### January 2016

#### NEWS COVERAGE PERIOD FROM JANUARY 25TH TO JANUARY 31ST 2016

GOVT BURDENS GAS CONSUMERS WITH RS101BN TO FINANCE PIPELINES Dawn, January 29th, 2016

#### KHALEEQ KIANI

ISLAMABAD: The Economic Coordination Committee (ECC) of the Cabinet on Thursday decided to charge consumers of the two gas utilities Rs101 billion to partly finance pipeline network.

At a charged meeting presided over by Finance Minister Ishaq Dar, the committee also approved Rs3 per unit reduction in future power tariff for industrial consumers previously announced by the prime minister in December.

It also regularised import of first six cargoes of the liquefied natural gas (LNG) in April-May last year through a floating storage terminal, but deferred a final decision on LNG sales and purchase agreement between Qatargas and Pakistan State Oil (PSO) until Friday.

"It was a bad day for member gas (Oil and Gas Regulatory Authority, or Ogra) Amir Naseem," said a cabinet member who attended the meeting, adding that the finance minister lost his temper at the beginning of the meeting over Ogra's written comments against petroleum ministry's summary on Rs101bn financing arrangement for gas companies.

Ogra earlier opposed the recovery of Rs101bn from consumers through tariff, saying the pipeline projects should be financed out of Gas Infrastructure Development Cess (GIDC) already being collected from consumers.

The regulator believed that it could not allow under the GIDC law the "double taxation" through gas tariff. Consumers, who were already paying GIDC for pipeline infrastructure, could not be burdened again with financing for repayment of Rs101bn loan along with 17 per cent return on assets to be created by the gas companies through these loans.

This was enough to ignite Mr Dar's ire. "Where should we bring this money from? Why don't you charge them (consumers)," said the finance minister after reading Ogra's written opinion. "It's government prerogative to decide from where to raise money and where to spend," he was quoted as saying.

He then asked the Ogra member to come close to him and show where in the GIDC law it was written the money would be spent on LNG pipelines and consumers could not be charged for it.

Mr Naseem had to leave his seat to move to the ECC chairman and read with him various relevant clauses to prove his point. The finance minister, still dissatisfied, then remarked: "You people also live in Pakistan and should also understand how we should move on. Don't do this."

The Ogra member told the ECC that the regulator could not allow double charges for the same purpose under the law but if the government issued policy guidelines it would have to implement them.

The finance minister then decided to issue policy guidelines. He believed that the projects like pipelines under Turkmenistan, Afghanistan, Pakistan and India (TAPI), Iran-Pakistan and Karachi to Lahore and Gwadar to Nawabshah for transportation of LNG and natural gas required Rs600bn and the government had so far collected around Rs200bn only.

Under the federal budget, the government is to collect Rs145bn through GIDC on gas sales during the current fiscal year. The government had given undertakings to parliament and the courts that the tax (GIDC) would be used to construct gas pipeline network.

The GIDC is being collected from various consumer categories — except residential consumers — for more than five years now with the sole objective of arranging funds for gas pipeline infrastructure to facilitate utilisation of imported gases from LNG and proposed pipelines from Turkmenistan and Iran.

The petroleum ministry demanded collection of Rs101bn from consumers so that the gas companies could construct pipelines to transmit imported LNG from ports to power load centres in Punjab. The petroleum ministry has also requested the ECC to allow the two gas companies to claim return on investment planned to be made on pipelines with this additional expenditure.

The ministry said the ECC approved in September 2015 the bank borrowing of Rs101bn from commercial banks to SNGPL and SSCGL to carry out augmentation of pipelines for phase two of the upcoming LNG and anticipated indigenous supplies against the government's guarantees to be provided by the Ministry of Finance but was being disallowed in tariff by Ogra.

The petroleum ministry reported that financial arrangements were prerequisite to complete RLNG project of national importance, in the absence of which the companies could not be able to proceed further, delaying the project implementation.

The ECC directed a committee comprising secretaries of finance, law and petroleum to submit a revised summary on Friday for the clearance of \$15bn LNG supply agreement between Qatargas and PSO for 15 years. Barrister Zafarullah Khan, prime minister's special assistant on human rights, was also asked to help the committee address legal challenges, including change in Ogra rules, higher port charges build-up in tariff, etc.

To implement an announcement made by the prime minister last month, the ECC also decided to issue policy guidelines to National Electric Power Regulatory Authority (Nepra) for a Rs3 per unit cut in existing power tariff for the Industrial consumers of all distributions companies (Discos) for 2015-16, for units consumed from Jan 1, 2016 onwards.

The ECC on a proposal submitted by the Ministry of Petroleum and Natural Resources gave ex-post facto approval in respect of six cargoes arranged by PSO from Qatargas under a government-to-government arrangement on a FOB (free on board) basis using FSRU (floating storage and regasification unit) as LNG carrier.

Meanwhile, APP reported that the chair gave instructions to reconvene ECC meeting on Friday (today) to consider important

leftover agenda items including provision of salaries to the Pakistan Steel Mills and supply of wheat to the displaced people through the World Food Programme.

http://www.dawn.com/news/1236026/govt-burdens-gas-consumers-with-rs101bn-to-finance-pipelines

TOTAL REVAMP: K-P GOVERNMENT ALL SET TO RESTRUCTURE PEDO

The Express Tribune, January 29th, 2016

Sohail Khattak

PESHAWAR: In another show of institutional reforms, the energy and power department is set to restructure and overhaul the Pakhtunkhwa Energy Development Organization (PEDO).

A summary of the proposed changes in the organisational structure was sent to the chief minister for approval and insiders say it is just a matter of weeks. The move irked employees of PEDO who are unhappy with the proposed structure, calling it "privatisation and a waste of money".

The powers that be in the department are committed to implement the summary once it gets approval from the chief minister.

Senior officials believe the department needs competent people from the market to come forth and grab financing for the execution of provincial projects in the hydel sector.

"We need large sums of money to execute our projects and the pace of PEDO has not met our requirements or the energy needs of the country," said a senior official of the department, requesting anonymity.

The department's apex committee held a meeting in June 2015 and approved a plan under which Khyber-Pakhtunkhwa Power Company Limited would be formed in place of PEDO alongside special purpose vehicles (SPV)—private companies—to execute and operate hydel power projects.

According to a copy of the summary sent to the chief minister, the KPPCL would be incorporated with the Security and Exchange Commission of Pakistan (SECP) under the Companies Ordinance 1984.

The company will have an authorised capital of Rs5 billion and paid up capital of Rs2.5 billion. The fee of the SECP and paid up capital would be provided from the Hydel Development Fund (HDF) after getting approval from the fund's board.

The department has 12 hydropower projects—Malakand-III, Pehur, Reshun, Shishi, Machai, Ranolia, Daral Khwar, Koto, Jabori, Karora, Lawi and Matiltan.

Under the new set-up, each project will become a separate power company and KPPCL will own equity in each of the SPVs on behalf of the K-P government. The authorised capital for each SPV would be Rs3 billion and paid up capital will be a function of project costs.

According to summary documents, operational projects included Malakand-III, Pehur, Reshun and Shishi which require no further cash injection. Funds for the remaining would be allocated in the Annual Development Programme (ADP) and HDF could be used for the purpose.

The KPPCL will have a chief executive officer (CEO) as will each SPV, said an insider at the PEDO union. He and his peers are against the change and the hefty salaries proposed for the CEOs and other staffers of the companies.

"The CEO will get Rs1.4 million every month, while the human resource manager will get Rs0.7 million. Similar salaries have been offered for other staffers," he said.

"This means the profit which PEDO currently generates for the provincial government will be spent on salaries," said employee union president Fazli Rahim Khan.

Fazli Rahim said PEDO currently generated Rs3 billion annually for the K-P government through 105 megawatts of power generation. However, the province has a generation capacity of 3,500 megawatts.

"It is a one-time investment and then profit for a lifetime," said Fazli Rahim. He alleged central leaders of the ruling Pakistan Tehreek-e-Insaf (PTI) were eying jobs for their own people to make some money.

However, a senior official at the department rejected the union's reservations. "This is not privatisation, just restructuring which is needed because we require financing to execute these projects."

The official added they would pick up competent people from the market at good salaries who would find financing for the projects as HDF can only meet the monetary needs of a single initiative.

"We want to complete projects through non-recourse financing as loans for the projects will be taken by the SPV and it will have no impact on the provincial government if it is fails," he added. The senior official stressed once completed, the projects would become the property of the K-P government and the revenue generated from each one, for the first five to 10 years, will be used to pay back loans taken for the project.

The official denied allegations PTI central leaders were eying the sector and said at least Rs64 billion were needed for the execution of five projects – Matiltan, Koto, Lawi, Jabori and Karora. These would produce 216 megawatts of electricity collectively.

"We have Rs15 billion in the HDF; we have a Rs49 billion shortfall and we get Rs3 billion in the ADP which means we would need 16 years to complete these projects from the latter funds."

.http://tribune.com.pk/story/1035904/total-revamp-k-p-government-all-set-to-restructure-pedo/

ECC DECIDES TO RECOVER RS101 BILLION FROM GAS CONSUMERS FOR LNG PIPELINE The Express Tribune, January 29th, 2016.

ISLAMABAD: In what appears to be a move that will further burden consumers, the government on Thursday reaffirmed its decision to recover Rs101 billion from utility consumers for laying a gas pipeline despite the fact that it has already collected over Rs160 billion from customers for the same purpose.

The decision will result in an increase in gas and electricity tariffs as well as an increase in the prices of all goods where Liquefied Natural Gas (LNG) is used as fuel, including fertilisers.

"The Economic Coordination Committee (ECC) of the Cabinet directed the Oil and Gas Regulatory Authority (Ogra) to treat Rs101 billion spending on the construction of North-South gas pipeline for transportation of the LNG as admissible expense and recover it from the consumers through gas tariffs," said a senior government functionary after the meeting.

The ECC chairman, Finance Minister Ishaq Dar, lost his cool during the meeting when he was reminded by Ogra officials that the government was already charging consumers for laying gas infrastructure.

The cameras recorded Dar snubbing an Ogra official. "Don't teach me," he told an Ogra member who tried to stop the ECC from reaffirming a controversial and illegal decision.

The government wants to lay a pipeline with a capacity of 1.2 billion cubic feet from Karachi's Port Qasim upwards to Punjab for transportation of imported LNG to fuel three LNG-fired power plants, having cumulative generation capacity of 3,600 megawatts (MW).

However, Ogra has already refused to pass on the impact, saying the pipeline should be financed out of Gas Infrastructure Development Cess (GIDC) that the government has been collecting for laying gas infrastructure.

After collecting over Rs160 billion from consumers in the name of laying gas infrastructure, the finance ministry has already utilised the funds for budget financing, revealed sources in the ministry.

According to the finance ministry, the government collected Rs24.1 billion from the consumers under the GIDC alone from July through September of last year.

In September 2015, the ECC approved bank borrowing to the extent of Rs101 billion in favour of Sui Northern Gas Pipeline Limited (SNGPL) and Sui Southern Gas Company Limited (SSGCL), enabling them to carry out augmentation of pipelines for phase-II of the LNG project.

The petroleum ministry had requested the ECC that Ogra be advised that the LNG project must be included in the asset base of gas companies, subject to the condition that the LNG pricing will be ring-fenced and all directly attributable costs will be recovered from the LNG consumers. The ECC approved this proposal.

Since the LNG will be consumed for power generation in Punjab, the cost will also be recovered from electricity consumers, which will also push up the electricity tariffs.

Both the gas utility companies had approached the finance ministry to provide funds from the GIDC pool. However, in May last year, the finance ministry asked the companies to arrange the funds from the commercial banks.

http://tribune.com.pk/story/1036097/for-lng-pipeline-ecc-decides-to-recover-rs101b-from-gas-consumers/

NEPRA REFUSES TO APPROVE RS23 BILLION HIGHER COST FOR NANDIPUR POWER PLANT The Express Tribune, January 30th, 2016.

#### Zafar Bhutta

ISLAMABAD: Government may find it difficult to run the 425-megawatt Nandipur power plant as the National Electric Power Regulatory Authority (Nepra) has turned down its request to approve an increase of Rs23 billion in the cost of the project and recover it from consumers.

"The government has landed in trouble after the power regulator refused to approve the increase in project cost. The Ministry of Water and Power believes that in this situation it will be unfeasible to run the plant and it will go bankrupt," an official said.

The ministry was of the view that the cost stood at Rs58 billion and in a review petition filed with Nepra for approval, the government put the cost even higher at Rs65 billion including the cost of laying liquefied natural gas transmission lines.

It sought approval for an increase of Rs4 per unit in the power generation tariff to Rs15.63 per unit.

In April 2015, the regulator had approved a cost of Rs42 billion for the Nandipur power plant and set the power tariff at Rs11.63 per unit.

Now, the regulator has turned down the plea for the increase in project cost and kept it at Rs42 billion, saving the consumers a burden of Rs23 billion.

It has approved the cost of engineering, procurement and construction at \$109 million instead of \$382 million. It has asked the government to adjust the higher cost in equity for the project.

The government has already faced scathing criticism and allegations of kickbacks in establishing the Nandipur power plant and different investigation agencies including the National Accountability Bureau (NAB) were probing the matter.

Auditor General of Pakistan also stepped in to conduct an audit. The controversy also led to the removal of Nandipur Power Company Managing Director Captain (Retired) Muhammad Mehmood.

The controversy had erupted last year when the Nandipur power plant was shut down due to a technical fault and tussle between the chief of the power company and the Ministry of Water and Power. The company managing director wanted to award maintenance and operation contract to a Malaysian company despite reservations of the board of directors.

In its audit findings, the Auditor General of Pakistan also raised questions over appointment of the managing director, lower-than-required capacity of furnace oil treatment plant and award of the project to a blacklisted foreign company.

The country also faced a loss of Rs12 billion because of the power plant's shutdown for three months.

http://tribune.com.pk/story/1036639/nandipur-power-plant-nepra-refuses-to-approve-rs23b-higher-cost/

### OGRA RECOMMENDS 21PC REDUCTION IN PRICES OF PETROLEUM PRODUCTS Dawn, January 30th, 2016

ISLAMABAD: The Oil and Gas Regulatory Authority (Ogra) recommended on Friday reduction of up to 21 per cent in prices of petroleum products for the month of February, based on existing tax rates.

In a summary sent to the government, Ogra recommended that price of petrol be reduced by about 10 per cent, of high speed diesel (HSD) by 13.6pc, of kerosene oil by 20.38pc, of light diesel oil (LDO) by 19.6pc and of high octane blending component (HOBC) by 14.4pc if the government wanted the current tax rates to continue.

An official said the prices could be brought down by up to 50pc if the general sales tax rate was reverted to the normal 17pc but the government would want to offset the resultant revenue losses by maintaining GST rates of up to 47pc on some products.

He said the crude and product prices in the international market had declined by around 30pc or about \$10 per barrel in the month of January.

However, under instructions from Finance Minister Ishaq Dar, Ogra worked out the prices on the basis of existing tax rates.

Although, the federal ministers for finance and petroleum have promised in their recent public statements that substantial cut in oil prices would be allowed, the exact reductions would be announced on Sunday after approval of prices by the prime minister keeping in view the ongoing talks with the International Monetary Fund.

Based on the existing tax rates and PSO purchases from international market, Ogra worked out a reduction of Rs7.56 per litre (9.9pc) in the ex-depot price of petrol (motor gasoline) for February, and proposed that it should be cut to Rs68.69 per litre from the existing rate of Rs76.25 per litre.

The regulator recommended that the ex-depot price of HSD be cut by 13.6pc or Rs11 per litre to Rs69.79 per litre from Rs80.79.

Ogra also recommended that ex-depot price of kerosene oil be reduced by Rs8.17 per litre (20.38pc) and be fixed at Rs40.08 per litre instead of Rs48.25.

It worked out ex-depot price of light diesel oil at Rs37.58 per litre, down by Rs7.36 or 19.6pc, from Rs44.94 per litre.

Likewise, the regulator calculated the price of high octane blending component at Rs70.51 per litre instead of Rs80.66, with a decrease of Rs10.15 per litre or 14.4pc.

Petrol and high speed diesel are the two products that generate most of the revenue in oil sector.

On an average, the HSD sales across the country are 600,000 tons per month against monthly consumption of around 400,000 tons of petrol while kerosene sales are less than 10,000 tons per month and that of HOBC less than 6,000 tons per month.

# NEWS COVERAGE PERIOD FROM JANUARY 18TH TO JANURAY 24TH 2016 NAB INVESTIGATING GAS, LPG MISAPPROPRIATION AT KPD FIELD Dawn, January 18th, 2016

#### KHALEEQ KIANI

ISLAMABAD: After taking control of official record, the National Accountability Bureau (NAB) has started investigations into alleged mismanagement and misappropriation of natural gas and liquefied petroleum gas (LPG) at the Kunar-Pasakhi Deep (KPD) field in Sindh going on for almost five years and causing an irreparable loss to the national economy and an acute shortage of gas.

Informed sources told Dawn that NAB had started the probe into KPD affairs on leads reportedly provided by former petroleum and natural resources minister Dr Asim Hussain, former SSGC managing director Shoaib Warsi and others during interrogation.

The leads necessitated a deep examination of the record of KPD field development, purification of raw gas through private contractors, delays in setting up purification plants and mode and quality of gas injected into the system of Sui Southern Gas Company, apart from metering, billing and payments.

The sources said a NAB team had so far recorded statements of more than eight senior officials of OGDCL and almost the same number of SSGC executives before making any arrest.

The bureau has also taken into custody the record relating to agreements with private contractors, delay in development of Kunar-Pasakhi Deep and Tando Allahyar fields and the setting up of OGDC's own purification plant, selection process for project consultants and contractors.

In the process, OGDCL's receivables from SSGC had increased to Rs70-80 billion, said an OGDCL spokesman who confirmed that the country's largest oil and gas firm had provided all the required record to the top investigating agency.

On the other hand, SSGC decided against officially commenting on the issue in response to specific questions asked by Dawn last week, despite reminders.

This is in addition to a related investigation by the Federal Investigation Agency (FIA) into similar issues in Sindh's another gas scheme — Sinjhoro pipeline project.

It has already led to formal arrests of six senior OGDCL officers and registration of FIRs against them.

Under a decision of its board of directors in January 2012, OGDCL had entered into an agreement with Jamshoro Joint Venture Limited (JJVL) for purification of KPD natural gas to remove impurities and hazardous gases capable of damaging SSGC's pipeline network. In fact, it was SSGC which asked OGDCL to provide purified gas; otherwise it would not accept KPD gas.

The JJVL agreement envisaged purification of 90-115 million cubic feet per day (mmcfd) of gas and its injection into the SSGC network through a new pipeline and, in the process, extraction of around 400 tons of LPG per day at a processing fee of about \$230 per ton of LPG for two years. It was planned that OGDCL would install its own plant during these two years to increase gas production from 100-150mmcfd to about 250mmcfd.

The purification plant, however, caught fire after a few months and supplies came to a halt. On the other hand, OGDCL did not install its own purification plant even in more than four years despite a promise to do so in two years.

OGDCL Chief Executive Officer Zahid Mir said last week that the purification plant would now be completed in March and would increase supplies from KPD by 125mmcfd.

Interestingly, SSGC, which had earlier declined to supply raw gas to its system saying it would destroy its existing pipeline network, has been receiving raw gas with low quantities through a bypass system from KPD since the JJVL plant faced problems.

The metering and billing between the two state-run companies have been under clouds for more than two years with no payments at all. In the meanwhile, private bowzers are reported to have been transporting LPG in the area. Common consumers, however, faced a tremendous shortage of LPG and had to pay heavy charges while the country separately faced gas shortages — more than 40pc according to Petroleum Minister Shahid Khaqan Abbasi.

NAB is examining if the purification agreement was in line with procurement rules and under what circumstances consultants ILF and Zeeshan Pvt Ltd and Enar Petrotech were appointed at different stages.

The sources said that after the induction of the PML-N government some internal inquiries were ordered into activities associated with the project development and fact-finding missions were also sent to the KPD field to see if all facilities were in place, but these did not reach any conclusion.

OGDCL's spokesman Ahmad Hayat Lak said the KPD's purification plant would be completed in two to three weeks to add 100mmcfd gas to the current supply of about 125mmcfd.

He confirmed that "untreated gas" was currently being supplied to SSGC and said the plant should have been in place two years ago.

He said that before fire at the JJVL plant, natural gas had been transferred to SSGC at the purification plant and LPG belonged to OGDCL, but unpurified gas was now being transferred to SSGC at the field gate.

Mr Lak said there was no dispute outstanding between JJVL and OGDCL and although the former had some reservations and claims, which had been resolved amicably.

He confirmed that NAB was investigating the KPD project development and transfer of gas to SSGC and how metering and billing were conducted. He said the company had shared all material and record with the bureau.

He said OGDCL receivables from SSGC had now increased to Rs70-80bn, depending on different calculations, adding that this had become a circular debt.

http://www.dawn.com/news/1233761

OGDCL FAILS TO INSTALL LPG PLANT AT NASHPA The News, January 18, 2016

Khalid Mustafa

ISLAMABAD: Pakistan has suffered a mammoth loss of \$500 million (Rs50 billion) just because of the fact that the Oil and Gas Development Company Limited (OGDCL) has failed to install an LPG plant at Nashpa field in Khyber Pakhtunkhwa (KP) in the last six-year period, one of the top officials at OGDCL told The News.

"Nashpa has the potential to produce 400 ton LPG a day whereas the country's requirement stands at 2,400 tons out of which 800 tons LPG is being imported and the remaining 1,600 tons a day is being produced locally. In case, an LPG plant had been installed some five years back, Pakistan's economy would have reaped the benefit of \$500 million."

If 400 tons LPG a day had been added on time, the LPG being imported would have been reduced to just 400 tons a day, meaning the foreign exchange being spent since long would been saved.

Now under the latest development, the KP government has told the top management of OGDCL that it has lost its right to install an LPG plant at Nashpa, so the KP OGDCL will now itself install the LPG plant.

In a strong-worded letter with subject, 'LPG plant at Nashpa' written on January 13, 2016 to the OGDCL managing director of which the copy is exclusively available with 'The News, the KP OGDCL mentioned the Clause 20.3 model PCA (petroleum concession agreement) 2009 saying that OGDCL was supposed to install an LPG plant within four years of grant of lease.

The KP government's letter also highlights the clause 3.1.1 of LPG policy 2013 which clearly states: "In case E&P (exploration and production) company remains unable to implement the development plan with reference to extraction of LPG as per provisions of available petroleum concession agreement (PCA), its right would stand surrendered to the government which can get it extracted through competitive bidding."

The letter further says about the intention of the KP government that the KP OGDCL, therefore, wants to install an LPG plant at Nashpa as per the law. The KP govt to this effect has sought access to the Nashpa site to assess the project.

However, when contacted, OGDCL spokesman Ahmad Hayat Lak, who is also General Manager Legal, said he had not gone through the letter the KP OGDCL had sent.

Mr Lak said that Nashpa was a joint venture project and its PCA had no mention of any such thing that said, "If the E&P fails to install LPG plant in four years time its right would stand surrendered."

However, he agreed that LPG plant should have been set up in 2 years time, but he argued saying that the tender process as per the laid down procedures took at least 13 months to complete and on this very project, one tender process got completed but contract could not be awarded as the lowest bidder was evasive to get the contract as said bidder was of the view that the price it quoted as \$70 million was less than the cost.

The OGDCL re-initiated, Mr Lak said, the bidding process which also took 14 months and now the contract of \$160 million had been awarded to the consortium of Chinese and local companies. Under the contract, apart from setting up LPG extraction plant, the contractor would also complete gas gathering and de-hydration plants. Mr Lak expressed the optimism that LPG extraction from Nashpa would start after 18 months as the contract had started mobilisation of its machinery to the site.

When his attention was drawn towards the bitter fact that country had braved mammoth loss of \$500 million, Mr Lak responded by saying that he had already heard such observations. However, he said," Had the OGDCL been the privatised entity, it would have never gone for LPG extraction plant, but since the company was public sector entity, the social aspect of providing LPG to the people remained dominant in the decision to install the LPG plant as the economic aspect of the decision was not fruitful if kept in view the declining crude oil prices in the world."

http://www.thenews.com.pk/print/91933-OGDCL-fails-to-install-LPG-plant-at-Nashpa

PAKISTAN, RUSSIA MEET TODAY TO DISCUSS \$2B LNG PROJECT The Express Tribune, January 19th, 2016.

ISLAMABAD: Pakistan and Russia are set to meet in Moscow today (Tuesday) to discuss the course of action on implementing the \$2-billion LNG project after the US imposed sanctions against the Russian energy firm designated to build the pipeline.

Pakistani side will also negotiate a LNG supply deal with Russian firm Gazprom.

Petroleum Minister Shahid Khaqan Abbasi will lead the delegation which comprised of Interstate Gas Systems (ISGS) Managing Director (MD) Mobin Saulat and Ministry for Petroleum Joint Secretary Tauquer Hussain.

Russia had signed a government-to-government (G2G) deal with Pakistan to lay the \$2 billion North South Pipeline from Karachi to Lahore to transport imported LNG and nominated RT Global to implement the project.

Russian President Vladimir Putin was to visit Pakistan to perform the ground breaking ceremony of the project for which Moscow will lend Islamabad \$2 billion

However, US imposed sanctions against RT Global, causing bottlenecks to implementing \$2 billion LNG pipeline project. Pakistan's Interstate Gas Systems (ISGS) and Russia's RT Global were supposed to sign a commercial agreement to implement the project.

During the talks, Russian side would update the Pakistani side about the sanctions imposed against RT Global. Officials said that Russia could replace RT Global with some other company which was not facing US sanctions.

The firm, which is a Russian State Corporation, was to lay the 1,100-km-long pipeline with a capacity of 12.4 billion cubic metres (bcm) per annum to connect LNG terminals in Karachi with those in Lahore. Under the agreement, Pakistan would provide 15 per cent equity whereas 85 per cent funding would be provided by the Russian firm. The first phase of the project is expected to conclude by December 2017.

Pakistan has worked on a similar model with China under which a Chinese firm would lay the Gwadar LNG pipeline to Nawabshah and build an LNG terminal at the deep-sea port at a cost of \$2.5 billion.

The financing for the LNG pipeline by Russia comes as a result of Russia's eagerness to sell LNG to Pakistan. Russia is the second-largest producer of natural gas in the world, and was seeking to diversify its export markets after a spat over Ukraine with the European Union, its main buyer.

During talks, two sides would also discuss LNG supply deal on a G2G basis. Gazprom had expressed interest to supply LNG to Pakistan. Pakistani side had informed Russian side that there was a need of 4.5 metric tons per annum of LNG from the second quarter of 2017. Pakistan has recently awarded contract of 60 LNG cargoes to Gunvor.

Two sides will also discuss plan of setting up LPG-air mix plants by Russian company. Russia had nominated RusGaz Engineering and targeted commissioning timelines of May 2016. These plants would be set up in areas where pipeline network was not available to supply gas.

http://tribune.com.pk/story/1030073/2-billion-lng-pipeline-pakistan-russia-meet-today-to-discuss-way-forward/

NEWS COVERAGE PERIOD JANUARY 11TH TO JANUARY 17TH, 2016 FINANCIAL CLOSE OF 1,320MW PROJECT DECLARED IN HASTE Dawn, January 11th, 2016

Khaleeq Kiyani,

ISLAMABAD: The government has declared financial close worth \$1.9 billion of a 1,320MW coal-based power project near Karachi without completing prerequisites which may expose the nation to massive liabilities.

This is the first major project under the \$46bn China-Pakistan Economic Corridor (CPEC) to have achieved financial close. The plan for the project has been put together by Saifur Rahman, a former chairman of the Ehtesab Bureau and close aide to Prime Minister Nawaz Sharif. The PM laid the foundation stone of the project in April last year.

Mr Rahman himself supervised the ceremony held to mark the financial close of the project jointly sponsored by the Sinohydro Resources Limited of China and Al-Mirqab Capital of Qatar. The Chinese Exim Bank is providing \$1.9bn financing for the project.

Sources told Dawn that in haste to show the results, the Private Power and Infrastructure Board (PPIB) approved and announced on Dec 22 the financial close in the absence of a Direct Lenders Agreement and legally trustworthy land acquisition.

The implementation agreement (IA) for the project was signed by the sponsors and the government in April last year.

Legally speaking, all clauses of the IA do not come into force at once. Before the approval of the financial close, most responsibilities and liabilities, like those relating to the financing plan, signing of a series of documents, arrangement of water, roads and other infrastructure, land acquisition and start of construction work, rest with the sponsors.

The PPIB has not only approved the financial close but a sovereign guarantee has also been executed even though controversies still remain over the transfer of land title to the project company. In fact, the land issue has pitted the federal authorities against the Sindh government.

While the PPIB, in a written response, claimed that the obligation of land acquisition was "in full force and effective", the Port Qasim Authority said it had allocated land to the project but it had not been registered with the registrar's office because of opposition by the Sindh government.

That means that if the land dispute remains unsettled or goes into litigation the project sponsor would be entitled to claim damages for investment loss from the government through international arbitration.

Secondly, the PPIB has not been able to execute Direct Lenders Agreement — a central legal document linking sponsors, lenders and the government in a financial arrangement. Legally speaking, the government of Pakistan does not know who is lending such a huge amount at what terms.

When contacted, Barrister Asghar Khan, who has been involved in finalisation of documents on behalf of the government as head of the PPIB's legal department, said that "without signing the Direct Lenders Agreement at the time of Financial Closing, acknowledgment of the Lenders and the Financing Documents does not take place".

Resultantly, financial liabilities and obligations of the government are not locked and there is no legally binding undertaking by the lenders to that effect and release of liens, transfer of power plant and discharge of liabilities in the event of payment by the government is not assured, he said.

On behalf of the water and power ministry, the PPIB confirmed in writing that land acquisition was an obligation of the project company and claimed that "this obligation is in full force and effect and accordingly the company after taking possession of the land has started construction".

The PPIB said it was not aware of any probe by the National Accountability Bureau over the land acquisition by sponsors from Port Qasim. It also confirmed that "Direct Agreement is a comfort to the Lenders by the GOP as per the customary practices of such transactions, but the lenders did not require execution of such agreement for the financial close". It said the financial close has been notified after completion of the prerequisite under the IA" and in line with earlier precedents.

Chairman of the Port Qasim Authority Agha Jan Akhtar said the authority had issued an "indenture to lease" for the land to the project sponsors three to four months ago but the sub-registrar had not registered/verified the deed on the orders of the Sindh government.

He said the Sindh government had in the past issued statutory regulatory orders (SROs 73 and 74) to identify this land under the sea and then give it to the PQA because such lands then belonged to the federation and never raised any objection.

He said the authority had committed in writing to the provincial government that the PQA would transfer all funds collected against the land cost to it if at any stage the project land is proven to be its asset.

He said the Chinese Exim Bank had shown leniency for the project and had already released \$200 million as the first tranche.

He said the land had been given to project company at Rs2.5m per acre and he had given a detailed briefing to the NAB. The project company would have to spend around \$200m in dredging, effectively increasing its cost beyond Rs8m per acre.

http://www.dawn.com/news/1232232

DEPLETING RESOURCES: COUNTRY MAY NOT SEE BIG OIL AND GAS FIND, SAYS ABBASI The Express Tribune, January 12th, 2016.

Saad Hasan

KARACHI: Petroleum Minister Shahid Khaqan Abbasi on Monday said Pakistan has no option but to import liquefied natural gas (LNG) to meet its pressing energy requirement as supply from domestic wells has not been able to keep up with demand.

If businesses and households awaiting gas supply are taken into consideration, then total demand has touched 8,000 million cubic feet per day (mmcfd) against supply of 4,000 mmcfd from domestic fields that has been stagnant for years, he told a seminar.

Titled LNG Outlook in Pakistan, the seminar was organised by the Petroleum Institute of Pakistan.

"Our own fields are depleting," he said. "And in my opinion, the law of probability says we might not see a large find (of oil and gas reserves)."

No substantial gas reserve has been found in decades with the largest one being able to produce just 56 mmcfd, he said.

"I am very proud of the LNG project and I completely own it," he said, ridiculing the experts who have written articles and appeared on television talk shows to express concern over it.

"One of these so-called experts suggested that Pakistan should use biogas instead of LNG. Could someone tell him that all the buffaloes in the world cannot produce enough manure for even 400 mmcfd," he said, adding a jibe: "Collecting that manure would be a challenge too."

Pakistan started importing LNG last year and Abbasi said it would emerge as a big player with a demand for 2,500 mmcfd.

"Every LNG producing country in the world knows the significance of our market. It is only Pakistan, which does not know it yet."

The first LNG terminal at Karachi's Port Qasim became operational last year. So far, the country has imported 17 cargoes at an average price of \$7.8 per million British thermal units (mmbtu).

It recently awarded a five-year contract to commodities giant Gunvor for supply of 0.75 million tons per annum at a price to be determined at 13.37% of Brent crude.

Islamabad is also in talks with Doha to secure a long-term supply contract. Officials say Pakistan State Oil (PSO), which is importing LNG on behalf of the government, has asked Qatari counterparts to reconsider the terms being offered.

Since its inauguration in March 2015, the LNG terminal operated by Elengy, a subsidiary of Engro Corporation, has remained in the spotlight, mostly for wrong reasons.

Abbasi said the criticism surrounding the terminal was unfounded, especially when no alternative to solving the crisis is being offered to a country which meets half of its energy needs burning gas.

LNG, which costs more than domestically produced gas, has been received well by the energy-starved market, he said.

But customers used to consuming subsidised gas still have to get used to the idea of a relatively expensive substitute.

Abbasi said deregulation is the way forward for LNG trade. "We have to charge the actual cost. Otherwise this won't work."

Another LNG terminal, also at Port Qasim, is expected to come online in early 2017.

But Port Qasim Authority Chairman Agha Jan Akhtar said every time an LNG vessel comes, container traffic has to be halted for five to six hours.

"There are some other challenges as well like high duties on tugboats, which are used to pull LNG vessels. We don't receive any grants from the government. Someone must look into this."

The sponsors behind upcoming terminals have been asked to pay for dredging of their passage ways at the port, he said.

http://tribune.com.pk/story/1025909/depleting-resources-country-may-not-see-big-oil-and-gas-find-says-abbasi/

### TUBE WELLS: SENATOR SUGGESTS SHIFT TO SOLAR ENERGY The Express Tribune, January 12th, 2016

ISLAMABAD: The Senate Standing Committee on Water and Power on Monday urged the authorities to shift Balochistan's tube wells to solar energy.

A meeting of the committee, chaired by Senator Iqbal Zafar Jhagra, was apprised by Senator Mir Kabeer Ahmad Muhammad Shah that in several areas feeders were over-loaded, resulting in tripping and power suspension. He suggested that tube wells in the province should be run on solar system.

The committee members supported the suggestion and asked the ministry officials to take an initiative as soon as possible.

Quetta Electric Supply Company (Qesco) Chief Executive Officer said this step would surely provide relief to the masses.

The committee was told that Prime Minister Nawaz Sharif has directed Zarai Taraqiati Bank to start easy loan schemes to facilitate the farmers in running their tube wells on solar energy.

Officials told the committee that Qesco was providing enough electricity but the recovery was only 4%, adding more power load management was being carried out in the areas where losses were high.

Shah said Balochistan was paying Rs12 billion in subsidy which should be used for shifting the tube wells to solar energy.

Senator Azam Khan Swati suggested that the federal and provincial governments should start the project jointly. There were 30,000 agricultural tube wells in Balochistan which also provide potable water to the people.

Senator Attaur Rahman drew the attention of the body to the scarcity of drinking water in Taunsa Sharif. He said the tube wells were closed due to non-payment of electricity bills and added the people were ready to pay their bills.

http://tribune.com.pk/story/1025908/tube-wells-senator-suggests-shift-to-solar-energy/

CHINESE TO HELP BUILD SMALL HYDEL PROJECTS IN PUNJAB. Dawn, January 13th, 2016

LAHORE: A delegation of China Three Gorges Corporation (CTGC), headed by its Chairman Lu Chun, here on Tuesday discussed investment options in Punjab with and Chief Minister Shahbaz Sharif.

The visiting team expressed willingness to cooperate with the provincial government in small hydel projects and assured that a delegation of experts would soon visit the province.

Shahbaz Sharif said that it was the transparency and efficiency of the provincial government which was attracting foreign investment. He assured the delegation of his cooperation and facilitation.

http://www.dawn.com/news/1232547

ECC LIKELY TO GIVE GREEN LIGHT TO MULTIBILLION DOLLAR LNG DEAL The Express Tribune, January 13th, 2016.

Zafar Bhutta

ISLAMABAD: The Economic Coordination Committee (ECC) is likely to approve the multibillion dollar LNG contract with Qatar in its meeting on Wednesday (today), after months of negotiations have resulted in Doha agreeing to cut the price.

Petroleum Minister Shahid Khaqan Abbasi visited Qatar on January 6 and demanded a cut in LNG prices, resulting in the country agreeing to match the price offered by Gunvor in a short term LNG supply contract for five years.

Pakistan State Oil (PSO) has awarded the five-year LNG supply contracts for 120 LNG cargoes to Gunvor and Shell. It was agreed that Gunvor will supply 60 cargoes at 13.37% of Brent crude price; similarly Shell will supply the same at 13.80% of Brent crude price.

Earlier, Pakistan and Qatar had finalised the deal at 13.9% of Brent oil.

"Qatar has agreed to match the price of Gunvor at 13.37% of Brent crude oil and petroleum minister will brief the economic decision making body for approval," officials said.

Pakistan and Qatar will sign the commercial agreement following approval of the ECC.

During the visit, Qatari authorities had informed the petroleum minister that they had offered the price which was already very low. However, there were reports that India had finalised LNG deal at a price that was even lower. But

contrary to reports, Petroleum Minister said that Indian price was higher by 20% compared to the price finalised with Qatar.

According to an official, Shell and Gunvor would also get LNG supply from Qatar to export to Pakistan.

Experts asserted that because the contract with Qatar was a long term one, prices should be much lower. The government also felt that if it takes gas from Qatar at the rate of 13.9%, they may be embroiled in corruption allegations.

Under proposed arrangement, this contract was for 15 years and it would be renegotiated after 10 years. There was a clause to end the contract if both sides failed to develop consensus regarding LNG price.

Under the proposed agreement, PSO will receive 1.5 million tons of LNG from Qatar gas in the first year and the annual volume will be enhanced to 3 million tons from the second year.

http://tribune.com.pk/story/1026485/importing-energy-ecc-likely-to-give-green-light-to-multibillion-dollar-lng-deal/

SHELL TO LOSE \$1BILLION CONTRACT AS QATAR OFFERS PAKISTAN LOWER PRICE The Express Tribune, January 15th, 2016.

Zafar Bhutta

ISLAMABAD: Energy giant Royal Dutch Shell is going to lose a five-year liquefied natural gas (LNG) supply contract worth over \$1 billion as a Qatari company has agreed to provide the commodity at a lower price to Pakistan.

Gunvor and Royal Dutch Shell had won supply contracts in response to the two tenders floated by Pakistan State Oil (PSO) a few weeks ago for bringing 120 LNG cargoes over a period of five years.

Gunvor offered to bring 60 cargoes at 13.37% of Brent crude price whereas Shell quoted 13.8% of Brent crude price for another 60 cargoes.

During negotiations after the opening of bids, Qatargas agreed to match the price offered by Gunvor, which was the lowest, prompting the government to consider scrapping the contract with Shell and award it to the Qatari company.

This was disclosed in a meeting of the Economic Coordination Committee (ECC) on Wednesday this week, which approved a long-term LNG supply agreement worth \$15 billion.

The ECC was told that the government would save a substantial amount by transferring the contract won by Shell to Qatar at a lower price. However, Gunvor's contract will remain intact.

In the tenders, nine trading firms including commodities giant Vitol, Glencore, Trafigura, Marubeni and US-based Excelerate Energy had submitted bids but all were rejected.

Owing to the plunge in crude oil prices, Shell is focusing on LNG business in the world market. During the previous Pakistan Peoples Party government too, Shell had tried to strike an LNG deal with Pakistan, but failed due to a controversy over the Mashal LNG project, which landed in the Supreme Court.

Pakistan produces 4 billion cubic feet of natural gas per day (bcfd) against demand for over 6 bcfd. The government considers LNG as a fast-track source to bridge the growing energy shortfall.

The lower price offer on the part of Qatar came after Petroleum and Natural Resources Minister Shahid Khaqan Abbasi visited Doha on January 6 and sought a reduction in the LNG rate. Qatar agreed to match the price offered by Gunvor for the short-term supply contract spread over five years.

Earlier, Pakistan and Qatar had finalised a long-term supply deal at 13.9% of Brent crude price. The two sides are going to sign a commercial agreement as the ECC has given the go-ahead. Reports suggested that India had struck an LNG deal with Qatar at the lowest price, but Petroleum Minister Abbasi insisted the Indian price was 20% higher compared to the rate agreed between Islamabad and Doha.

Under the proposed arrangement, the long-term LNG supply contract will be for 15 years, but it will be renegotiated after 10 years. The two sides can end the contract if they fail to develop consensus over the price.

Every three months past price of LNG would be taken to calculate the price with Qatar.

As part of the agreement, PSO will receive 1.5 million tons of LNG from Qatargas in the first year and the annual volume will be enhanced to 3 million tons from the second year.

http://tribune.com.pk/story/1026485/importing-energy-ecc-likely-to-give-green-light-to-multibillion-dollar-lng-deal/

#### PAKISTAN'S \$2 BILLION LNG PIPELINE PROJECT HITS A SNAG The Express Tribune, January 14th, 2016.

Pakistan's two-billion-dollar LNG pipeline project has hit a snag with Washington slapping a set of sanctions on the Russian firm designated to work on the scheme.

Earlier, Pakistan was unable to execute the Iran-Pakistan (IP) gas pipeline project because of sanctions slapped on Tehran by the United States and the European Union.

The Russian government had signed a deal with the Pakistani administration to lay a \$2bn North South Pipeline from Karachi to Lahore to transport imported LNG, nominating the firm RT Global Resources (RTGR) to execute the project. Russian President Vladimir Putin was to visit Pakistan to perform the ground-breaking ceremony of the project.

"Now we have found out that the US has imposed sanctions on RTGR, causing bottlenecks in executing the LNG pipeline project," a Pakistani official said, adding that the US had also stopped Pakistan from executing the IP gas pipeline project.

After the latest development, Pakistan and Russia are facing an uncertain situation as regards awarding the contract to RTGR.

The two countries had signed a government-to-government deal, and RTGR and Pakistani firm Inter State Gas Systems were to sign a commercial agreement to execute the project.

An official said the Russian government was evaluating the sanctions imposed on the Russian firm while Pakistan was yet to make a decision.

The two governments had signed a deal in October 2015 to construct a pipeline to transport liquefied natural gas from Karachi to Lahore.

Moscow had agreed to lend Islamabad \$2 billion for the project. In return, Islamabad would award the contract of laying the pipeline to RTGR without holding a bidding process.

The firm, which is a Russian state corporation, would lay the 1,100km pipeline with a capacity of 12.4 billion cubic metres per annum to connect LNG terminals in Karachi with those in Lahore.

Pakistan has worked on a similar model with China under which a Chinese firm would lay an LNG pipeline from Gwadar to Nawabshah and build an LNG terminal at the deep-sea port at a cost of \$2.5 billion.

The financing for the LNG pipeline had come as a prelude to Russia's offer to sell LNG to Pakistan. Russia is the second-largest producer of natural gas in the world, and was seeking to diversify its export markets after a spat over Ukraine with the EU, its main buyer.

The pipeline would be laid on the basis of build, operate and transfer. The Russian company would transfer it to Pakistan after 25 years.

Under the agreement, Pakistan would provide 15% equity while 85% funding would be provided by the Russian firm. The first phase of the project is expected to conclude by December 2017.

http://tribune.com.pk/story/1026485/importing-energy-ecc-likely-to-give-green-light-to-multibillion-dollar-lng-deal/

#### CHINA, PAKISTAN TO HAVE ENERGY AGREEMENT IN WRITING FOR 15 YEARS

The News, January 14, 2016

Mehtab Haider

ISLAMABAD: Pakistan and China have agreed to establish long term plan in writing for next 15 years cooperation (2015-2030) with specific areas and expand energy sector cooperation from power sector to include oil and gas sectors, official documents available with The News reveal.

"The preparation of long term plan under CPEC initiative is underway for next 15 years under which one corridor through three passages will be developed in harmonised manner," Major General (R) Zahir Shah, Planning Commission's CPEC Secretariat head, confirmed to The News when this scribe contacted him on Wednesday.

However, according to official documents exclusively available with this correspondent, Pakistan and China considered draft of long term plan of CPEC by reviewing the progress made for finalising it in consultation with authorities concerned of both the countries.

Islamabad has shared its initial assessments of the draft for long term plan which was submitted by Beijing where it was pointed out that the passages identified in the Transport Plan of CPEC provide the foundation for development of spatial structure of the long-term plan and subsequently along which economic activity will be generated.

"Pakistani side argued that the long-term plan needs to be reassessed to arrive at a revised spatial pattern on the basis of agreed changes in the monographic study on transport planning of CPEC," official document states.

Both sides agreed changes in the transport plan of CPEC needs to be incorporated in the long term plan which require further work and frequent communications between both sides for early finalization. They agreed that revisions will be made in the long term plan according to the adjustments made in the monographic study of transport planning of CPEC. The two sides will strengthen coordination and cooperation in this regard.

Pakistan and China have also agreed to expand energy sector cooperation from power sector to include oil and gas sector. The discussions on the planning of specific areas/projects of cooperation may be held between the energy working group as soon as possible in the near future.

On transport sector, Pakistan side presented progress of the joint feasibility study on ML-1 (Karachi-Peshawar route) and Havelian Dry Port. It was considered important to accurately determine the costs to avoid issues at implementation stage. Phased implementation of ML1 was mutually agreed. The extension from Peshawar to Torkhum will be discussed at technical level

The Pakistan side emphasized the need for moving to the next steps for timely implementation of two railways sector for early harvest programs (EHPs) i.e. ML-1 and Havelian Dryport.Both sides approved proposal of signing a framework agreement for the two EHPs between the Ministry of Railways, Pakistan and National Railways Administration, Peoples Republic of China.

They also approved that under the two EHPs, i.e. MLI and Havelian Dry Port, following priority sub-projects will be implemented by December 2017 based on the availability of the funding including ML-1 Multan ~ Lahore Section, 339 km, 160km/h (including passenger facilitation of Lahore and Multan), ML-1 Hyderabad—Multan Section: 749 km long, overhaul of track and civil works; (including passenger facilitation of Rohri / Sukkur), ML-1 Kemari-Hyderabad Section: 182km long, up-gradation and speeding up to 160km/h (including passenger facilitation of Karachi Cantt. and Hyderabad), establishment of Havelian Dry Port and education and training (in Walton Railway Academy).

http://www.thenews.com.pk/print/90232-China-Pakistan-to-have-energy-agreementin-writing-for-15-years

ECC finally approves LNG deal with Qatar Khalid Mustafa

The News, January 14, 2016

Extension in wheat export also given a nod

ISLAMABAD: The Economic Coordination Committee (EEC) on Wednesday approved the much-touted \$16 billion LNG deal with Qatar under the government-to-government mode for 15 years at 13.37 percent of three months' average price of the Brent and extension in wheat export.

Prime Minister Nawaz Sharif will visit Qatar on February 11-12 wherein both the sides (Pakistan State Oil and Qatargas Company) will formally sign the 15-year deal and the contract will become operational. Pakistan will import two LNG ships in the month of February from Qatar under the government-to-government deal and from March onwards, three LNG consignments from Qatar will be imported each month.

Minister for Petroleum and Natural Resources Shahid Khaqan Abbasi told 'The News' that with the approval of LNG deal with Qatar by the Economic Coordination Committee (ECC), Pakistan was also set to finalise by September 2016 another LNG deal to import 4 million tons per annum under government-to-government mode with another country. The countries with which negotiations to this effect are underway include Russia, Oman, Malaysia and Algeria.

The ECC meeting that was held here on Wednesday with Finance Minister Senator Ishaq Dar in the chair accorded approval to the LNG deal which is under the SLOP form. SLOP means that in case the Brent price increases, the LNG price for Pakistan will also increase accordingly and if Brent's price goes down, LNG price will also tumble as per the formal of 13.37 percent of the Brent.

The ECC approved the deal after the Qatari authorities agreed to trim down the LNG price from 13.9 percent to 13.37 percent of the Brent as was demanded by Pakistan.

According to experts, the crude oil price tends to remain in the lower side by 2018 to 2020 and Pakistan will get LNG delivered at Port Qasim with price close to \$5 per MMBTU. Under the deal, Pakistan will import from Qatar 2.2 million tons LNG every year in the first two years and from third year onwards LNG of 3.7 million tons per annum will be imported for a 13-year period.

The salient feature of the new LNG deal is that Qatar will also provide LNG to Pakistan on 15-day defer payment against the earlier settlement of defer payment for 10 days.

With the reduction in LNG price by Qatar, the price of delivered LNG at Qasim Port will be close to \$5 per MMBTU whereas India has renegotiated its LNG deal with Qatar under which the landed cost of LNG at Indian port is hovering at \$6-7 per MMBTU which is still 20 percent higher than the price that Pakistan has managed from Qatar. India has also faced the penalty of \$500 for violating its deal earlier signed with Qatar.

That's a great achievement of the Nawaz government that successfully managed to convince the authorities in Qatar to reduce the LNG price by matching it to 13.37 percent of the Brent—the price that PSO had managed through tenders for five years.

Qatar had earlier offered the LNG price at 13.9 percent of three months average price of the Brent which ECC refused to accept, arguing that Pakistan State Oil has managed the LNG at 13.37 percent of the Brent through tenders, which is why the authorities concerned should ask Qatargas Company to match the price that PSO managed at 13.37 percent of the Brent.

The ECC approved the deal after Qatar authorities have agreed to trim down LNG price from 13.9 percent to 13.37 percent of the Brent as was demanded by Pakistan.

Qatar had earlier offered the LNG price at 13.9 percent of three months average price of the Brent which the ECC (Economic Coordination Committee) headed by Finance Minister Senator Ishaq Dar refused to accept, arguing that Pakistan State Oil has managed the LNG at 13.37 percent of the Brent through tenders, which is why the authorities concerned should ask Qatargas company to match the price that PSO managed at 13.37 percent of the Brent.

http://www.thenews.com.pk/print/90273-ECC-finally-approves-LNG-deal-with-Qatar

NEWS COVERAGE PERIOD JANUARY 4TH TO JANUARY 10TH, 2016 OIL, GAS COMPANIES SEEK 32PC INCREASE IN RLNG PRICE Khaleeq Kiyani, Dawn, January 4th, 2016

ISLAMABAD: With the petroleum ministry's support, three state-run oil and gas companies have sought a cumulative 32.3 per cent increase in the price of regasified liquefied natural gas (RLNG) to improve their profits even on system losses without fresh investments.

The Oil and Gas Regulatory Authority may reconsider on Monday the RLNG price it had determined on Oct 7 at \$8.64 per million British Thermal Unit (MMBTU) by disallowing various price build-ups.

The authority has been asked by the oil and gas trio to revise RLNG price to \$11.135 per MMBTU by allowing them actual system loss at about 12.5pc besides service and administrative charges and margins on RLNG price. Ogra is scheduled to hold a public hearing for the cost build-up on Monday.

An Ogra member told Dawn that the authority "seems inclined to give an upward revision in RLNG price through majority vote". He said Ogra had already determined RLNG price under Petroleum Levy Act of 1961 on the orders of the federal government, but the law did not have any provision for price review.

The three companies — Pakistan State Oil, Sui Southern Gas Company and Sui Northern Gas Pipelines Limited — have written to the regulator that the RLNG price approved at \$8.64 per unit on Oct 7 did not offer them substantial incentive to be in RLNG supply business, hence the increase.

The Ogra member said the record showed the three firms have now changed their strategy to increase RLNG price by proposing increased rates for the textile industry first to set a principle followed by its extension to other consumers — power, fertiliser and CNG, etc. This would be in addition to their formal requests for price review.

On the basis of price of LNG delivery ex-ship (DES) has come down from \$7.72 per MMBTU in Oct to \$7.49 per MMBTU, according to price sheet provided to the petroleum ministry. The SNGPL has now requested an increase in LNG terminal charges to Engro at \$1.43 per MMBTU instead of 66 cents approved by Ogra.

The SNGPL has also pleaded that retainage (gas lost during regasification and transfer to pipeline network) be allowed at 1.5pc of total cost of LNG which worked out at \$0.135 per MMBTU. This was previously allowed at 0.75pc in accordance with the tender documents.

The SNGPL has now demanded building the cost of unaccounted for gas (UFG) loss at about 10.9pc which now works out at about \$0.82 per MMBTU. Ogra had previously allowed 0.5pc transmission loss at \$0.039 per MMBTU.

On top of that, the SNGPL cost of service has been demanded at \$0.73 per MMBTU and \$0.13 per MMBTU for the SSGC. Moreover, administrative margin for two gas companies has been demanded at \$0.10 per MMBTU. All these factors were previously disallowed by Ogra in October last year.

In addition, the margin for the Pakistan State Oil has been demanded at 4pc (about \$0.30 per MMBTU) of LNG DES price. This was previously allowed by Ogra at 1.82pc (about \$0.14 per MMBTU).

After inclusion of general sales tax, the gas companies have demanded revised RLNG price of \$11.135 per MMBTU based on imported LNG price of \$7.49 per MMBTU.

The PSO has contended that Ogra had allowed the margin as the sum of estimated cost on taxes and the operating cost on LNG without incorporating any adequate return. "PSO being a commercial entity is also responsible to provide adequate return to its shareholders as they normally expect a reasonable return on new ventures initiated by the company."

Ogra had determined a provisional RLNG price in October last to facilitate imports, saying about a dozen mandatory documentary proofs had not been placed on the Ogra record.

http://www.dawn.com/news/1230623

#### SAUDI-IRAN STANDOFF MAGNIFIES UPSIDE RISK FOR OIL

Dawn, January 5th, 2016

LONDON: An escalation of the diplomatic dispute between Iran and Saudi Arabia looks like a black swan event for the oil market: hard to predict, but potentially huge in its effects. Open conflict between the two Middle East powers would threaten nearly one-fifth of world oil supplies, shipped daily through the Strait of Hormuz.

Relations between the two Middle Eastern countries were already at boiling point before Saudi executed the cleric and outspoken critic of the kingdom's royal family Sheikh Nimr al-Nimr. The two countries are fighting proxy wars in Syria and Yemen, and Saudi's strategy of pushing down the oil price through increased production counts producer Iran among its unhappy victims. The severing of diplomatic ties following the storming of the Saudi embassy in Tehran on Jan 3 has raised the chances of open conflict between the two states.

Were a war to break out between Saudi and Iran, Tehran's most obvious way of hurting its rival would be to cut off oil exports from the Gulf passing through the Strait of Hormuz. Record global stockpiles would start to drain away if the flow of tankers carrying about 17 million barrels per day of crude through the 21-mile wide channel — which separates Iran from the Arabian Peninsula — were interrupted by armed conflict in the Gulf.

The kingdom's close allies in the Gulf, who also oppose Iran extending its influence in the region, would also be squeezed.

Both sides would lose, but Iran less so. According to the US Department of Energy, Saudi Arabia could divert just under a third of its 7.2m bpd of crude exports away from the Gulf chokepoint. However, the loss of exports would still severely test Saudi Arabia's economy. By contrast, since it is restrained by international sanctions, which could be lifted this year, Iran is exporting just 1.4m bpd through Hormuz. Iran has already been forced to adjust to years of lost oil income.

Where does that leave the oil market? While the conflict between the two states remains indirect, it means more of the same low prices. But any escalation still has the potential to send prices rocketing back towards \$100 per barrel, putting the risk emphatically on the upside

http://www.dawn.com/news/1230799

### TECHNOLOGY CAN HELP BANKS DO A HARD RESET ON COSTS

Dawn, January 5th, 2016

NEW YORK: Technology can help America's banks do a hard reset on costs. Lenders have little to look forward to in 2016, and face pressure from a variety of startups. But the revolution the new players threaten could actually revitalise traditional institutions.

Most big banks fail to earn a return on equity above the 10 per cent usually seen as their cost of capital. Only JPMorgan, Wells Fargo and US Bancorp do so regularly — and even then not spectacularly. Nor is there much room to grow. Interest rates rising slightly will help profitability, but only a bit. And rising credit costs could increase bad loans.

So returns will not budge, unless banks begin to co-opt the best of financial technology. That could mean buying fintech outfits, building homegrown equivalents on their own or with other lenders or simply purchasing their services.

There are plenty of inspiring examples. Alternative lenders use sophisticated algorithms to better assess would-be borrowers. And companies like Bill.com and Viewpost are rationalising large chunks of processes such as small-company invoicing and cash management. Viewpost, which partners with banks, claims its technology can strip out enough costs to cut current fees by more than 90pc.

Elsewhere, technology could allow banks to provide a more personal phone service yet cut costs by as much as two-thirds, according to digital communications firm Xura. It could also help combine support functions, like so-called know-your-client data gathering, which could shave up to a tenth off back-office costs, according to the Boston Consulting Group.

All told, the results could be dramatic. Bancorp, with \$400bn of assets, is the most efficient big bank, spending around \$54 of each \$100 of revenue on expenses. But suppose it could eventually cut 15pc of its bills. That would boost its ROE to 17pc from the recent 14pc level, Breaking views calculations show.

http://www.dawn.com/news/1230795/technology-can-help-banks-do-a-hard-reset-on-costs

#### UK OIL AND GAS OUTPUT RISES FOR FIRST TIME IN 15 YEARS

Dawn, January 5th, 2016

LONDON: Britain's oil and gas output rose in 2015 for the first time since the turn of the millennium, industry body Oil and Gas UK said on Monday, reversing a declining trend but coming as oil prices are trading at a seven-year low.

The industry group, which represents oil producers active in the North Sea such as BP, Shell or ExxonMobil, expects British oil and gas production to have risen 7-8 per cent, much higher than a 3-4pc increase it predicted in September.

Britain's oil and gas output has more than halved in the past 15 years due to easy-to-reach resources running low and a lack of investment in new areas.

But a renewed push to explore new areas of the North Sea over the past four years has meant new fields started up in 2015, including Taqa's Cladhan oil field in resource-rich waters near the Shetland Islands, and boosted output year on year.

"The industry-wide focus on improving production efficiency coupled with investments of more than 50 billion pounds over the last four years to bring new fields on stream across the last twelve months is paying off and yielding a better result," said Oil and Gas UK chief executive Deirdre Michie in a statement.

Final production figures, released by the government, were not yet available but Oil and Gas UK said it had based its estimate on data for the first 10 months of 2015 and average production assumptions for November and December.

Britain is estimated to have another 200 billion pounds (\$295.38bn) worth of oil and gas trapped in the North Sea and to tap these resources the government has issued a series of tax incentives and tasked a new regulator with helping companies squeeze as much as possible out of the ground.

The rise in oil and gas production comes as a global supply glut has lead to a crash in oil prices to the lowest level in seven years.

Major oil producers active across the world ramped up crude output in 2015 as investments in new technologies brought new fields on stream.

http://www.dawn.com/news/1230781

#### ENGRO AVOIDS EXPOSURE TO THAR POWER PROJECT

Javed Mirza The News, January 05, 2016

KARACHI: Engro will not take further exposure to the Thar power project after the completion of two 330-megawatt plants, expected to be commissioned by the end of 2018, said the company's senior official.

Shamsuddin Shaikh, chief executive officer at Sindh Engro Coal Mining Company (SECMC) said the company has already taken huge exposures in the project.

"It has not been formally decided, but Engro will not be taking further exposures in the project," Shaikh said.

"We are investing a total of \$200 million both in (coal) mining and power plant, which is the largest investment on the part of Engro." He said a number of local and foreign companies are interested in setting up the plants and "we would like other groups to come forward."

"However, the mine would remain with the SECMC and we would provide the coal for these generation facilities," he said.

As many as six companies, along with the government of Sindh, are mining coal under the banner of SECMC.

Engro, HBL, Liberty Power and China Machinery Engineering Corporation, led by Engro Powergen Thar Limited, will set up two 330MW mine-mouth power plants.

"A number of local and foreign companies have approached us to partner in the project, but there is no more room. Besides our equity has already been completed," Shaikh said. The funding agreements have been signed but the money has not started pouring in.

"There are certain conditions, which we need to meet and then the institutions would start releasing the money. It would not take more than a month," he said.

SECMC CEO said the company is out of funds at the moment. He said around \$150 million of shareholders' equity would be pumped in January.

The mine will be expanded to a capacity of 7.6 million tons per annum in phase 2 of the project and another 660MW power plant facility will be added.

This expansion has also been included into the China-Pakistan Economic Corridor. Thar Block-II, allotted to SECMC, has the capacity to fuel six 660MW power plants. Earlier this month, the provincial government signed an implementation agreement with SECMC and water utilization agreement with Engro Powergen Thar Limited. Under the implementation agreement, the government committed to provide the required infrastructure to facilitate the mining project amounting to \$600 million. Shaikh said things are proceeding as planned. He added that the work on airport and road network is underway, while the National Transmission and Despatch Company would lay the transmission network.

He said the Prime Minister Nawaz Sharif may visit Thar in early February to perform the ground-breaking ceremony of generation facility as well as the transmission network.

http://www.thenews.com.pk/print/86877-Engro-Elengy-Terminal-imports-1MT-of-LNG-till-December-end

1,320MW COAL PROJECT AT PQ TO START GENERATION IN 2017 Dawn, January 7th, 2016

ISLAMABAD: The 1320MW Port Qasim coal project has achieved financial close and its first unit will start generation by December 2017 while construction of 1,02MW Gulpur hydropower project has started.

Similarly, 1320MW coal project at Sahiwal by Huaneng Shandong Ruyi of China is under construction and is scheduled to achieve commercial operationalisation in December 2017, while 660MW Engro Powergen Thar coalbased power project has signed financing documents and is expecting financial closing in a few weeks.

This was stated by officials at the 103rd meeting of the Private Power and Infrastructure Board (PPIB) held on Wednesday. Minister for Water and Power Khawaja Asif presided over the meeting.

PPIB Managing Director Shah Jahan Mirza spoke on current status of various coal and hydropower projects being handled by the PPIB.

He stated that 1,000MW small projects based on R-LNG are targeted to start production during the first quarter of 2017.

The meeting was informed that 147MW Patrind Hydropower project would achieve its commercial operation date by March 2017 as construction work is in full swing.

Speaking at the meeting, Minister for Water and Power Khawaja Asif said that the government is following a multi-pronged policy to address the power sector issues by using coal, hydro and R-LNG for electricity generation.

He said the investors are being facilitated to meet their commercial operation dates by the end of 2017 and early 2018. The government is arranging power for future needs at affordable rates instead of expensive electricity, he added.

Different ongoing private power generation projects, particularly the projects being undertaken under China-Pakistan Economic Corridor (CPEC) were discussed in the meeting.

#### http://www.dawn.com/news/1231207

TAJIKISTAN TO EXPORT 1,000MW POWER TO PAKISTAN UNDER CASA PROJECT: ENVOY The News, January 09, 2016

ISLAMABAD: Tajikistan would export 1000MW hydel electricity to Pakistan under Central Asia South Asia (CASA 1000) project through a 750 kilometre long transmission line by year 2018 with an estimated cost of US dollars 1160 million.

Ambassador of Tajikistan Sherali Saidamir Jononove said this here on Friday while talking to APP about Pakistan Tajikistan bilateral relations with special reference to CASA 1000 project.

Talking about Pakistan Tajikistan bilateral relations the ambassador said that Pakistan is one of the first among those countries who recognised Tajikistan as an independent country and both the brotherly countries are enjoying cordial relations since then.

Speaking about details of the project the ambassador said that the said transmission line of 500 KV would also be utilised for transmitting more than 300MW hydel electricity to Pakistan from another state of Central Asia Kyrgyzstan.

To a question about the implementation of this project the Ambassador Sherali said that feasibility report had already been completed and working on the laying of transmission line from Kyrgyzstan, Tajikistan, Afghanistan and Pakistan would begin from May this year.

Prime Minister Nawaz Sharif will also participate in the transmission line laying ceremony scheduled to be held in Tajikistan in May this year, he said. About capacity of export of hydel electricity of Tajikistan, he said that only Tajikistan could export more than 5000MW electricity to Pakistan through hydel projects especially in the summer season.

Working on another transmission line of same capacity of 500KV from Tajikistan to Pakistan via Wakhan Strip bordering Afghanistan would also begin shortly after the working of CASA 1000 MW transmission line, the ambassador said.

Regarding current status of the project the ambassador said that a Joint Commission of both the countries was working on the implementation of CASA 1000 MW project and its upcoming meeting would be held during next week in Dushanbe.

When asked about financing of the project the ambassador said that a total estimated cost of the project was 1160 million US dollars as per the feasibility study finalised with the support of World Bank.

Financing from IDA (World Bank), Islamic Development Bank, Arab Group and other donors was under consideration. A Multi Donor Trust Fund was also being established for this project, he added.

Responding to a question about the details of recently held visit of President of Tajikistan Imomali Rahmon to Pakistan, he said the visit of President of Tajikistan remained successful and many MOUs and agreements were signed to enhance trade and economic cooperation between the two countries.

The visit of president of Tajikistan opened a number of new avenues of cooperation to further strengthen bilateral trade, economic, cultural and historic relations between the two brotherly countries, he said.

Tajikistan is a blessed country with resources of approximately 50000MW electricity due to unique networking of about 1000 rivers and lakes having 80 per cent mountainous terrain of the total area with Tien Shan and Pamir Ranges besides huge network of world known glaciers, he said.

When asked about the price of the electricity, the ambassador said that it will be from Hydel project namely Roghun Hydro Power Project which has a total capacity of 3600MW and price will be very reasonable even nominal basically it would be a gift for Pakistani fraternity from Tajikistan .

When asked about future of economic ties between the two countries, he said that Pakistan was enjoying very important geo-strategic location in the region and Tajikistan would take benefit from this opportunity and would be a partner of China Pakistan Economic Corridor (CPEC).

Trade volume was getting momentum between the two countries day by day and it would be increased to 500 million US dollars within next two years and exhibitions were being planned to achieve this goal, the ambassador stated.

During the visit of president of Tajikistan leadership of both the countries agreed on the importance of air connectivity for the promotion of people-to-people contacts, economic relations and tourism.

To this purpose Pakistan had conveyed decision to permit Somon Air of Tajikistan to operate on Dushanbe Lahore, Islamabad, Karachi, Faisalabad or Quetta sectors which was welcomed by the president of Tajikistan.

Negotiations between the Tajik Airlines Somon Air and Civil Aviation Authority of Pakistan are underway to finalise modalities in this regard to start flight operation between the two countries, the ambassador said.

Responding to a question about China Pakistan Economic Corridor (CPEC) the ambassador said that Tajikistan would not only support Pakistan for this project but was fully ready to be a partner of this important trade and economic connectivity project of the region.

Central Asian States would take benefit from this China Pakistan Economic Corridor for boosting economic activities as using CPEC as a bridge between Central Asia and world through Gwadar port, the ambassador expressed the hope.

 $\underline{http://www.thenews.com.pk/print/89080-Tajikistan-to-export-1000MW-power-to-Pakistan-under-CASA-project-Envoy}\\$ 

### RUSSIA TO HELP PAKISTAN SET UP LPG AIR-MIX PLANTS Zafar Bhutta, the Express Tribune, January 9th, 2016

ISLAMABAD: Pakistan and Russia have agreed to deepen cooperation in the energy sector as they will jointly set up liquefied petroleum gas (LPG) air-mix plants in an effort to tackle the persisting energy crisis.

"For establishing the LPG air-mix plants in Pakistan, Russia has nominated its company RusGaz Engineering; technical discussions have already been held and the two sides have proposed May 2016 as the timeframe for making the plants operational," an official aware of the developments told The Express Tribune.

Pakistan and Russia are already working closely in the area of liquefied natural gas (LNG) and have signed a government-to-government deal for laying the North-South pipeline from Lahore to Karachi for LNG supply. However, a commercial agreement has not yet been inked.

State-run gas utilities have a huge pipeline network to provide locally produced natural gas to consumers across the country, but they fall way short of meeting the growing demand.

The LPG air-mix plants will discourage the laying of new pipelines. Already, Sui Southern Gas Company (SSGC) has set up LPG air-mix plants in Balochistan.

In order to keep a check on LPG prices that normally go up during winter when demand rises, the Ministry of Petroleum and Natural Resources has sent a summary to the Council of Common Interests (CCI) seeking approval for regulating the consumer prices of LPG, officials say.

The government believes that fixing of LPG prices by the Oil and Gas Regulatory Authority (Ogra), like other petroleum products, will lead to a fall in rates.

During the previous government of Pakistan Peoples Party (PPP), the LPG air-mix plants were approved at a higher rate which sparked controversy. At that time, Ogra estimated that LPG air-mix could be injected into the SSGC system at \$25 per million British thermal units (mmbtu) as prices were high.

The PPP government had planned to calculate LPG prices on weighted average basis and as a result all consumers, except for domestic consumers, were expected to face a price rise of up to 9.9% with the injection of 50 million cubic feet of LPG air-mix per day as approved by the Economic Coordination Committee.

However, now LPG prices have come down and the government is going to regulate the market to make the commodity affordable for the consumers. Therefore, officials suggest, it would be feasible to inject LPG into the pipeline network of gas utilities when prices stand lower.

In the past, Ogra had opposed the scheme, arguing that the LPG air-mix plants would lead to a sharp increase in the cost of gas for the end-consumers. The regulator, however, insisted in order to protect the consumers, the air-mix plants should work as a standalone and not be made part of the larger system.

Still, the regulator pointed out that mixing of LPG and air was not feasible and the method had not been adopted for the same reason in other parts of the world. Only Argentina has installed such plants, its officials told the ECC.

http://tribune.com.pk/story/1024334/energy-partnership-russia-to-help-pakistan-set-up-lpg-air-mix-plants/

CASA-1000: TAJIKISTAN TO EXPORT 1,000MW HYDEL ELECTRICITY The Express Tribune, January 9th, 2016.

ISLAMABAD: Tajikistan would export 1,000MW hydel electricity to Pakistan under the 'Central Asia South Asia' (CASA-1000) project through a 750-kilometre long transmission line by 2018, at an estimated cost of \$1,160 million, said Tajikistan Ambassador to Pakistan Sherali Saidamir Jononov on Friday.

Talking about Pakistan-Tajikistan bilateral relations, the ambassador said, "Pakistan is one of the first countries to recognise Tajikistan as an independent state and both have been enjoying cordial ties since then."

Elaborating on the CASA-1000 project, he said the said transmission line of 500KV would be utilised for transmitting more than 300MW hydel electricity to Pakistan from another state of Central Asia; Kyrgyzstan. "The feasibility report has already been completed and working on the laying of transmission line from Kyrgyzstan-Tajikistan-Afghanistan-Pakistan would begin from May this year.

"Only Tajikistan can export more than 5000MW electricity to Pakistan through hydel projects, especially in the summer season," said Jononov, adding that another transmission line of the same capacity of 500KV from Tajikistan to Pakistan via Wakhan Strip bordering Afghanistan would also begin shortly.

Jononov, concerning the current status of the project, said that a joint commission of both countries was working on the implementation of CASA-1,000MW projects and its upcoming meeting would be held next week in Dushanbe.

"The estimated cost of the project is \$1,160 million, as per the feasibility study, finalised with the support of the World Bank. Financing from IDA (World Bank) Islamic Development Bank, Arab Group and other donors is under consideration."

"A 'Multi-Donor Trust Fund' was also being established for this project," he added.

Moreover, he said the recent visit of Tajikistan President Imomali Rahmon to Pakistan was successful and it has opened a number of new avenues.

"The trade volume is gaining momentum between the two and would be increased to \$500 million within next two years. Exhibitions are also being planned to achieve this goal."

During the visit of President of Tajikistan, leadership of both countries agreed on the importance of air connectivity for the promotion of people to people contacts, economic relations and tourism.

http://tribune.com.pk/story/1024352/casa-1000-tajikistan-to-export-1000mw-hydel-electricity/

FINANCIAL CLOSE OF 1,320MW PROJECT DECLARED IN HASTE Khaleeq Kiyani, Dawn, January 11th, 2016

ISLAMABAD: The government has declared financial close worth \$1.9 billion of a 1,320MW coal-based power project near Karachi without completing prerequisites which may expose the nation to massive liabilities.

This is the first major project under the \$46bn China-Pakistan Economic Corridor (CPEC) to have achieved financial close. The plan for the project has been put together by Saifur Rahman, a former chairman of the Ehtesab Bureau and close aide to Prime Minister Nawaz Sharif. The PM laid the foundation stone of the project in April last year.

Mr Rahman himself supervised the ceremony held to mark the financial close of the project jointly sponsored by the Sinohydro Resources Limited of China and Al-Mirqab Capital of Qatar. The Chinese Exim Bank is providing \$1.9bn financing for the project.

Sources told Dawn that in haste to show the results, the Private Power and Infrastructure Board (PPIB) approved and announced on Dec 22 the financial close in the absence of a Direct Lenders Agreement and legally trustworthy land acquisition.

The implementation agreement (IA) for the project was signed by the sponsors and the government in April last year.

Legally speaking, all clauses of the IA do not come into force at once. Before the approval of the financial close, most responsibilities and liabilities, like those relating to the financing plan, signing of a series of documents, arrangement of water, roads and other infrastructure, land acquisition and start of construction work, rest with the sponsors.

The PPIB has not only approved the financial close but a sovereign guarantee has also been executed even though controversies still remain over the transfer of land title to the project company. In fact, the land issue has pitted the federal authorities against the Sindh government.

While the PPIB, in a written response, claimed that the obligation of land acquisition was "in full force and effective", the Port Qasim Authority said it had allocated land to the project but it had not been registered with the registrar's office because of opposition by the Sindh government.

That means that if the land dispute remains unsettled or goes into litigation the project sponsor would be entitled to claim damages for investment loss from the government through international arbitration.

Secondly, the PPIB has not been able to execute Direct Lenders Agreement — a central legal document linking sponsors, lenders and the government in a financial arrangement. Legally speaking, the government of Pakistan does not know who is lending such a huge amount at what terms.

When contacted, Barrister Asghar Khan, who has been involved in finalisation of documents on behalf of the government as head of the PPIB's legal department, said that "without signing the Direct Lenders Agreement at the time of Financial Closing, acknowledgment of the Lenders and the Financing Documents does not take place".

Resultantly, financial liabilities and obligations of the government are not locked and there is no legally binding undertaking by the lenders to that effect and release of liens, transfer of power plant and discharge of liabilities in the event of payment by the government is not assured, he said.

On behalf of the water and power ministry, the PPIB confirmed in writing that land acquisition was an obligation of the project company and claimed that "this obligation is in full force and effect and accordingly the company after taking possession of the land has started construction".

The PPIB said it was not aware of any probe by the National Accountability Bureau over the land acquisition by sponsors from Port Qasim. It also confirmed that "Direct Agreement is a comfort to the Lenders by the GOP as per the customary practices of such transactions, but the lenders did not require execution of such agreement for the financial close". It said the financial close has been notified after completion of the prerequisite under the IA" and in line with earlier precedents.

Chairman of the Port Qasim Authority Agha Jan Akhtar said the authority had issued an "indenture to lease" for the land to the project sponsors three to four months ago but the sub-registrar had not registered/verified the deed on the orders of the Sindh government.

He said the Sindh government had in the past issued statutory regulatory orders (SROs 73 and 74) to identify this land under the sea and then give it to the PQA because such lands then belonged to the federation and never raised any objection.

He said the authority had committed in writing to the provincial government that the PQA would transfer all funds collected against the land cost to it if at any stage the project land is proven to be its asset.

He said the Chinese Exim Bank had shown leniency for the project and had already released \$200 million as the first tranche.

He said the land had been given to project company at Rs2.5m per acre and he had given a detailed briefing to the NAB. The project company would have to spend around \$200m in dredging, effectively increasing its cost beyond Rs8m per acre.

http://www.dawn.com/news/1232232

### February 2016

NEWS COVERAGE PERIOD FROM FEBRUARY 22n TO FEBRUARY 28th 2016

BIOFUELS A COMMERCIAL REALITY: UN REPORT

Dawn, February 24th, 2016

ISLAMABAD: Advanced biofuels made from non-food biomass, also known second-generation biofuels, have become a commercial reality, a new report by the United Nations Conference on Trade and Development (UNCTAD) concludes.

The report, 'Second-Generation Biofuel Markets: State of Play, Trade and Developing Country Perspectives', says that this is happening in the context of advanced technologies, economic pressures and a political will to act on climate change.

In the wake of environmental commitments countries have made with the Sustainable Development Goals (SDGs) and Paris COP21 climate change agreement, the report focuses on how the market for second-generation biofuels can be exploited, and how to make the technology available in developing countries.

With a specific focus on cellulosic ethanol, a new type of biofuel produced from wood, grass or the inedible parts of plants, the report provides a wide-ranging review as of 2015–2016 of the second-generation biofuels sector, maps selected cellulosic ethanol projects, and details recent policy developments from around the globe.

A key factor in decreasing costs for the industry has been process improvements that have allowed the market to expand, the report says.

Overall, two main strategies have given traction to advanced biofuels in the world. The first is a market-segmentation strategy in conventional/advanced cellulosic biofuels used in the US, and more recently in the EU with the adoption of limits for conventional biofuels, resulting in premium pricing.

The second is the availability of national development bank loans that have reduced risk and promoted growth in the industry, especially in China and Brazil.

Low interest rates and a venture-capital culture have also played a role in advancing the position of second-generation biofuels.

However, while production facilities have been scaled-up over the past three years, evidence suggests that actual production is much smaller than nominal capacities.

The report concludes with five suggestions for the responsible development of the second-generation biofuels industry which includes creation of regulatory frameworks for advanced bio-energy tailored to national circumstances, which do not necessarily focus on the type of supply but instead on existing local demands. Technical dialogue should continuously be promoted among different production regions of advanced fuels in order to ensure compatible standards for feedstock and promote trade in advanced biofuels.

http://www.dawn.com/news/1241489/biofuels-a-commercial-reality-un-report

PAKISTAN ENERGY FORUM: 'TRANSNATIONAL DEALS TO USHER IN NEW ERA OF PROSPERITY' Business Recorder, February 26, 2016

Advisor to the Ministry of Petroleum, Zahid Muzaffar Thursday said the impact of transnational deals with China, Turkmenistan, Iran and Qatar, will usher in a new era of development and prosperity in the country. Muzaffar who is also Chairman Board of Director of state-owned Oil and Gas Development Company Limited (OGDCL) has invited local and international investors to come to Pakistan and seek ensuing opportunities.

He said this while addressing the 8th Pakistan Energy Forum 2016, organised by SHAMROCK Conferences International here. He said the government was working very hard to overcome energy crisis.

Muzaffar added that successive governments since 1990s kept talking about Liquefied Natural Gas (LNG), Turkmenistan-Afghanistan-Pakistan-India (TAPI) and Iran-Pakistan (IP) pipeline projects, but the present government

has started implementing all these critical projects to end gas supply/demand gap and put the country on the path of economic growth.

He maintained that the government was not only working to implement imported gas projects, but has also sped up exploration of local oil/gas resources, adding that in 2015 OGDCL has started exploring shale oil/gas resources of the country which as compared with conventional natural resources is much expensive. The theme of the conference was "Impact of Large Scale Trans-National Ventures" highlighting the CPEC (China Pakistan Economic Corridor), TAPI (Turkmenistan, Afghanistan, Pakistan & India) Gas pipeline, IP-GAS (Iran-Pakistan gas pipeline) and the Pak-Qatar LNG deal, respectively. Dr Gulfaraz Ahmed, giving a review of the initiatives underlined the enormous economic benefit to the country and the major change in regional geo-political dynamics.

Claudio Raja Gabaglia Lins, Ambassador of Brazil in Pakistan highlighted the energy resources in his country and showed interest in Pakistan's energy prospects. Mirza Shakil Baig, Managing Director, Bakri Petroleum spoke on the challenges being faced by the new oil marketing companies and looked for convenience in operational issues. Asim Tirmizi, Project Director, Liquid Gases representing Sui Southern Gas Company (SSGC), highlighted how the company was moving steadily towards sustainable supplies to meet gas demand.

In the second session "An Integrated Approach to determine Pakistan's Energy Mix" Iftikhar Ahmed of Sindh Energy Department said the key objective of the province is to make Sindh self-sufficient and extend its success to the rest of country. Highlighting the potential of Balochistan as the next frontier for energy resources, Sardar Shaukat Popalzai said Balochistan was open to investment and development, He added, "all the major pipelines including Turkmenistan-Afghanistan-Pakistan-India (TAPI) and Iran-Pakistan (IP) pass through Balochistan and with removal of sanctions on Iran, regional prospects are bright.

Iftikhar Randhawa, representing Secretary Energy, Government of the Punjab, gave a historical background of the country energy issues and discussed how Punjab had moved forward briskly in addressing energy problems; whereas, Mr Tariq Rasheed of Khyber Pakhtunkhawa Oil & Gas Company opined, that the KP province has huge potentials for investors.

Inam ur Rehman, CEO, Reon Energy emphasised the need for technological growth to spur renewals options, while Syed Imran Shah, GM at FFC Jhimpir Wind Power, concluded, by saying that the wind energy projects in the country, particularly in Sindh, have increased to a great extent.

Being organised for the eighth consecutive time, the conference has made a mark as one of the premier events in the federal capital focusing on the challenges of the energy sector. Earlier, in his opening remarks, Menin Rodriguez, Chairman of SHAMROCK Conferences International and the Convenor of the conference said, "It is heartening to see most stakeholders in the energy sector participate in the conference, indicating the importance, both the government, the private sector and investor groups & countries, were giving to this challenging situation. I am sure the way forward to achieving our collective goals is to come together and dialogue to adopt the most favourable route."

The annual conclave of key stakeholders attracted 150 delegates from more than 100 companies and organisations that are directly or indirectly connected to the energy sector in Pakistan. Display stalls were set-up by sponsor companies which provided additional attention from the participants.

The annual event was addressed by representatives of government, regulatory bodies, eminent practitioners, opinion makers, and potential foreign investor countries. Ambassadors, Charge d'Affairs and Commercial Attaches of Turkmenistan, Qatar, Iran, Brazil, Portugal, Turkey, Germany, Poland, the UK and Algeria, respectively, also attended the sessions.

http://www.brecorder.com/fuel-a-energy/193/20150/

#### KHALEEQ KIANI

ISLAMABAD: Based on the existing high tax rates, the Oil and Gas Regulatory Authority (Ogra) recommended on Friday up to 12 per cent reduction in prices of all petroleum products, except kerosene oil, for the month of March.

In a summary sent to the government, Ogra said that a substantial reduction in oil prices had been witnessed in international market in February. The benefit of this decline in prices should be passed on to consumers, it said.

In its working paper, the regulator recommended a reduction of 11.9pc in the price of petrol, 6.2pc in that of high speed diesel (HSD), 3.95pc in that of high octane blending component (HOBC) and 4.93pc in that of light diesel oil (LDO).

Ogra proposed an increase of about 3.8pc in the price of kerosene.

An official said that prices of petroleum products could be brought down by up to 55pc if the general sales tax rate was reverted to the normal 17pc, but the government had continued to offset losses in revenue collection through the highest-ever tax rates on them.

He said that prices of crude oil and allied products had declined by 15 to 18pc in the international market.

Ogra has formulated its working paper on the basis of the existing tax rates under instructions from Finance Minister Ishaq Dar.

The federal petroleum minister promised in his recent public statements that benefit from the decline in international prices of the products would be passed on the consumers.

The final prices will be announced on Monday after approval by the prime minister.

Based on the existing tax rates and PSO purchases from the international market, Ogra worked out a reduction of Rs8.48 per litre in the ex-depot price of petrol (motor gasoline) for March to Rs62.77 from the existing Rs71.25.

It recommended that the ex-depot price of HSD be brought down by Rs4.67 to Rs71.12 from Rs75.79 per litre.

It also worked out ex-depot price of light diesel oil at Rs37.97 per litre, down by Rs1.97 from Rs39.94.

Likewise, Ogra calculated the price of high octane blending component at Rs72.62 per litre instead of Rs75.60 — a decrease of Rs2.98.

Ogra proposed that ex-depot price of kerosene be increased by Rs1.66 per litre to Rs44.91 from the existing Rs43.25.

Currently, the government is collecting about Rs25 per litre on petrol in the form of a fixed sales tax of Rs14.58 and Rs10 as petroleum development levy. Similarly, the government is collecting about Rs38 per litre in taxes on HSD, including a fixed sales tax of Rs29.57.

Petrol and high speed diesel are the two major products which generate most of the revenue in the oil sector.

The HSD sale across the country on an average is 600,000 tons per month against the consumption of around 400,000 tons of petrol, while kerosene sales are less than 10,000 tons and those of the HOBC less than 6,000 tons.

http://www.dawn.com/news/1242238

ISLAMABAD: The ruling PML-N was at its hubristic best on Friday in the National Assembly when it bulldozed a piece of legislation with ex-post facto effect, threw unparliamentary tantrums at the protesting opposition benches and displayed complete disregard of meaningful amendments presented by lawmakers from both sides of the aisle to a bill for energy conservation.

On the last day of the sitting, as the house prorogued for an unspecified period, thin attendance on the treasury benches continued to mar business of the house. In fact, the session ended when quorum was successfully pointed out by a Pakistan Tehreek-i-Insaf (PTI) member. Actually, it was the second time that the quorum was pointed out in the day.

Earlier, Shazia Marri of the PPP sought the speaker's attention towards the lack of quorum. When the counting was made, two members were short of the required 86. However, Deputy Speaker Murtaza Javed Abbasi, who often had to face criticism for running the house in a partisan manner, instead of announcing the count facilitated the government by giving extra time to bring in members from galleries.

Ministers, Zahid Hamid and Anusha Rehman, could be seen running around the hall to complete the quorum which they eventually did.

Soon after the minister of state for interior, Balighur Rehman, presented the bill to amend the Islamabad Capital Territory Local Government Act, 2015, PTI and PPP lawmakers from the opposition benches opposed it. The bill shall be deemed to have taken effect on Oct 14, 2015.

Asad Umar of PTI said by presenting and passing this bill, the government was setting a unique precedent in the parliamentary history. "These amendments are meant to provide constitutional cover to the elections of mayor and three deputy mayors for the local government of Islamabad city for which elections were held on Feb 15," remarked Mr Umar. The PTI lawmaker said the election of three deputy mayors on the basis of simple majority vote instead of proportional representation was another distinctive but condemnable amendment which had only been made to appease different factions within the ruling party.

It was Shazia Marri who hit the government hard. She said that increasingly the present government had developed the habit of paying no regard whatsoever to the laid down rules in making legislation. "I forcefully condemn this attitude of the government and oppose this bill."

Sher Akbar Khan of Jamaat-i-Islami, who is also member of the National Assembly Standing Committee on Interior, said it was mind-boggling that big cities like Lahore and Karachi had one deputy mayor but Islamabad would have three. Syed Asif Hasnain said that following this action of the government, "I will suggest the country should also have a number of deputy prime ministers".

The deputy speaker had to expunge criticism made by Amjad Ali Khan of the PTI and the counter argument presented by otherwise soft spoken minister Mr Rehman, as the two resorted to some highly objectionable, unparliamentary language.

Notwithstanding the opposition's assertions, the speaker allowed presentation of the bill and passed it through verbal voting, though Dr Shireen Mazari, chief whip of the PTI, sought physical counting of the votes for and against it.

While the deputy speaker ignored calls from Dr Mazari, she kept on chanting 'bulldozing, bulldozing, bulldozing', emphasising how the government on the basis of its majority was bulldozing legislation through the house.

It was then that Mian Abdul Manan and Abid Sher Ali, the two PML-N lawmakers who are known for their liking of passing offensive remarks, lunged at the PTI lawmaker. Overheard in the press galleries, the two uttered highly

personal remarks at her. Shazia Marri of the PPP asked her fellow lawmakers from treasury benches to show decency towards their female colleagues.

Another bill, which received censure from the opposition benches, was presented by Chaudhry Abid Sher Ali for energy conservation in the country. Opposing the bill, Dr Nafeesa Shah of the PPP claimed that content of the bill seemed to have been plagiarised from a neighbouring country's legislation, and its drafters even didn't bother to change it a bit. Dr Mazari, in her criticism of the bill, said apparently this piece of legislation was meant to take initiatives for energy conservation, but it had nothing in it. "On the face of it, it's a good initiative, but, it seems the government is only interested in the passage of the bill rather than its actual objective." Dr Mazari suggested that without the involvement of environmentalists, it would be a futile exercise.

#### http://www.dawn.com/news/1242236

NEWS COVERAGE PERIOD FROM FEBRUARY 8th TO FEBRUARY 14th 2016 UNLOCKING SOLAR MARKET

Dawn, Business & Finance weekly, February 8th, 2016

#### **AMIN AHMED**

WHILE the solar power potential in Pakistan stands at 2.9m megawatts, only 100 megawatts of grid-tied solar power have been commissioned to date.

Wind power proposals have seen an upsurge since 2012 with at least 477 megawatts projects reaching financial closure to date, demonstrating a viable market for renewable energy.

Last month, Nepra announced a new round of solar tariffs valid until June 30, 2016.

Eyeing the business potential, the International Finance Corporation has released a guide for investors to develop renewable energy particularly solar projects in the country.

The IFC handbook 'A Solar Developer's Guide to Pakistan' provides vital information for international investors and developers implementing solar projects, outlining development procedures and explaining the legal and regulatory mechanisms around them. It also explains the requirements surrounding the preparation, agreement, approval and implementation of projects up to financial close.

The country's first step towards firm support of renewables in its energy mix came in 2006 when it announced 'Development of Renewable Energy Generation Policy' which dealt with wind, solar and small hydro projects up to 50MW.

While initial progress has been slow, investors' interest has gained momentum over the last five years particularly in the wind and hydro sector and more recently in solar. To date, however, the only grid connected (100MW) project is the one commissioned by the Punjab government in May 2015.

The Alternative Energy Development Board (AEDB) reports that 35 projects with a capacity of 1,111.4MW are under development within the board's framework. Upfront tariffs have been approved for 10 developers and of those three projects of 100MW each have signed a power purchase agreement.

The IFC guide also spells out challenges and recommendations, identifying major issues with the input of various developers, tariff determination and industry norms.

Referring to timeline and policy uncertainty, the guide points out that no privately financed solar IPP has reached financial close in Pakistan. It is understood that projects awarded tariffs under the 2014 and 2015 determinations have been stalled as the Central Power Purchase Agency (CPPA) has been waiting for a lower tariff.

This has impacted investor confidence. Nepra is clear that the CPPA must honour those tariffs and has been consistent in granting timeline extensions to developers for reaching financial close, where the government organisations have not been cooperative. In addition, the issuance of letters of intent (LoIs) by the AEDB and provincial agencies had stalled in 2015 on the basis that a new tariff was expected. It is hoped that the issue will be resolved after publication of tariffs for 2016.

Land identification is one of the main hurdles for international developers looking to enter the Pakistani market. If a local partner is not found who already has land access, it may take some time to identify lands that are suitable for a solar project.

The lack of access to good digitalised maps makes things more difficult. The AEDB and the Sindh government are trying to make the process more investor-friendly by identifying suitable lands.

Referring to transmission issues, the IFC guide points out a number of applications for solar projects are pending with the National Transmission and Despatch Company (NTDC) which, owing to a regulatory uncertainty, has not been processing them as quickly as timelines require.

Under the 2006 policy, the NTDC is required to provide grid interconnection but this can take time and requires funding. The IFC has recommended that the NTDC be approached by investors as soon as possible. The developers should work with them and local consultants to identify areas that are most suitable for evacuation of power and that do not require substantial construction of transmission lines.

In the distributed solar space, the market has also been developing. With the rising costs of electricity and unreliable grid supply, more industries and commercial organisations are turning to captive solar solutions. There has been a strong surge in domestic installation of rooftop photo voltic panels in big cities. The private sector imported 350MW of solar panels in 2013.

For projects under 1MW, net metering regulations came into effect in September 2015. This sector is expected to see significant growth in the coming years. Pakistan is targeting at least one million customers and adding approximately 3,000MW of solar power through net metering.

Under the 2006 policy, solar power project developers can also enter into direct bilateral sales contracts with end-use customers to sell part of the power generated by them to their direct customers and the rest to the utility company for general distribution. For direct sales, they are required to pay wheeling charges for the use of the transmission/and or distribution grid network used to transport the power from the plant to the purchaser. Until now, there are no known solar projects that are selling power on a bilateral basis.

#### http://www.dawn.com/news/1238155

NO ALL-CLEAR FROM US FOR IP GAS PIPELINE PROJECT The Express Tribune, February 9th, 2016.

Zafar Bhutta

ISLAMABAD: A top US official has advised caution on the multibillion-dollar gas pipeline between Iran and Pakistan, saying that some American sanctions against the Islamic Republic are still in place.

The United States and European nations lifted crippling sanctions on Tehran on January 16 after international inspectors confirmed the country had honoured its commitment to dismantle large sections of its controversial nuclear programme.

However, the US Department of Energy's assistant secretary for international affairs told a news conference in Islamabad on Monday that some American sanctions were still in place.

"Pakistan will be entering gas agreement with major international gas suppliers very soon. The case of IP gas pipeline project is still to be judged," Jonathan Elkind said while announcing the launch of a three-year technical assistance programme designed to support Pakistan's energy development efforts.

"Indeed there has been a great deal of progress between Iran and the international community, including the United States, on most sensitive issues," he said. "We have been pleased to launch initial implementation of joint comprehensive action and move successfully towards implementation day, a moment which prescribes a list of international sanctions."

In the case of the United States, certain other sanctions are still in place against Iran which affect the ability of American legal persons and other parties using American financial systems to participate in projects with Iran, he added.

Elkind also said the Russian company picked out to develop gas infrastructure in Pakistan was facing US sanctions. "Pakistan is to determine and decide energy choices," he added. He was referring to RT Global Resources, a firm Moscow has nominated to build a north-south Liquefied Natural Gas (LNG) pipeline in Pakistan.

Asked about the development of coal-based power plants in Pakistan, the US official said the share of coal in the US energy mix has been dropped significantly. He cited the discovery of inexpensive natural gas reserves in the US as a reason.

"Globally too, a number of other countries which were earlier heavily dependent on coal are now working to reduce its share in their energy mix due to health problems. It affects human health, especially leading to premature death of children," Elkind said. "In the end, it's Pakistan's choice."

Asked if LNG could ease Pakistan's energy woes, he said LNG was a part of solution. "It's for Pakistan to decide how big role LNG should play," he added. "Pakistan has a sizeable domestic resource base which has not been tapped."

He said some countries had nuclear energy as part of their energy mix – but it required very serious and careful treatment. "We are working with Pakistan to facilitate it to pick out best energy options," he added.

Elkind said Washington and Islamabad had entered a new phase of energy cooperation. Under this project, the two countries would work on energy efficiency and development of the power grid system in Pakistan.

"We have an ambitious target for Pakistan-US energy partnership. And we have very good reasons to be optimistic due to the kind of changes Pakistan has made in its energy sector," he said. "The Pakistan government has come up with a great deal of focus on the energy sector."

Under the new phase of Pakistan-US energy cooperation, the use of application in the energy sector would be promoted because its prices have come down drastically in the world, he said. "Renewable energy can balance the load for supply from different variable resources. This is the area of cooperation in which we are focusing on technology for sustainable power."

http://tribune.com.pk/story/1043010/no-all-clear-from-us-for-ip-gas-pipeline-project/

NORWEGIAN FIRMS INTERESTED IN POWER SECTOR: ENVOY

Business Recorder, February 09, 2016

The Norwegian ambassador has revealed his country's companies interest in planning to invest in Pakistan, especially in the power sector. Diplomat Tore Nedrebo, talking to the Lahore Chamber of Commerce and Industry Senior Vice President, Almas Hyder, on Monday, did tell the LCCI to help identify areas of common interest.

A Norway-based company named the Telenor Group is already providing employment to 4,000 to 5,000 people in Pakistan. The group is an international provider of voice, data, content and mobile communication services in 13 markets across Europe and Asia and an additional 17 markets through its ownership in VimpelCom Ltd. Telenor started out as a public company in 1855.

"There is a need to make more concerted and sector-specific efforts to enhance the economic cooperation between the two countries and Norway is ready to take all steps to expand its ties for socio-economic development of the country," the diplomat added. Senior Vice President Hyder said, "Pakistan is well positioned to take off as economic indicators are portraying an encouraging picture. The growth rate is expected to reach between six and eight percent in 2018. Therefore, businessmen of Norway should come forward and avail of the opportunities through joint ventures with their Pakistani counterparts.

"Pakistan is a huge market and this is high time foreign investors taped a huge potential and take full advantage of the investment-friendly policies of the regime. The Lahore Chamber is ready to extend maximum cooperation to the businessmen of Norway." He went on, "The total mutual trade volume fell from \$78 million in 2012 to \$69 million in 2014. The trade figures of the last three years suggest that both countries must jointly make efforts to reverse the declining trend. A direct interaction between the two business communities can make it possible to cause quantum jump in trade figures.

"Pakistan's exports to Norway include bed linens, articles of apparel & clothing, rice, sports goods and hosiery items. Pakistan's imports from Norway are limited to polymers of ethylene & vinyl chloride and some natural polymers in primary forms. Other items include electrical equipment and scrap of iron and steel." He then went on to talk about the China-Pakistan Economic Corridor, claiming it had opened up new opportunities of trade and investment in Pakistan. He also urged the diplomat to play role in projecting Pakistan as a good market for international buyers and investors.

http://www.brecorder.com/fuel-a-energy/193/14474/

## THAR COAL GASIFICATION PROJECT REVIEWED Dawn, February 10th, 2016

ISLAMABAD: Planning and Development Minister Ahsan Iqbal said on Tuesday private or public investment could be made available for a coal gasification project in Thar once it was found commercially feasible.

Chairing a meeting to review progress on the project, Mr Iqbal sought details of financial modelling, cost calculations and evaluation of the scientific model for making the project commercially viable after validation of its technological model.

"Since the prototype has been developed and functional, a business model must be prepared now. To dispel any negative perception about the project, we must have a scientific validation of the project by a panel of eminent experts."

Briefing the minister, project head Dr Samar Mubarakmand said synthetic gas (syngas) purification plants, eight power generators and horizontal directional drilling machinery had been installed, while power production of 5MW began in May last year. Eight more generators and other machinery would be installed in the near future, he said.

He said 322 million cubic feet gas could be produced along with other materials, including diesel. The plant was not emitting environmentally hazardous gases since the whole process was being done underground, he added.

Mr Iqbal said he would visit the project site soon to see the processes of generating gas and electricity. Pakistan has very talented engineers who could find solutions to problems in a cost-effective manner. The government is focussing on developing strong technological base for future knowledge economy of Pakistan," he said.

He said the development of Thar coal power plants was top priority of the government as 175 billion tonnes of lignite could help produce 5,000MW annually for 400 years.

## http://www.dawn.com/news/1238470

SINDH OBJECTS TO 1,180MW LNG POWER PROJECT IN PUNJAB, SEEKS CCI INTERVENTION Dawn, February 10th, 2016

# KHALEEQ KIANI

ISLAMABAD: Amid opposition by the Sindh government on legal and constitutional grounds, the National Electric Power Regulatory Authority (Nepra) on Tuesday reserved its judgement whether or not to grant generation licence to a 1,180-megawatt, LNG-based power plant in Punjab's Bhikki area.

The regulator was hearing comments of the stakeholders on a request filed by Quaid-e-Azam Thermal Power (Pvt) Limited for grant of generation licence for the project located in Bhikki, Sheikhupura district. The hearing was presided over by Nepra Chairman Tariq Sadozai.

Tariq Ali Shah, a focal person of the Sindh government, said the setting up of LNG-based power plants in Punjab should not be allowed without a formal approval of the Council of Common Interests (CCI), which he said was the constitutional forum to settle inter-provincial issues.

The Sindh government believed the natural gas, electricity and all related incidental or ancillary matters appeared at the entry number 2, 4 and 18 of the second part of the fourth schedule of the Constitution and fell in the provincial domain, and hence should be taken up for approval with the CCI.

Mr Shah said LNG power plants in Punjab should not be set up solely on the basis of decisions of the cabinet's Economic Coordination Committee (ECC) and its energy committee because they had no legal standing on the issue in the eyes of the Constitution. "This project should be presented before CCI for approval and should not be initiated unless cleared."

He said the regulator would have to consider Sindh government's viewpoint and Punjab should not be granted generation licence to operate the plant. Sindh has already submitted before Nepra in writing that the regasified LNG (RLNG) after import would be swapped with natural gas from Zamzama, Dadu, Kandanwari and Sawan fields and Sindh's consent was necessary for such a swap.

Quaid-e-Azam Thermal Power's CEO Ahad Khan Cheema informed Nepra that a gas sales-purchase agreement (SPA) with the Sui Northern Gas Pipeline Limited (SNGPL) would be signed on Wednesday (today). He said the project had been approved at the highest level and contract for its installation had also been awarded through competitive bidding.

He said the SNGPL and Sui Southern Gas Company (SSGC) were also expected to sign SPA for swapping RLNG with domestic gas near Sawan field, while better quality imported LNG would be made available for consumption in Sindh.

He said the two gas companies were also working on projects for increasing their pipeline capacity by 800mmcfd (million cubic feet per day) from 400mmcfd to support LNG-based power stations in Punjab, where various consumers were facing extreme energy shortages.

Responding to a question from Nepra's chairman, Mr Cheema said his company was not the first to contract new power plants of General Electric (GE). He said the GE had contracted 10 similar orders, latest being in France where these plants were running successfully.

Rejected viewpoint of the Sindh government, he said LNG-based power plants did not require approval of the CCI and these plants were being set up under the power policy of the government of Pakistan and all relevant approvals were in place. He said a number of issues raised by Nepra case officers were out of the regulator's jurisdiction.

Mr Sadozai commented that anyone could come to the regulator for generation licence which had to take into account views and concerns of all the stakeholders and also frame its own issues before granting a licence. He said it was important for the regulator to satisfy all questions and issues raised by any side.

The Nepra staff wondered if the project was justified given the fact that a number of imported and local coal-based projects were being set up in the south of the country while their generation was supposed to be consumed in the centre and north of the country.

It also pointed out that currently there was no dedicated transmission line in the country to deliver RLNG into the project site, and LNG import agreements and arrangements were still not in place.

Meanwhile, the regulator also conducted public hearing regarding new tariff for Quetta Electric Supply Company (Qesco) for 2015-16.

The Qesco chief said during the hearing that the company was supplying power to the far-flung areas of the province.

It was a challenge for company to control losses due to big distribution network, he said, and pleaded the regulator to approve higher tariff for 2015-16.

The Nepra chairman said the company should control its losses and should use budget allocated by the federal government effectively.

He expressed concern when the Qesco said the company was transferring all its revenue collections to the Central Power Purchasing Agency (CPPA) of the federal government and had little financial space to reduce losses as the system required investment.

The regulator was informed that this fiscal transfer was taking place without any written orders of the federal government. Mr Sadozai said the company should improve its affairs before making payment to the CPPA.

# http://www.dawn.com/news/1238472

THAR COAL POWER DEVELOPMENT TOP PRIORITY OF GOVERNMENT: AHSAN Business Recorder, 10 February 2016

ISLAMABAD: Minister for Planning, Development and Reform, Ahsan Iqbal on Tuesday said development of the Thar coal power plant was top priority of the government.

Chairing a meeting held to review progress of coal gasification project in Thar, he said the coal reserves of 175 billion tonnes would produce 5,000 MW annually for 400 years.

Dr Samar Mubarak Mand, who is heading the project, briefed that the syngas purification plants, eight power generators and horizontal directional drilling machinery had been installed, while power production of five MW had started in May 2015.

He mentioned that eight more generators and other machinery would be installed in the near future.

Dr Mand informed 322 million cubic feet gas could be produced along with other useful materials, including diesel. He clarified that the plant was not emitting environmentally hazardous gases in the air since the whole process was being done underground.

The minister asked about the financial modelling, cost calculations and evaluation of the scientific model for making the project commercially viable after validation of its technological model.

The minister asked for preparing a commercialisation feasibility and said the private or public investment could be made available for the project if it was found commercially feasible.

"Since the prototype has been developed and functional and now a business model must be prepared. In order to dispel any negative perception about the project, we must have a scientific validation of the project by a panel of eminent experts," he said.

The minister assured to visit the site at the earliest to see the processes of generating gas and electricity.

http://www.brecorder.com/top-news/pakistan/277977-thar-coal-power-development-top-priority-of-government-ahsan.html

3,000 MEGAWATTS: US-PAKISTAN PARTNERSHIP TO DEVELOP NEW PRIVATE SECTOR INVESTMENT

Business Recorder February 11, 2016

Department of Energy Assistant Secretary for International Affairs Jonathan Elkind joined Pakistan's Ministry of Planning, Development, and Reform, the Ministry Water and Power, and the Ministry of Petroleum and Natural Resources to announce the launch of a \$3 million multi-agency technical assistance program designed to support Pakistan's energy development efforts.

The three-year Program, conducted in partnership with the US Agency for International Development, will bring experts from the Department of Energy national laboratories together with Pakistani experts to develop strategies and resources for integrated energy planning, energy efficiency, and promoting private investment in renewable energy and integration.

"The United States is committed to our partnership with Pakistan. We are addressing energy challenges and working together on our shared global energy priorities, including the opportunities presented by a growing renewable energy market," said Assistant Secretary Elkind. "We look forward to having American and Pakistani experts collaborate in this critical arena." The Program is a milestone in the US-Pakistan Clean Energy Partnership, announced by President Obama and Prime Minister Sharif in October 2015.

The Partnership aims to develop 3,000 megawatts of new private sector investments in Pakistan in clean energy generation, directly benefiting more than 30 million Pakistanis. The new Partnership continues ongoing joint efforts by the United States and Pakistan to address Pakistan's energy needs, and is part of broader energy assistance that includes support from USAID, the Department of State, and the Department of Energy.

The United States and Pakistan have co-operated on energy issues since 2009 under the Energy Working Group established through the US-Pakistan Strategic Dialogue. Recognising the critical importance of increasing energy security and access in a clean, sustainable manner, the United States has committed more than \$1 billion to date to support energy sector investments and reforms in cooperation with the government of Pakistan. -PR

http://www.brecorder.com/fuel-a-energy/193/15106/

Business Recorder, February 12, 2016

#### ABDUL RASHEED AZAD

The government of Pakistan has reiterated to support Global Cleantech Innovation Programme for Small and Medium Enterprises (SMEs) and Start-ups (GCIP) to create a competition and accelerate promotion of innovations in the area of clean technologies to effectively tackle the energy crisis. Shoaib Mir, Additional Secretary, Ministry of Climate Change (MoCC) said this while addressing an event titled "Celebrating Success" organised by the United Nations Industrial Development Organisation (UNIDO) here on Thursday.

Mir stressed on the use of clean technology in highly globalise world and the efforts made by the government for the promotion and advancement of technology and industrialisation in Pakistan. He said that he was really glad to hear about the laurels which Pakistani teams had brought at international level in this particular area and it was indeed an honour for people, government and all institutions of Pakistan.

The participants were informed that in 2015, GCIP completed second cycle, under the programme 55 SMEs and start-ups in Pakistan were supported through a programme of extensive mentoring, training, access to investors and showcasing opportunities. The UNIDO representative to Pakistan, Esam Alqararah addressing the ceremony shared UNIDO's vision on energy and environment and the efforts UNIDO is making to promote innovations regarding clean technologies in Pakistan.

The GCIP programme seeks to create new industries that bring about new jobs, prosperity as well as saving the environment. This programme has a special feature to ensure gender mainstreaming and this programme remained successful in this regard, he added.

He said that Pakistan had got the highest numbers of applicants in the world, adding that this project was unique and what benefits to this project was offering to the innovators of cleantech and also the efforts which the team are doing to make this programme sustainable and making the whole ecosystem more conducive for the entrepreneurial activities in the field of Cleantech.

Alqararah pointed out the importance of innovations for sustainable development of Pakistan and reiterated UNIDO's commitment to further strengthen cooperation with MoCC and ICCI. This competition was carried out in seven countries simultaneously around the world to foster innovations in renewable energy, energy efficiency, water efficiency and waste to energy.

The programme involves extensive mentoring, training, access to investors and opportunities to showcase their innovations and win prizes ranging from \$15,000 to \$20,000 along with a learning visit to Silicon Valley, USA. Atif Ikram Sheikh, President of the Islamabad Chamber of commerce and industry (icci) highlighted initiatives taken by the chamber in collaboration with UNIDO to support SMEs and entrepreneurship with a particular focus on youth and females.

He was optimistic that such initiatives would promote clean technologies in SMEs and will enable them to compete more effectively in the market. He expressed keen interest to work with the UNIDO on such initiatives in the future too.

 $\underline{http://www.brecorder.com/fuel-a-energy/193:pakistan/15412:call-for-using-clean-technologies-to-tackle-energy-crisis/?date=2016-02-12$ 

PAKISTAN TO SIGN FIVE MORE LNG AGREEMENTS The Express Tribune, February 12th, 2016 ISLAMABAD: Minister of Petroleum and Natural Resources Shahid Khaqan Abbasi has said that five more liquefied natural gas-based agreements will be signed with Qatar after the government inked a \$16-billion deal for gas import a day ago.

Talking to Voice of America on Thursday, he said Pakistan had been passing through a severe energy crisis and LNG import from Qatar would be a positive and welcome step to address the issue.

The two countries have signed three other agreements and memoranda of understanding for cooperation in the fields of radio, television, health and academic research.

Abbasi pointed out that 50% of Pakistan's energy needs depended on energy produced by gas and LNG import from Qatar had started partially, but the gas was given to consumers on the basis of their need.

Under the agreement with Qatar, three LNG-carrying ships would reach Pakistan every month this year and next, he said, adding the number of vessels would increase to five after 2017.

Responding to a question, the minister said Pakistan had been facing energy crisis for the past several years due to which not only domestic consumers but also the national economy suffered badly.

In his remarks, Sui Southern Gas Company former general manager Brigadier (Retired) Agha Gul noted that the process of LNG purchases from Qatar had been going on from 2004. Talking to Voice of America, Gul stressed that people who had some knowhow of the energy crisis would consider the LNG import project as light at the end of the tunnel.

The deal has come at a time when oil prices stand at sharply lower levels in the international market, which would have a good impact.

http://tribune.com.pk/story/1045185/country-to-sign-five-more-lng-agreements/

NEWS COVERAGE PERIOD FROM FEBRUARY 1ST TO FEBRUARY 7TH 2016 SINDH HAS RESERVATIONS OVER GAS, ENERGY & NFC AWARD, SAYS QAIM Published in Dawn, February 1st, 2016

### SHAKEEL AHMED

MULTAN: Sindh Chief Minister Syed Qaim Ali Shah said on Sunday that the Sindh government stood with the federal government on some issues, but there were certain matters on which it had reservations with the federation.

Talking to journalists here, the chief minister said: "We are with the federal government and have respect for it but we also have reservations on some issues like energy, gas, National Finance Commission Award and the implementation on 18th Amendment.

"Prime Minister Nawaz Sharif is a good person and he visits Sindh in connection with the law and order situation but he never addressed our reservations over energy, health and education," Mr Shah complained.

The chief minister said that powers had not been devolved to provinces as far as health, education and other sectors were concerned.

He said the federal government had not extended the NFC Award despite the fact that it had completed five years.

"Finance Minister Ishaq Dar was asked to play his role for the extension of the NFC award, but he did not respond to the provincial government's request," the chief minister said.

Referring to power situation in the province, Mr Shah said that the province had resources to generate electricity from coal and wind.

He said that the cost of a power unit in Sindh, Punjab and other areas of the country was Rs17 to Rs18, but it could be brought down to Rs9 from coal.

The chief minister said that 20 licences had been issued to various companies to generate electricity from coal.

He said the Sindh government had no objection to the arrest of Uzair Baloch.

"We have no differences with the federal government over the arrest of Uzair Baloch as all criminals should be arrested," he said.

He said the provincial government did not know when Baloch had been arrested as some reports suggested he had been arrested earlier.

Referring to law and order situation in Sindh, Mr Shah said that it had deteriorated in the province over past 30 years, but it was now improving for a couple of years.

He said that corruption existed in all parts of the country and Sindh was not alone in that sense and institutions like National Accountability Bureau and Federal Investigation Agency were there to take action against those elements who were involved in this.

Meanwhile, Mr Shah participated in a marriage ceremony during his stay here besides visiting the Gilani House to condole the death of Asad Murtaza Gilani, nephew of former prime minister Yousuf Raza Gilani. Asad Gilani died in the Mina stampede during Haj.

Mr Gilani's brother, Ahmed Mujtaba Gilani, received the chief minister along Khawaja Rizwan Alam, PPP information secretary in south Punjab, when Mr Shah arrived here as former prime minister Yousuf Raza Gilani was not present in Multan.

http://www.dawn.com/news/1236710

K-ELECTRIC'S RS42B SUBSIDY CLAIMS SPARK CONCERN The Express Tribune, February 4th, 2016.

Zafar Bhutta

ISLAMABAD: The Ministry of Finance has voiced concern over the highest subsidy claims made by K-Electric and requested the Ministry of Water and Power to rationalise the payments.

The issue came up for review in a meeting of the sub-committee on K-Electric affairs on January 5.

Officials of the finance ministry told the committee that the subsidy claimed by K-Electric was the highest when compared with other power distribution companies and was almost equal to the combined subsidy claims of all other distribution companies.

Terming the situation alarming, they asked the Ministry of Water and Power to look into the matter and rationalise K-Electric's subsidy claims. According to officials of the water and power ministry, the company has claimed Rs42 billion in subsidy payments.

During the deliberations, issues related to the Central Power Purchasing Agency (CPPA) were also taken up for discussion.

Joint secretary of the water and power ministry recalled that it had earlier been decided that the CPPA and National Transmission and Despatch Company (NTDC) would share draft of a new power purchase agreement with K-Electric about supply of 650 megawatts to the power utility.

Subsequently, the agreement was shared with the company on December 28, 2015.

K-Electric Chief Executive Officer Tayyab Tareen spoke about the consumer growth pattern in Karachi and the difficulty in an instantaneous reduction because of various factors including but not limited to capacity, impact on tariff differential claims, consumer subsidy, etc.

He said a yearly average lower than 650 megawatts could be agreed to address the capacity issue while a higher subsidy and tariff differential were also the areas where the impact was understood.

Some meeting participants pointed out that a fixed power supply quota for K-Electric was not possible anymore in view of the growing demand from other areas of the country.

K-Electric should utilise its own generation capacity and then look at other scenarios, they said. However, if extra energy is available in the national grid, it will be provided to the company.

The committee asked the CPPA to discuss terms and conditions of the new power purchase agreement with K-Electric and present a report.

Talking about electricity supply to the Karachi Water and Sewerage Board (KWSB), the CEO of K-Electric said they had held several meetings with the Government of Sindh for reconciliation of outstanding bills of the remaining 17 connections of the water board.

However surprisingly, KWSB has now requested for reconciliation of bills of all other 280 connections from April 2009 to July 2015. The "willful default strategy" of KWSB caused concern among committee members as it had resulted in an increase in liabilities of the Sindh government and caused power sector crunch.

According to the CEO of K-Electric, KWSB's liabilities have surged to Rs42 billion. Meeting participants decided that they would send a request to the Sindh government for clearing the liabilities of KWSB immediately. They also agreed that power connections of strategic customers would also be cut off if they defaulted on payments.

http://tribune.com.pk/story/1039821/alarming-k-electrics-rs42b-subsidy-claims-spark-concern/

CEMENT, FERTILISER AND POWER SECTORS STILL CONSUMING MAJOR SHARE OF GAS Dawn, February 4th, 2016

### KHALEEQ KIANI

ISLAMABAD: Around 275 million cubic feet per day (mmcfd) of natural gas is still being provided to cement, fertiliser and power plants although domestic consumers continue to suffer, particularly in Punjab and some parts of Khyber-Pakhtunkhwa.

A senior official of the petroleum ministry told Dawn that natural gas currently being supplied to some of the non-domestic sectors was without formal contracts. At least 275mmcfd gas being supplied to customers other than residential consumers accounted for 600mmcfd of total gas availability in the Punjab.

The supplies of liquefied natural gas (LNG) have also been curtailed in recent days because of liquidity crunch even though the regasification and storage terminal was installed in March last year with prime objective of minimising gas shortfall in winter — starting November 2015.

He said the terminal had the capacity to process 400mmcfd under the government contract but LNG imports had been reduced despite lowest prices in the spot market.

The government should not only increase LNG imports to take advantage of its low prices, but also negotiate with Qatargas to put an upper cap on its import price because of a long-term agreement.

Giving an example, the official said Rousch Power Plant was currently being supplied about 86mmcfd of gas despite the fact that the plant did not have any gas supply contract at the moment. Likewise, Fauji Kabirwala Plant was also getting 25mmcfd and public sector Guddu plant was being provided 23mmcfd.

Another 81mmcfd of natural gas was also being provided to Jamshoro Power plant, followed by 29mmcfd to Kotri Power Plant. Fauji Jordan Fertiliser plant was also being provided 19mmcfd. The official said Pak-Arab Fertiliser was also being provided about 43mmcfd of natural gas until last week but was later disconnected when it was highlighted in the media.

About 11mmcfd gas in Sui Northern Gas Pipelines Limited (SNGPL) was also going to the cement sector which is at the lowest level of the priority list.

This include 5.5mmcfd to Lucky Cement, 2.5mmcfd to two plants of DG Khan in Kalar Kahar and Multan, one mmcfd to Kohat Cement and two mmcfd to Gharibwal Cement.

Under the load management policy, domestic consumers are on the top priority, followed by power, fertiliser, industry, CNG and then cement. Because of historic fall in international oil prices, the cost of regasified LNG (RLNG) after all the taxes and charges has fallen below \$5.5 per mmbtu which is well below the price of some of the domestic gas fields.

RLNG price has become affordable to domestic sector at this rate if made part of the weighted average cost of gas at least for three months.

On the other hand, the SNGPL has appealed to all consumers to minimise use of gas appliances to ensure provision of gas for cooking purposes only for fellow consumers and avoid using gas compressors and heaters which could be life threatening.

The company said the demand supply position on its system had deteriorated over the last few years due to the impact of new domestic connections involving additional 80-100mmcfd annually during winter months against 160mmcfd reduction in supplies every year.

"Thus each year, SNGPL faces an additional shortfall of 250mmcfd," the SNGPL said.

It said the shortfall was bridged though load management (curtailment) in different sectors to cater for high priority domestic and commercial sectors in accordance with Natural Gas Allocation and Management Policy, 2005 and its subsequent amendments.

"Due to the decision of Peshawar High Court against a writ petition invoking Article-158 of the constitution, there is no curtailment in Khyber Pakhtunkhwa," a company spokesperson explained.

During the current winter season, SNGPL was left with no option but to curtail total system quality gas supplies to all sectors in Punjab other than domestic and commercial consumers, the spokespersons claimed.

Even with the said suspension, the gas available for Punjab is not sufficient to meet the demand of domestic and commercial sectors in extreme winters (around 1,000 mmcfd).

Commenting on gas supply to non-entitled sectors, the SNGPL said some sectors continue to get gas even during winter months like power and fertiliser which are supplied raw, permeate or low BTU gas, which is not fit for supply to other sectors through SNGPL's pipeline network. These dedicated supplies typically range from 180 to 240mmcfd. Further, SNGPL is bound to supply 15mmcfd system quality gas to Engro Fertilisers, under firm commitment.

Additionally, cement sector is being supplied around 12mmcfd, out of which, around 7-8mmcfd is supplied to the plants located in the provinces of Khyber Pakhtunkhwa. Remaining 4-5mmcfd is mainly supplied to residential colonies of cement plants in Punjab since the same fall under domestic consumers.

Some consumers have opted for supplies of Re-gasified LNG (RLNG). Rousch, Fauji Kabirwal, Kot Addu, Saif, Sapphire, Orient and Halmore from the power sector, Pak-Arab from fertiliser sectors and a large number of consumers from industrial and CNG sectors have opted for RLNG supplies and are being supplied RLNG on as available basis.

This shift has contributed to reduction in the overall demand supply gap of natural gas. Domestic sector is not being supplied RLNG due to its heavy cost component.

He said total gas available for supply in the Punjab was around 600mmcfd and diversion of gas from non-entitled sectors as per government's approved and published load management policy could make a lot of difference in easing sufferings of the people.

### http://www.dawn.com/news/1237263

# 2,320 MEGAWATTS ENERGY PROJECTS IN SOUTHERN PUNJAB: TWO ACCORDS SIGNED WITH CHINESE, DANISH COMPANIES

Business Recorder, February 04, 2016

Two separate agreements were signed between Punjab Government and Chinese and Danish companies for setting up 2320 megawatt energy projects in South Punjab Chief Minister Shahbaz Sharif was the chief guest. Under the agreement signed between Punjab government and Danish wind power generation international company VESTAS will set up four wind power plants of 250 megawatt each at Rajanpur in South Punjab whereas under the second agreement, renowned Chinese Company Hauneng Shandong will set up two coal power plants of 660 megawatt each at Rahimyar Khan.

The Chief Minister gave Letter of Intent to Vice President of VESTAS. Gerard Carew with regard to the agreement of one thousand megawatt energy project between Punjab government and Danish company VESTAS, under which four wind power projects of 250 megawatt each will be set up in South Punjab on which an investment of 2 billion dollars will be made.

Talking to the media men Shahbaz Sharif said that last year it was announced that there are vast opportunities of generating energy in south Punjab and sites had been identified where plants of generating electricity through wind could be set up, former Danish Ambassador in Pakistan Jesper Moller Sorensen had extended cooperation for identifying wind corridor.

He said the wind corridor was identified with the cooperation of world renowned company VESTAS for which we are thankful to Danish company for providing free assistance in this regard. As a result of these efforts, a big achievement has been made with regard to one thousand megawatt wind power project between Danish Company VESTAS and Punjab government.

Political Director of Ministry of Foreign Affairs of Denmark Jesper Moler Sorensen who served as ambassador in Pakistan from 2013 to 2015 addressing the function said Pakistan is coming as a surprising market for Danish

companies in energy sector and is marching forward in the field of renewable energy where Danish companies are very strong.

He said that technical abilities of VESTAS were introduced to Punjab government one and a half years ago and Denmark is ready to provide more technical assistance to Punjab government in renewable energy sector. He said Danish government has planned to transfer Danish expertise in wind policy, technical field and financing sector to concerned Pakistani stakeholders. 2018 is the target of starting commercial operation from first 250 megawatt project.

Vice President of VESTAS Jerad Cereu addressing the ceremony said that VESTAS provides wind energy to 74 countries and it has provided jobs to 19500 people. VESTAS has set up 52 percent more megawatts than others in the industry and the projects of 71 gegawatts have been set up all over the world. VESTAS is committed to play important role in the increasing market of Pakistan, he added.

Provincial Ministers Sher Ali Khan, Ayesha Ghous Pasha, Chairman Planning and Development and other officials were also present on this occasion. Earlier, an agreement of 1320 megawatt coal power plant was signed between Punjab government and Chinese company Hauneng Shandong, an investment of two billion dollars will be made on this project.

Under this agreement, Chinese company will set up two coal power plants of 660 megawatt each in Rahimyar Khan. Secretary Energy Asad ur Rehman Gilani signed on behalf of Punjab government and President of Chinese company Wang Wen Zong on behalf of his company.

Speaking on the occasion Shahbaz Sharif said that the agreement of 1320 megawatt between Punjab government and Chinese company is a good omen. The Punjab government will provide all possible facilities for implementing this project. He said that Sahiwal coal power project is being forwarded expeditiously and 50 percent construction work has been completed.

The Chief Minister said that a new history of speed, transparency and high standard is being written in Sahiwal coal power project. He said that Chinese companies have made investment of 1.8 billion dollars in the project of China Pakistan Economic Corridor will be helpful in removing darkness from Pakistan. Shahbaz Sharif said that Punjab government and federal departments are working with devotion and dedication on energy projects. Railways, Port Qasim Authority and NTDC have assured to complete their respective work within stipulated period.

The Chief Minister said that work is continuing on 1320 megawatt coal power plant in Sahiwal. He said that the work was started on this project six and a half months ago and 50.8 percent construction work has been completed so far.

http://www.brecorder.com/market-data/stocks-a-bonds/0/13182/

HYDEL POWER POLICY 2016 APPROVED BY KP Business Recorder, February 05, 2016

The provincial government of Khyber Pakhtunkhawa Thursday approved Hydel Power Policy 2016 to allow power generation both under Independent Power Producers (IPPs) model and public sector in the province. The policy was approved in a meeting of the provincial cabinet with Chief Minister Pervez Khattak in the chair.

Under the new policy, the provincial government will promote low-cost power projects and private sector will be encouraged. The policy will also guarantee fast-track, transparent and environment-friendly power projects.

The policy will cover hydel power projects in each size, capacity and technology and the projects whose implementable feasibility study and complete engineering design are available will be awarded through international bidding.

On the recommendations of the provincial cabinet, hydel power projects including transmission line and distribution lines will be taken up with federal government. Under the policy, all private sector hydel power projects will be operated on the basis of built own operate and transfer (BOOT).

For this purpose, Pakhtunkhawa Energy Development Organisation (PEDO) will provide one-window facilitation to all investors and they will be allowed to issue corporate bonds. The provincial government will also support investors in the acquisition of land, which later will be leased out to investors under a formal agreement.

Besides, return on equity, the investors will be exempted of income tax, turnover tax, withholding tax and zero rated sales tax on plant, machinery and other instruments will be given.

There will also be no provincial sales tax and the investors will have to pay only 5 percent customs duty on import of plant and machinery that are not locally manufactured.

Under the policy, the investors will have to initiate public welfare projects in social sectors of health and education and they have to spend a good amount of water charges on the development of the area concerned.

The cabinet also approved amendments to Ehtesab Commission Act 2014, making it mandatory for the commission to complete inquiry against the accused within a period of 30 days with a deadline of completing investigation in 90 days.

It was made mandatory to inform Speaker or Deputy Speaker in case of arrest of any MPA or provincial minister. Similarly, in case of arrest of any government official, the chief secretary of the province would be informed, said Mushtaq Ghani, Provincial Minister for Information.

The provincial cabinet has also decided that Ehtesab Commission can keep government record for 15 days for completing inquiry against any person. After 15 days, the commission will return official record by keeping a photostat copy with it, he added. In case of Anti-Corruption Department, the official record would be returned on the same day after getting a photostat copy of it.

The cabinet also approved Youth Policy aimed at economic, social, and political growth of youth of the province so that they could play an effective role in the development of the country. In preparation of Youth Policy, 380 youngsters from across the province and 250 departments made contributions.

Under the Youth Policy special concentration will be made on imparting vocational training to youngsters, giving loan on easy terms to poor youth, guidance on starting up business. Under the policy, two percent of annual budget would be reserved for youth development, the minister maintained.

http://www.brecorder.com/fuel-a-energy/193/13568/

LNG-BASED: GOVT PLANS MEDIUM-SIZED POWER PROJECTS The Express Tribune, February 6th, 2016.

Zafar Bhutta

ISLAMABAD: The government has decided to invite bids from the private sector for building new medium-sized power plants of 100 to 250 megawatts with re-gasified liquefied natural gas (LNG) as fuel and cumulative production capacity of 1,000MW.

The Economic Coordination Committee (ECC) took the decision in a meeting held on January 29.

The Ministry of Water and Power told the committee that the government was making concerted efforts to eliminate power shortages and was exploring all possibilities for a substantial addition to the country's electricity generation capacity in the minimum time frame.

To achieve that goal, the government will stimulate private-sector investment in constructing new medium-sized power plants of 100 to 250MW and these will be run with the help of re-gasified LNG.

Their total production capacity will be 1,000MW and investors will be picked through international competitive bidding.

These plants will either be installed at the sites of old or abandoned power generation plants or in the vicinity of existing grid stations and transmission lines of the National Transmission and Despatch Company (NTDC) or electricity distribution companies.

The bidders will be required to offer a discount on the tariff set for re-gasified LNG-based power projects. Project sponsors must also start open-cycle operations by March 31, 2017 and commercial operations in combined-cycle mode by January 1, 2018.

The water and power ministry said the planned projects would be processed and developed under the Power Generation Policy of 2015. The policy provides for standardised security documents for power projects developed by the private sector.

The security documents include an implementation agreement and a power purchase agreement containing provisions regarding legal and contractual framework for financial close, engineering, procurement, construction, commissioning, operation and maintenance on build, own and operate basis.

Drafts of the implementation agreement and the power purchase agreement are based on the standards approved earlier by the ECC for coal-based power projects of the private sector.

These are also in line with the specific requirements of re-gasified LNG-based power projects, the upfront tariff set by the National Electric Power Regulatory Authority (Nepra) and the parameters specified by the regulator.

The Ministry of Water and Power asked the ECC to approve the initiative and the framework for processing and implementing the planned power projects. It also sought the ECC's go-ahead for the standardised implementation agreement and the power purchase agreement under the Power Generation Policy of 2015.

The ministry requested the ECC to empower the Private Power and Infrastructure Board (PPIB) and the Central Power Purchasing Agency (CPPA) so that they could make and approve any specific amendments in the implementation and power purchase agreements during negotiations provided the government's obligations or liabilities did not increase.

It said the PPIB and CPPA should be permitted to make and approve any amendments in these agreements in order to comply with Nepra's tariff determinations.

The ECC accepted the ministry's proposal and allowed the setting up of LNG-fired power plants by the private sector with cumulative capacity of 1,000MW. These are aimed at bridging the power shortfall to meet the government's target of ending outages by December 2017.

http://tribune.com.pk/story/1041193/lng-based-govt-plans-medium-sized-power-projects/

# **March 2016**

### NEWS COVERAGE PERIOD FROM MARCH 28th TO APRIL 3rd 2016

### ENERGY CRISIS: FIVE HYDROPOWER PROJECTS INITIATED IN K-P

The Express Tribune, March 28th, 2016

PESHAWAR: At least five 214 megawatt (MW) hydropower projects have been initiated in the province while three 56MW hydropower projects will be completed this year.

This was stated in a handout issued by Pakhtunkhwa Energy Development Organization on Sunday. These decisions were taken during the 12th PEDO meeting held the same day.

"The provincial government is taking effective measures to accelerate the pace of generating electricity to pull the country out of the energy crisis," stated the document.

During the meeting, participants decided Munda Dam and other projects will be included in the China-Pakistan Economic Corridor.

"The Asian Development Bank (ADB) will assist in developing 1,000 mini-micro hydropower stations in areas where people have been deprived of electricity," the handout read.

Participants also discussed steps that were being taken for the welfare of PEDO employees. PEDO CEO Akbar Ayub Khan briefed participants about ongoing hydropower projects in the province.

"Three energy projects will be completed this year which would generate 56MW of electricity," the handout quoted him as saying. "Meanwhile, work on five more hydropower projects had been initiated that would produce 214MW of electricity."

He added the provincial government initiated work on 356 mini-micro hydel stations and the number of projects will increase to 1,000 with the financial support of the ADB.

Meanwhile, Shakeel Durrani, chairman of the organisation, said PEDO is an autonomous organisation and there was no political pressure on it. He added all decisions would be taken on merit and in the best interest of the province. Durrani added the provincial government was carrying out efforts to induct the proposed Munda Dam and other projects in CPEC.

http://tribune.com.pk/story/1073863/energy-crisis-five-hydropower-projects-initiated-in-k-p/

#### **DELAYS IN POWER PROJECTS**

The Express Tribune, March 28th, 2016.

Very few things would take priority for the government over its commitment to end power outages in the country by the end of its term in 2018. But when there are reports making the rounds that there could be a possible delay in completing power projects that would help achieve that goal, it is bound to annoy the prime minister.

With more than half the PML-N government's term over, the completion of two crucial projects is likely to be delayed. The authorities are fighting a race against time to complete the Neelum-Jhelum hydropower project and the Tarbela-IV Extension before the general elections. If that does not happen, the prime minister's hopes of staying true to his word regarding adding thousands of megawatts of electricity to the national grid will be dashed.

The Wapda chairman has repeatedly assured that work on the Tarbela-IV Extension would be completed by June 2017, but a delay is in the offing. Meanwhile, despite cost revisions that have seen the estimate shoot up by over 100 per cent, the Neelum-Jhelum project is also unlikely to be completed on time.

The issue with the delays is not just about the projects not being ready to supply much-needed electricity. There are also serious concerns about cost revisions, which will take a great toll on the government's finances.

For long, bureaucratic red tape and an inefficient organisational structure have hindered the country's development on various fronts. While the government at times is all too ready to boast about the few power projects that have allowed some relief to the energy sector, there still remain important projects, which if not implemented, are likely to derail the progress Pakistan is hoping to make.

With energy needs bound to go up, the country can ill-afford to be found wanting in terms of making progress in the power sector. At the same time, despite some reforms being initiated, deep-rooted issues in the sector remain intact. It is of utmost importance that the government ensures the completion of the two said projects in time as Pakistan's long-term economic progress depends increasingly on resolving our energy needs.

http://tribune.com.pk/story/1073897/delays-in-power-projects/

# BRAZIL CAN HELP OVERCOME ENERGY CRISIS: AMBASSADOR

Business Recorder March 29, 2016

RAWALPINDI: Brazil's Ambassador to Pakistan Claudio Raja Gabaglia Lins Monday said his country could provide assistance in renewable energy sector, especially in wind power, solar and coal to resolve the issue of energy crisis.

He was talking to Acting President of Rawalpindi Chamber of Commerce and Industry (RCCI) Saqib Rafique during his visit to the chamber on Monday.

The ambassador said,"We have improved per hector yield through double cropping, corn after soybean. Similarly, poultry meat has huge potential and Pakistani exporters can take benefit from Brazilian expertise in this sector."

The current trade volume between the two countries, he said, was around 300 million dollars which was very low. Brazil's major imports from Pakistan were sports items, surgical tools, cotton, polymer and paper.

More than 30% of exports were being carried out in agriculture and livestock sector, he added.

Acting President RCCI Saqib Rafiq underscored the need to translate the existing goodwill in building solid trade and commercial ties between the two countries.

Brazilian expertise in information technology, dairy farming, livestock and renewable energy and infrastructure sectors was much needed in Pakistan, he added.

He said there was a need to explore non conventional sectors like gem and jewellery, marble, information technology and pharmaceuticals.

Saqib urged the envoy to focus on increasing Pakistan's exports to Brazil and attracting Brazilian investment for joint ventures.

To benefit from the existing opportunities, exchange of delegations was important, he added.

He said single country exhibitions could be a great source of introducing products in each other's markets.

A Brazilian information desk was required at the chamber where members could get informational catalogues and brochures.

He invited envoy to bring Brazilian Companies representatives in the upcoming international trade and expo conference being organized by RCCI in August this year.

http://www.brecorder.com/pakistan/industries-a-sectors/287297-brazil-can-help-overcome-energy-crisis-ambassador.html

INTERCONNECTION ENERGY GRID WITH CHINA PLANNED Dawn, April 1st, 2016

Khaleeq Kiani

ISLAMABAD: Pakistan's Ministry of Water and Power and State Grid Corporation of China are working closely to build an interconnection grid for electricity.

The grid "will mutually benefit both the countries by utilising each others energy potential", Secretary Water and Power Muhammad Younas Dagha was quoted by his ministry as telling a 700-plus delegate of Global Interconnection Conference in Beijing.

The interconnection grid will allow Pakistan to meet its energy demands and will also enable China to benefit from the potential of clean energy in Pakistan, especially hydro-electricity on the Indus river cascade lying all along the route of China-Pakistan Economic Corridor.

Indus cascade involves around 60,000MW potential of hydro-electricity through a dozen of hydropower projects, including dams between Satpara and Tarbela.

Dagha said Pakistan was very much positioned now to become energy corridor for the region and facilitate the exchange and optimised use of clean energy available in the region of South Asia, Central Asia, Middle East and China and could play an active role in the Global Energy Interconnection.

Talking about the upcoming Central Asia-South Asia (CASA-1,000) project, Dagha said Pakistan had a unique geographical position, strategically located at the confluence of South Asia, Central Asia, Middle East and China and "we are very much aware of the opportunity offered by our geographical location".

He said Pakistan had been working on the project for many years and had succeeded in signing an agreement on Central Asia South Asia transmission line, (CASA-1,000), with Tajikistan, Kyrgyz Republic and Afghanistan to build a 1,400kms long HVDC transmission line which will bring 1,300MW of clean power to Pakistan.

He said Pakistan "already had grid interconnection with Iran" and plans are afoot to further enhance it.

Pakistan, he said, was also working with other South-Asian countries to bring interconnectivity within South-Asia and had "found a lot of interest in CASA-1,000 in the countries of the region such as Turkmenistan, Kazakhstan and Russia".

Dagha told the conference that Pakistan had the potential and was fast becoming an energy-surplus from an energy-deficit country in the next three years due to the volume of projects initiated by the government.

He said Pakistan was initiating work on 10,400MW of new power generation and 660 HVDC transmission line with the State Grid.

He said Pakistan had sizeable potential of untapped and clean energy resources apart from fossil fuels.

He said the country was expected to "become self-sufficient in power generation in 2018 and still be left with an untapped potential of more than 60,000MW of hydro-electric power, most of which lies right across the Pakistan-China border".

He said there was also an untapped potential of more than 90,000MW of wind power in the south and an unlimited potential of solar power all across the 850,000 sq-kms of the country, with almost 300 days of bright sunshine.

Dagha said Pakistan was currently producing more than 40 per cent of its electricity from non-fossil sources, mainly hydropower and was working closely with international players to move towards more sustainable energy.

# http://www.dawn.com/news/1249135

# K-P AGREES TO PAY RS18B FROM NET HYDEL PROFIT The Express Tribune, April 3rd, 2016

#### Zafar Bhutta

ISLAMABAD: The government of Khyber-Pakhtunkhwa has agreed to the deduction of its Rs18 billion electricity dues from net hydel profit of the province, officials say.

K-P has to pay Rs20.47 billion in electricity bills to power companies. Among provinces, Sindh stands on top as it has to clear outstanding bills amounting to Rs72.11 billion. Punjab owes Rs4.9 billion and Balochistan Rs4.53 billion.

"K-P government is willing to pay Rs18-billion electricity bills out of its net hydel profit, but Sindh is facing problems in clearing the dues that stood at over Rs70 billion," it was told in a recent meeting of the Cabinet Committee on Energy chaired by Prime Minister Nawaz Sharif.

K-P claims a principal amount of Rs47 billion in net hydel profit from the federal government and both have agreed to settle the matter. Net hydel profit is the compensation for contribution to the national grid of the hydroelectric power plants running in K-P.

The National Electric Power Regulatory Authority (Nepra) has increased the price of hydroelectric power, which leads to a rise in the net hydel profit of K-P from Rs6 billion to Rs18 billion per annum.

According to the officials, the Ministry of Water and Power and the K-P government have decided to take up for discussion the increase in net hydel profit before the Council of Common Interests (CCI) – an inter-provincial body – for final approval.

The federal and K-P governments have also agreed that they will jointly draw up a comprehensive plan for determining the period and volume of the outstanding amount of net hydel profit. A decision on this will be taken after bringing all stakeholders on board.

Participants of the cabinet committee meeting told the prime minister that the Ministry of Water and Power had encountered problems in recovering electricity bills from the government of Sindh.

Earlier, the ministry had powers to deduct at source the dues of provinces, but in 2013, the CCI decided that only 25% deduction would be allowed and that too after reconciliation of data.

"The federal adjuster may ask the Sindh government to clear 25% of pending bills immediately and the remaining after 30 days, in case the province does not finalise the reconciliation of data," the premier was told.

The pending electricity bills of Punjab farmers also came up for review in the energy committee huddle. The power ministry revealed that outstanding bills of Punjab farmers had piled up to more than Rs30 billion and their recovery posed a big challenge.

Earlier, the government had asked the ministry to go slow on the recovery of arrears until December 2015, however, the ministry feared that any further delay would turn these dues into bad debts.

http://tribune.com.pk/story/1077784/electricity-bills-k-p-agrees-to-pay-rs18b-from-net-hydel-profit/

NEWS COVERAGE PERIOD FROM MARCH 21st TO MARCH 27th 2016 DOUBTS ABOUT BIDDER DELAYING MANGLA PROJECT Dawn, March 24th, 2016

Syed Irfan Raza

ISLAMABAD: The procurement of six turbine generators worth Rs10 billion, as part of the Mangla Refurbishment Project (MRP), is likely to be delayed further while the Water and Power Development Authority (Wapda) tries to determine whether the firm with the lowest bid is, in fact, eligible to be awarded the contract.

French firm Alstom Hydro had the winning bid for the project, but confusion over the firm's links to a company that was recently indicted for bribery and falsification of records by a US court is holding up the process of award of contract.

In Nov 2015, a federal judge in the state of Connecticut had sentenced a French industrial company called Alstom SA to pay a \$772.3 million fine, said to be the largest levied by the US government in a foreign bribery case.

Following the decision, Wapda was in a fix over how to award the contract to Alstom Hydro France, even though it was not specifically mentioned in the US court case. The authority's legal advisers, however, have advised it to ascertain whether this company is, in fact, a subsidiary of Alstom SA, the company which was penalised by the US court.

Wapda's legal advisers have suggested that the authority could not award the project to any firm that has been debarred, blacklisted or sanctioned by the Public Procurement Regulatory Authority (PPRA) and other international agencies and departments of the US, World Bank, Asian Development Bank, European Bank for Reconstruction and Development, African Development Bank and Inter-American Development Bank.

Reportedly, four firms had submitted bids for the project in September 2015 – including Alstom Hydro France, Voith Hydro Germany, Andritz Hydro Austria and OJSC Power Machines Russia. As the Russian firm did not submit bid security along with its bid, it was considered non-responsive, leaving the three others to compete for the USAID and Wapda-funded project.

In a letter to Wapda Director (Legal) Shahzad A Sheikh, the law firm of Saad Rasool & Associates cites clause 59.1 of the contract, mentioning that 'a bidder is prohibited from being awarded a contract if it is a subsidiary of a parent company that is debarred, blacklisted, or otherwise sanctioned".

The letter, seen by Dawn, said: "The company cannot be awarded the contract for the project if it is clearly established that the company mentioned in the press release [of the US court] is in fact the parent company of [Alstom]."

Blacklisted company?

According to a Reuters report on the US court case, Alstom SA had pleaded guilty after a probe where investigators found it paid more than \$75 million in bribes over a decade to win contracts worth \$4 billion in countries such as Egypt, Indonesia, Saudi Arabia and Taiwan.

In 2012, the Wall Street Journal reported that World Bank had temporarily blacklisted and fined Alstom Hydro France and Alstom Network Schweiz, named as subsidiaries of the French engineering company Alstom SA, over bribery allegations in Zambia.

The debarment was lifted in Feb 2015. According to a press release on Alstom's official website, dated Feb 24, 2015, "As of 21 February 2015, Alstom Hydro France, Alstom Network Schweiz, and their affiliates are released from their World Bank debarment and are now free to resume competing for projects financed by the World Bank group and by other international institutions implementing cross debarment agreements with the World Bank."

Reportedly, the French firm had not mentioned any such litigation in its bid document, submitted in Sept 2015. Public Procurement Regulatory Authority (PPRA) Rules and a clause in the project contract are clear in such situations.

PPRA Rule 18 (that deals with the disqualification of suppliers and contractors) states: "The procuring agency shall disqualify a supplier or contractor if it finds, at any time, that the information submitted by him concerning his qualification as supplier or contractor was false and materially inaccurate or incomplete."

Wapda Spokesperson Abid Rana declined to respond to specific queries in writing. "We cannot comment on the matter as the bids are currently being evaluated," he said.

Wapda General Manager for Hydel Development Chaudhry Arshad, who is the head of the project committee, told Dawn that Alstom Hydro's bid was being evaluated and if any discrepancy was committed by the firm, it would be checked during the evaluation process.

He admitted that the French firm had been blacklisted by the World Bank last year and was barred from participating in bidding for the same contract. Later, he said, these sanctions were lifted, adding, "We only entertained the firm after the sanctions were removed".

However, he expressed ignorance of the US court penalties imposed on Alstom SA, saying, "The decision of the US court came in November 2015, while the bids of participating firms were received in Sept 2015, therefore, the French firm was entertained," the official said.

# http://www.dawn.com/news/1247584

# DELAY IN POWER PROJECTS SCUPPERS PLAN TO END OUTAGES The Express Tribune, March 24th, 2016.

Zafar Bhutta

ISLAMABAD: The government's plan to end electricity outages in 2018 has suffered a setback as work on two major hydroelectric power projects has been delayed, irking Prime Minister Nawaz Sharif.

Now the premier has directed the Ministry of Water and Power to prepare a report about the commitments made by the Water and Power Development Authority (Wapda) chairman in relation to the power projects and reasons for the delay.

In recent months, the PM has announced on different occasions that power outages will come to an end in 2018 – the election year – but it appears to be difficult for the government following delay in completion of critical projects.

The government had planned to complete power plants of 10,000-megawatt capacity until the winter of 2018 but the prime minister has now been told that Neelum Jhelum hydroelectric power project and Tarbela-IV Extension project with a cumulative capacity of 2,369MW have been delayed.

Finance Minister Ishaq Dar, in a high-level meeting chaired by the premier, said the Wapda chairman had assured in a meeting in January 2016 that the Tarbela-IV Extension project with a 1,400MW capacity would start operation in July 2017.

However, keeping in view the progress made so far, it would not be possible for Wapda to meet the goal despite payment of an extra \$51 million to a contractor for hiring more human resource and deploying more machinery to accelerate the work.

This made the prime minister concerned, who noted that despite repeated assurances, the project was not expected to be completed in 2017.

Regarding the 969MW Neelum Jhelum power project, the meeting was informed that it could not be completed by the set timeframe as excavation of 4,877 metres of tunnel would require another 16 months, keeping in view the pace of work.

In this case too, the PM expressed his annoyance over failure to meet the commitment and asked for reasons behind the delay. An official of the power ministry argued that no effective monitoring mechanism was in place.

The prime minister warned that any delay would not be tolerated at all and directed the ministry to prepare a report on the progress and justification for the delay.

During the previous Pakistan Peoples Party government, the cost of Neelum Jhelum project had jumped to \$2.74 billion from \$1.8 billion and the estimate further went up to \$4.21 billion during the rule of present administration.

In order to secure water supplies, Pakistan had kicked off work on the Neelum Jhelum River in Azad Jammu and Kashmir, but at the same time India developed the Kishanganga hydroelectric power project on the river, which sparked a legal battle between the two countries in the International Court of Arbitration.

The project was earlier scheduled to be completed by October 2015, but the deadline has been revised to November 2016. Its financial close has not yet been achieved.

In a meeting in June last year, the prime minister had been told that the project would not be ready even in 2016 and work may be extended to 2017.

The power ministry official spoke about the planned increase in power production by 10,000MW with the help of different fuels by the winter of 2018.

According to him, 441MW excluding Guddu plant will be available in the summer of 2016 and 1,121MW by the winter, including 680MW from the civil nuclear power plants. A considerable improvement will be made in 2017 through the addition of 4,418MW and a total of 9,090MW will be added to the national grid by the winter of 2017. This includes 2,400MW from LNG-based power plants.

http://tribune.com.pk/story/1071420/under-threat-delay-in-power-projects-scuppers-plan-to-end-outages/

NEWS COVERAGE PERIOD FROM MARCH 14th TO MARCH 20th 2016 NEPRA FAVOURING PRIVATE POWER PRODUCERS: MINISTRY The Express Tribune, March 15th, 2016.

Zafar Bhutta

ISLAMABAD: The Ministry of Water and Power has complained to the premier that the National Electric Power Regulatory Authority (Nepra) was favouring the private power producers in earning billions of rupees, while ignoring public sector energy projects.

In a meeting chaired by Prime Minister Nawaz Sharif on February 22, Secretary Younus Dagha said the regulator was delaying public sector projects, requesting the premier to make amendments in the Nepra Act to clearly lay down its role and responsibility. The meeting was also attended by energy ministers.

He suggested that the federal government should formulate a national electric policy in consultation with provincial governments and make strategic plans to empower the federal government to issue policy guidelines to Nepra for handling urgent issues being faced by the government.

While justifying his proposal, he quoted the legal and policy framework in vogue in Bangladesh and India which legally empowers the government to issue binding directions to the regulators.

Officials familiar with the development said Dagha brought several issues relating to Nepra in the notice of the prime minister and federal ministers.

He said the regulator had given benefits to private sector power producers and facilitated them to earn billions of rupees. He quoted an example of the prime minister's directive where Nepra did not give full relief to the industrial sector in reducing electricity rates.

He said the regulator allowed a relief of only Rs2.40 per unit to the industrial sector despite the directives of a Rs3-per-unit decrease.

Dagha further said Nepra's decisions while determining tariffs for the public sector energy projects were also discriminatory. He also complained to the prime minister that Nepra had also disallowed lower tariff to LNG power plants.

He pointed out the limitations of the current legal framework – Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 governing Nepra. He informed the prime minister that the Act was vague as far as relations of the federal government with the regulator were concerned.

He complained that the remit of Nepra was restricted to tariff determination and issuing of licences. However, the excessive focus of Nepra on tariff determination and licencing was hampering market reforms aimed at introducing a more open and competitive power market.

Moreover, he said, this attitude of the regulator was the major cause of delay in completion of power projects initiated by the government.

The prime minister directed the ministry to bring back a comprehensive proposal for amendments in the Nepra Act.

http://tribune.com.pk/story/1065628/nepra-favouring-private-power-producers-ministry/

HYDROPOWER PROJECTS IN AJK, GALGIT-BALTISTAN, PUNJAB: WUC LIKELY TO BE INCREASED BY 183 PERCENT

Business Recorder, March 15, 2016

Mushtaq Ghumman

Federal government is likely to increase Water Usage Charges (WUC) by 183 per cent from Rs 0.15/KWh to Rs 0.425/KWh for all upcoming hydropower projects in Azad Kashmir, Galgit-Baltistan and Punjab besides handing over BOOT- based private power projects to respective provinces after expiry of Implementation Agreement (IA), well informed sources in PPIB told Business Recorder.

Giving the background, the sources said, Power Generation Policy 2002 was formulated with the consensus of all stakeholders including the provinces/AJK, which was announced in October 2002.

Power Policy 2012 provided that projects implemented on Built, Own, Operate and Transfer (BOOT) basis will be transferred to GoP at the end of the concession period and the WUC will be paid by the private power generation companies to the respective provincial / AJK government at the rate of Rs 0.15/kwh adjustable annually for inflation.

The sources Board of PPIB, in its 90 meeting held in January 2012 while approving the proposed amendments in the Power Policy 2002 approved the recommendations for the transfer of BOOT projects to the respective provincial government after completion of concession period and WUC to be increased at the rate of Rs 0.425/kwh (without annual indexation) to be reviewed every five years in order to determine if an increase in WUC is necessary.

However, instead of incorporation of these amendments in Power Policy 2002, federal government after in principle approval of the CCI, announced the Power Generation Policy 2015 in April 2015. However, both Sindh and KPK had raised few queries on the Power Generation Policy 2015.

Since PPIB is processing various hydropower projects on BOOT basis under Power Policy 2002, including 720 MW Karot Hydropower Project which is located in the dual territory of AJ&K, the Government of AJK through its letter written on November 2, 2015 and Government of Punjab, through its letter written on December 3, 2015 have requested for enhancement of WUC from Rs 0.15/kWh to Rs 0.425/kWh for Karot project and other upcoming hydropower projects located in AJK and Punjab being processed under the 2002 Policy.

In addition, the Government of Punjab has also requested the transfer of the Karot project to provincial government on completion of concession period.

According to sources, both the AJK and Punjab require these provisions to be incorporated in respective project agreements being negotiated for the Karot Hydropower Project, one of the prioritised projects included in the CPEC agreement between China and Pakistan

. PPIB, sources said, has warned the federal government that the signing of these agreements could potentially be delayed if decision in the matter is not made on priority.

"Requests of AJK and Punjab are reasonable and should have also been incorporated in the Power Policy 2015, the sources maintained. Further, concessions would require to be extended to any other upcoming hydropower project being implemented under the Power Policy 2002 for which the financial close has not yet been achieved, irrespective of the location of the project, in order to bring parity amongst the provinces/AJK, and Gilgit-Baltistan, etc.

The federal government recently notified Net Hydel Profit (NHP) at Rs 1.10 per unit for KPK which will increase the amount of NHP from Rs 6 billion per annum to Rs 18.7 billion. Also hydel tariff for consumers will be increased by 21 paisa per unit from Rs 1.74 per unit to Rs 2.01 per unit.

http://www.brecorder.com/market-data/stocks-a-bonds/0/25507/

IRAN EXPRESSES INTENTION TO PROVIDE 3,000 MW OF ELECTRICITY

Business Recorder, March 15, 2016

LAHORE: Iran has expressed its intention to provide 3,000 megawatts of electricity to tackle the persistent power outages. The transmission infrastructure development can cost US \$1.5 billion.

The Iranian high-ups made this offer to a 26-member delegation from Lahore Chamber of Commerce and Industry, sources told Business Recorder on Monday. The delegation held business to business meetings with Tehran, Shiraz and Mashhad Chambers of Commerce and Industry during its recent visit of Iran.

Sources further claimed that the President, Islamic Republic of Iran, Hassan Rouhani who is scheduled to visit Pakistan on March 25th is likely to offer electricity besides endorsing some of the recommendations compiled during the meetings in Iran.

The delegation was also told that the Iranian leadership wants to enhance trade with Pakistan up to US \$10 billion and his country's businessmen were gearing up to reach this target but demanded some steps too from Pakistan.

During the meetings, it emerged that Iran was reportedly in need of Pakistani textile products and Iranians expect Pakistan to quickly send its textile delegation of leading companies. It also came into notice that Iran is in need of textile products including t-shirts, denim jeans and home textiles. The Iranian businessmen want Pakistan to immediately send its textile delegation comprising the leading companies.

Besides, Iran has sufficient demand for meat that could be exported from Pakistan. However, Pakistani companies need to enhance their capacity of meat processing facilities to meet the demand.

The talk of more flights between Islamabad, Lahore, Karachi and Tehran, Shiraz, Mashhad and Isfahan too came under discussion and resolved that business communities of both countries should help their airlines. The air links will also help increase trade in perishable items like fruits, vegetables and meat, the sources added.

The Iranians highlighted a number of steps needed to be done by the Pakistani government including completing gas pipeline project on priority basis. More steps were also discussed to enhance the trade including direct shipping between Iran and Pakistan, banking channels to overcome smuggling being faced by both countries. The meeting also stressed the need for improving rail link between Pakistan and Iran besides developing road between the two sides.

It is notable that three banks from Pakistan including the Bank of Punjab, Bank Alfalah and Meezan Bank are actively pursuing correspondent relationship with the Iranian authorities.

It was also resolved that the Preferential Trade Agreement (PTA) already signed several years ago between the two countries needs to be activated. Need was also stressed to develop special economic zones on Pakistan-Iran borders to enhance two way trade.

The delegation recommended for sending a high level delegation of government officials and trade bodies, besides taking part in Iranian exhibitions to display products. The delegation also recommends setting up of a secretariat for Pak-Iran Joint Commission to implement decisions.

During the visit, the delegation head, Almas Hyder offered scholarships on behalf of the Punjab government to Iranian students in engineering and medical disciplines as good gesture.

http://epaper.brecorder.com/2016/03/15/5-page/741017-news.html

POWER PRODUCERS: MINISTRY SUGGESTS CAP ON FRESH SOVEREIGN GUARANTEES The Express Tribune, March 16th, 2016

Zafar Bhutta

ISLAMABAD: The Ministry of Water and Power has proposed a ban on announcing new tariffs for imported fuel-based power generation and fresh sovereign guarantees for payment of capacity charges to independent power producers.

According to officials familiar with the development, sovereign guarantees to the power producers amounted to Rs272 billion by December 2015, constituting 20-30% of the power generation cost being paid by consumers.

In a meeting held on February 22, Water and Power Secretary Younus Dagha briefed the prime minister on sovereign guarantees for payment of capacity charges and the need to impose a cap on new tariffs for imported fuel-based electricity.

Elaborating, Dagha said the amount committed in sovereign guarantees would rise from Rs272.4 billion in December 2015 to Rs310.8 billion in 2016, Rs534.8 billion in 2017 and Rs630.8 billion in 2018. This meant that the amount would account for 40-45% of the power generation cost by 2018.

Quoting a study conducted by experts on the production of wind and solar power, Dagha said there were limitations for these power sources on the national grid as there was no balancing capacity.

The study suggested that power supply from wind and solar resources should be restricted to 2,200 megawatts until 2018. Moreover, a major upgrading and modernisation of the national grid and the distribution system would be required for setting up new power plants. Dagha was of the view that fresh sovereign guarantees should not be issued for imported fuel-based electricity generation.

Apart from this, no new tariff or power purchase agreement should be preferred for power plants based on liquid fuels, furnace oil, low sulphur furnace oil and high-speed diesel.

Explaining, he stressed that new tariff should not be preferred for plants to be run on imported liquefied natural gas except for ones already running and the planned 3,600 and 1,000MW projects where work had already been initiated.

New tariff for plants run on imported coal should not be announced except for plants being set up under the China-Pakistan Economic Corridor, projects of Lucky, Siddiqsons and others for which letters of support had been issued and projects being converted from furnace oil, which were estimated to be of around 4,920MW capacity.

The solar and wind power plants having levelised tariff of more than 11 cents per unit and hydroelectric power plants with a levelised tariff of more than 10 cents per unit should also not be treated for new tariff, he said.

http://tribune.com.pk/story/1066339/power-producers-ministry-suggests-cap-on-fresh-sovereign-guarantees/

GAS SHORTAGES: PAKISTAN BANKS ON TAPI: PRIME MINISTER Business Recorder March 17, 2016 ZAHEER ABBASI

Prime Minister Nawaz Sharif has said that TAPI gas pipeline is a mega project that will greatly help Pakistan mitigate its energy problems. Addressing a joint press talk with Turkmenistan President Gurbanguly Berdimuhamedov here on Wednesday after witnessing the signing of various memoranda of understanding of cooperation between the two countries in various fields, he stated Pakistan wants early completion of the TAPI project.

"We have also signed an agreement of 1000MW electricity with Turkmenistan and are keen to implement it. The Prime Minister also suggested Turkmenistan to benefit from the deep sea which provides shortest route for regional connectivity.

The Prime Minister added that regional connectivity is one of the essential components of Pakistan vision 2025. "We have also signed joint communiqué which covers a wide range of areas to help strengthen bilateral relations between the two countries" and also shared concern that terrorism is a major threat to the social development. Prime Minister further stated "we have to work to eradicate terrorism for betterment of regional and global peace."

Nawaz said he was happy to accept the invitation of president for visiting Turkmenistan and thanked him for accepting his invitation to pay a visit to Pakistan. President of Turkmenistan speaking to media after Prime Minister Nawaz Sharif stated, "we have held a fruitful discussion which led to signing of various memorandum of understanding aimed at strengthening bilateral relations in different fields."

He said he shared views with Nawaz on regional and international issues as well as on increase of bilateral trade between the two countries. He said that early implementation of the TAPI project would bring about development not only in the region but globally as well.

The Prime Minister held a one-on-one meeting with President of Turkmenistan and the two leaders discussed issues of bilateral relations and mutual interest before heading for the delegation level talks.

Finance Minister Ishaq Dar and his Turkmen counterpart signed an MoU on cooperation against money laundering and terror financing. Minister for Petroleum and Natural Resources Shahid Khaqan Abbasi and his Turkmen counterpart signed an MoU on further cooperation in the energy sector. MoUs were also signed for cooperation in higher education, research and information technology.

http://www.brecorder.com/market-data/stocks-a-bonds/0/26134/

NEWS COVERAGE PERIOD FROM MARCH 7th TO MARCH 13th 2016 SURPLUS CATEGORY: OGDC TO KEEP EXCESS STAFF IN RESERVE POOL The Express Tribune, March 9th, 2016

The board of directors of Oil and Gas Development Company (OGDC), the largest oil and gas explorer in the country, has decided to set up a reserve pool for keeping surplus employees of the company – a step taken as part of its austerity programme, officials say.

These excess employees will be sent home, though they will continue to receive salaries. The board has also approved a cut in incentives for the company employees after a decline in profits.

This will ease some of the burden of the company at a time when it is facing a loss of billions of rupees due to the plunge in global oil prices. OGDC saw its net earnings drop almost one-fifth to Rs16 billion in the October-December quarter of 2015, financial results show.

However, officials suggest that the move appears to be aimed at creating space for the appointment of some blue-eyed boys in the company.

The OGDC management, coming under pressure from the board of directors, has taken some decisions for hiring close relatives of the board members on key positions and at hefty packages. This belies the very objective of the austerity drive undertaken to ease the strain on finances.

Earlier, OGDC hired two officials, who were believed to be close to the board chairman and a board member, on key posts and at lucrative packages. The matter was even taken up in a meeting of the National Assembly Standing Committee on Petroleum and Natural Resources. Apart from these, an external communications manager is being appointed at a high pay package in violation of set criteria. This candidate is also believed to be a close relative of a member of the company board.

According to documents, OGDC has issued an offer letter to Muhammad Zeshan for his appointment as the external communications manager with a monthly package of Rs350,000.

The management had advertised the post on July 4, 2015, seeking applications from candidates having a master's degree with 12 to 14 years of relevant experience, particularly in media management, media and public relations.

However, Zeshan held experience of working in the accounts department of an unknown company – Loom Creatives – and dealt in food, telecom and IT services. This shows that the applicant lacks the relevant experience required to fill the slot.

Talking to The Express Tribune, OGDC Managing Director Zahid Mir acknowledged that the board had agreed to create the reserve pool where surplus employees would be placed.

However, he said the company still required 600 technical workers, adding unskilled staff members would be entered into the reserve pool.

Responding to a question as to why the company was going to hire the external communications manager in violation of the criteria, Mir insisted that the applicant was a reasonable man and the company had issued an offer letter to him which could not be withdrawn..

http://tribune.com.pk/story/1061857/surplus-category-ogdc-to-keep-excess-staff-in-reserve-pool/

GOVT SEEKS SPECIAL TARIFF FOR \$2.1BN MATIARI-LAHORE TRANSMISSION LINE Dawn, March 10th, 2016

Khaleeq Kiani

ISLAMABAD: The government has sought a special tariff for 878km Matiari-Lahore transmission line to be built by a Chinese firm at a cost of \$2.1 billion to evacuate upcoming 4,950 megawatts of electricity from coal-based power plants at Thar, Hub and Port Qasim.

This is the first transmission line project in the private sector.

Interestingly, however, the tariff petition for laying the transmission line on a build, own, operate and transfer (BOOT) basis by the Chinese firm State Grid of China/China Electric Power Equipment and Technology Co Ltd (CET) has been filed by the Private Power and Infrastructure Board (PPIB) on behalf of the National Transmission and Despatch Company (NTDC), a state-owned entity registered under the company laws.

Based on engineering procurement and construction (EPC) cost of \$1.76 billion and other cost build-ups total \$2.1bn, the PPIB has requested National Electric Power Regulatory Authority (Nepra) to approve a transmission tariff of 95 paisas (0.914 cents) per unit (kWh) for 30-year life of the transmission line. It will involve 80:20 per cent debt-equity ratio.

Informed sources said the NTDC which operates over 14,000km of transmission system of various capacities had previously applied for the tariff that was rejected by Nepra for technical and legal reasons.

The tariff petition has been prepared purely on the basis of "financial and technical data received from the CET. The project will be transferred to NTDC on completion of 25 years.

It said the NTDC and Chinese firms had signed cooperation agreement for two similar transmission lines. Apart from Lahore-Matiari, the other project included 660kv High Voltage Direct Current (HVDC) transmission line from Port Qasim to Faisalabad with 4,000MW capacity but that is not part of this petition.

The PPIB said the NTDC and State Grid of China (SGCC)/CET signed cooperation agreement in April 2015 for the development of about 660kv HVDC for Matiari-Lahore transmission line of 878km for wheeling 4,000MW generation in southern part of the country to mid country load centres. It is included in China-Pakistan Economic Corridor (CPEC) priority projects.

However, due to constraints on public sector resources and borrowing capacity of NTDC, the government had announced a policy framework for transmission line development in the private sector. "The induction of private sector in the transmission line would result in capacity additions in the system and bring about stability, reliability and sustainability".

The transmission line would have the maximum capacity of transmitting 4,000MW from generation capacity of about 4,950MW from 660MW Engro Thar Coal plants, 1,320MW of SSRL Thar Coal, 1,320MW of Port Qasim project, 660MW each of two Hub Coal Power plants and 330MW of Siddique Sons Energy.

The petition said the NTDC had opted for HVDC 660kv line for the bulk power transfer through a long distance line on the basis of feasibility and cost studies through SNC-Lavalin of Canada in 2013. Two converter stations at Matiari in Sindh and Lahore will also be part of this project to interface with the existing transmission system.

The PPIB said the transmission line would pass through mostly rural land away from settlements and obstruction with least temporary loss to crops and trees to be properly compensated. It said the Chinese investor had been involved in the project because "currently there exist a number of lengthy, time and money consuming complicated procedures due to which private investors are problem-stricken" like provision of bank guarantees, finalisation of project agreement with multitude of government agencies.

Moreover, the project was associated with power generation plants on imported and local coal at low operating costs that would save billions of dollars annually that would otherwise be needed for import of oil for equivalent electricity generation.

The project will take 36-42 months to be developed in parallel with power generation plants at Thar, Hub and Port Qasim and would be ready to evacuate power from those plants.

http://www.dawn.com/news/1244621/govt-seeks-special-tariff-for-21bn-matiari-lahore-transmission-line

SALES OF OFF-GRID SOLAR PRODUCTS TO TOUCH \$3.1BN BY 2020 Dawn, March 10th, 2016

ISLAMABAD: The sales of off-grid solar products in emerging markets are expected to reach \$3.1 billion by 2020, providing access to improved energy for 99 million households with no access to the grid, according to a new report released by the World Bank Group.

The report, titled 'Off-Grid Solar Market Trends', tracks the ground-breaking technological advances and innovative business models which have emerged to transform the lives of millions through affordable modern solar energy services.

It shows that the off-grid solar industry is booming and a growing wave of development partners and investors are committing significant funds, with a primary focus on pay-as-you-go business models.

While most people living off the grid are poor, the report estimated that there are 47 million households in Africa and Asia that have no electricity but enjoy an annual income of \$2 to \$10 a day per five household members. These households are likely to be able to afford not just simple solar lanterns but also larger solar home systems and appliances, points out the report.

There are likely to be millions of potential off-grid households with similar or higher income levels that are not officially counted as off-grid because they are technically connected.

The off-grid population in sub-Saharan Africa spent over \$14bn on lightening in 2014, according to estimates based on UNEP lighting assessments. The equivalent figure in Asia is lower at \$6.6bn annually.

The off-grid population may spend an additional \$5-\$6 billion annually on mobile-phone charging in Africa and Asia, according to estimates. There are 2.5 billion mobile-phone connections in the sixty countries where most of the off-grid population is located as of 2013.

GSMA estimates that there are 240 million mobile subscribers living off-grid.

These phones tend to be charged by small-business owners for fees reported at between \$0.15 and \$0.25 per charge.

This equates to an astounding cost per kWh equivalent for electricity service of \$30 to \$50. Additional opportunity costs are incurred when phone owners have to travel at times for hours to reach a charging point.

The report finds that annual investments into the industry have risen to \$276 million in 2015, a fifteen-fold increase since 2012. It also shows that 89 million people in Africa and Asia already enjoy improved access to energy by using off-grid solar products.

This is the third in a series produced by the World Bank Group's Lighting Global Programme since the industry's emergence seven years ago and illustrates how off-grid solar can be a game changer for development as well as a unique business opportunity for the private sector in the energy access space."

Solar-powered portable lights and home kits offer a safer, cheaper and environmentally friendlier service to the 1.2 billion people who live without access to the power grid and currently spend about \$27bn annually on fuel-based lighting and mobile-phone charging technologies.

About 95pc of the world's 1.2 billion people without grid access live in sub-Saharan Africa and South and East Asia and Latin America. African nations suffer from the lowest electrification rates by far.

Nonetheless, the picture is less gloomy in most of Asia. Slowing population growth rates and a booming economy helped drive a 212 million decline in the number of people living off-grid since the turn of the century.

However, there are still countries such as India and Pakistan, with large number of people living off the grid.

# http://www.dawn.com/news/1244612

PAKISTAN, IRAN TO SIGN 3,000MW POWER SUPPLY DEALS The Express Tribune, March 10th, 2016.

Zafar Bhutta

ISLAMABAD: Pakistan and Iran are set to sign deals for supply of over 3,000 megawatts of electricity to meet energy needs of the former during Iranian President Hasan Rouhani's visit to Islamabad, beginning March 25.

"Three power import deals are expected to be inked by the two countries including supply of 100MW, 75MW and 1,000MW," a diplomatic source said while talking to The Express Tribune. The 1,000MW agreement could be extended to 3,000MW of electricity.

Pakistan is already importing 73MW to meet the requirement of Gwadar but payments could not be made since 2011. Now that sanctions have been removed from Iran, officials believe banking channels will be opened, paving the way for payment of outstanding bills.

The schedule of Iranian head of state's two-day trip was disclosed during a meeting between Water and Power Minister Khawaja Muhammad Asif and Iranian Ambassador Mehdi Honardoost on Wednesday.

Rouhani's arrival here holds great significance in the backdrop of lifting of global restrictions and current visit of Prime Minister Nawaz Sharif and Army Chief General Raheel Sharif to Saudi Arabia, which has tense relations with Iran. According to a statement issued by the Ministry of Water and Power, Minister Khawaja Asif assured the Iranian envoy that Pakistan would play a positive role in bringing peace in the region.

The two dignitaries discussed all areas of mutual interest and bilateral cooperation in the field of energy, trade, business and defence. They agreed that due to lack of economic activities in the region, incidents of terrorism were growing.

Stressing that Pakistan and Iran were enjoying close and cordial relations in different fields, Asif said Pakistan was looking forward to the visit of Iranian president with great interest in the hope that it would lead to further deepening of bilateral ties.

Asif also highlighted the significance of the China-Pakistan Economic Corridor (CPEC), saying it was the most important artery in the region and all countries in the area should draw up plans for extracting maximum benefits out of the project.

According to officials, Pakistan will formally offer Iran during Rouhani's visit to participate in the CPEC programme, which would bring peace and ensure vital connections among regional states.

The Iranian envoy pointed out that as curbs had been withdrawn, Tehran had a great potential for attracting investment and priority would be given to the neighbouring nations.

The ambassador insisted that friendship between Islamabad and Tehran would be reflected in joint projects and the Iran-Pakistan (IP) gas pipeline was one of the best schemes in this regard.

Officials of the Ministry of Petroleum and Natural Resources said the Iranian president would push Pakistan to implement the IP pipeline project, which had earlier been stalled by the sanctions on Tehran.

The pipeline was to start running in December 2014 but work could not kick off. Pakistan had tried to engage China and Russia to help implement and finance the pipeline but to no avail. Even Iran offered to finance the project but after formation of the new government there the plan was shelved.

Now, hopes are high that the two countries will be able to press on with the plan. Pakistan has already awarded a contract for laying a liquefied natural gas pipeline and building a terminal in Gwadar to a Chinese company. This pipeline will be extended to the Iranian border to connect to the IP pipeline.

Officials said the Iranian president would take up the issue with Pakistan as the government had earlier given a commitment to starting work on the project after removal of sanctions.

If Pakistan did not push ahead with the project, it would have to pay penalties running into millions of dollars, which could strain ties between the two countries.

http://tribune.com.pk/story/1062677/iranian-president-pakistan-iran-to-sign-3000mw-power-supply-deals/

NEWS COVERAGE PERIOD FROM FEBRUARY 29th TO MARCH 6th 2016 RS 8.48 CUT IN PETROL PRICE APPROVED

Business Recorder March 01, 2016

Abdul Rasheed Azad

The government Monday announced reduction in major petroleum products' prices in the range of Rs 1.97 to Rs 8.48 per litre, effective March 1, 2016. The Oil and Gas Regulatory Authority (OGRA) on February 26, while calculating the Pakistan's last month oil imports in the International Market forwarded a summary to the Ministry of Petroleum and Natural Resources and Ministry of Finance while recommending a cut of Rs 4.67 per litre in High Speed Diesel (HSD) price, Rs 1.97 per litre in Light Diesel Oil (LDO) and Rs 2.98 per litre in High Octane Blending Component (HOBC).

The government has reduced the price of Motor Gasoline (Petrol) as per the recommendations of Regulator, a cut of Rs 8.48 per litre, while there is no change in the price of Kerosene Oil which the regulator has recommended increasing by Rs 1.66 per litre and will be available at Rs 43.25 per litre. Following the government's decision to pass on the full impact of the international oil prices to the end consumers, the major oil products in the country will be available at following prices: HOBC at Rs 72.68 per litre against Rs 75.66 per litre, petrol at Rs 62.77 per litre against Rs 71.12 per litre, High Speed Diesel at Rs 71.12 per litre against Rs 75.79 per litre and Light Speed Diesel at 37.97 per litre against Rs 39.94 per litre. Meanwhile, the Punjab based CNG station owners have also announced to cut the CNG price in the range of Rs 6-7 per litre in Punjab province, Ghiyas Abdullah Paracha said on Monday.

He said that keeping in view the low import price of Liquefied Natural Gas (LNG), the government has reduced CNG princes in Punjab which would be applicable from tomorrow March 1. This is a major step towards reviving the dying CNG industry for which the business community is highly thankful to Prime Minister Nawaz Sharif and Petroleum Minister Shahid Khaqan Abbasi, Paracha said.

He said that price of CNG would be slashed by Rs 6 to 7 per kg on CNG stations being run on RLNG which will help reduce oil import bill and pollution while providing jobs to millions. He appreciated the policies adopted by the government and said that the government decision has saved CNG outlets investment worth Rs 350 billion in Punjab, while the CNG sector will attract more investment once revived. Pakistan's CNG industry will soon reclaim lost title of world's largest CNG industry due to the support and initiatives of the government backed by the vision of energy managers, he said.

He said that CNG in Punjab would be thirty percent cheaper than petrol making it attractive for motorists and transporters which will also reduce fares in public transport providing relief to the commuters. Ghiyas Paracha hoped that the initiatives of the government will help resolve gas shortage in the country.

http://www.brecorder.com/market-data/stocks-a-bonds/0/21097/

FOUR COUNTRIES INK DEAL FOR \$10 BILLION TAPI GAS PIPELINE PROJECT The Express Tribune, March 4th, 2016.

Zafar Bhutta

ISLAMABAD: The four nations that are part of the \$10-billion Turkmenistan-Afghanistan-Pakistan-India (Tapi) gas pipeline project have signed an initial investment agreement, a move that will clear the way for updating the feasibility study and finalising the pipeline route in Afghanistan.

The agreement was inked by representatives of the four nations and the Tapi Pipeline Project Company in Istanbul last month.

They had already registered the company in November 2014 in which Afghanistan, Pakistan and India would have 5% shareholding each and the remaining 85% stake would be held by Turkmenistan.

The investment agreement pertains to the 5% shareholding of each of the three gas-importing countries, which means an initial investment of around \$200 million.

"We have initialed an investment agreement in Istanbul and the final deal will be signed soon," Interstate Gas Systems Managing Director Mobin Saulat told The Express Tribune.

Pakistan would contribute 5% of the financing for different activities of the project, he said.

Leaders of the four countries performed the groundbreaking of Tapi pipeline in December last year, a scheme aimed at easing the energy deficit in South Asia.

The Tapi pipeline, also dubbed the peace pipeline, is expected to bring peace and stability in the region in the wake of regional cooperation as Afghanistan, Pakistan and India will be depending on each other. It will also connect South Asia and Central Asia.

"We are currently working on three pipelines including a liquefied natural gas (LNG) pipeline from Gwadar, Tapi and the North-South LNG pipeline," Saulat said, adding the Tapi project was expected to be completed by the end of 2019.

He said Pakistan was facing gas shortages and the project would help ease energy crisis in the country.

The government is working on three gas import programmes which will bring about 4 billion cubic feet of gas per day (bcfd). This includes 1.325 bcfd from Tapi, about 750 million cubic feet per day (mmcfd) from the Iran-Pakistan pipeline and about 2 bcfd from LNG imports.

At present, Pakistan produces 4 bcfd of gas against demand for 6 bcfd. For bridging the shortfall, the government has signed a long-term LNG deal with Qatar. First vessel under the agreement reached Pakistan earlier this week.

Turkmenistan will make an investment of around \$25 billion to deliver around 3.2 bcfd of gas to three energy-hungry countries – Afghanistan, Pakistan and India – by December 2019 for 25 years.

Of the total, \$15 billion will be poured into developing the gas field whereas \$10 billion will be spent on laying a 1,680km-long pipeline.

A gas sales and purchase agreement had been signed in 2013 that set the pricing mechanism under which gas price at the Turkmenistan border would be around 20% lower than the Brent crude price.

At the present rate of crude oil, the Tapi gas will cost around \$3.2 per million British thermal units, which will rise to \$6.5 per unit after including the tolling tariff and transit fee to be paid to Afghanistan.

Afghanistan is estimated to receive about \$500-600 million in transit fee from Pakistan and India and will ensure security of the pipeline. India will also pay about \$250 million in transit fee to Pakistan.

Pakistan and India will each receive 1.325 bcfd of gas while Afghanistan's share has been set at 500 mmcfd, which will also be up for grabs either by Islamabad or Delhi if Kabul does not need it.

Turkmenistan is expected to achieve financial close for the project by December 2016 for developing the gas field and constructing the pipeline in three years – by December 2019.

http://tribune.com.pk/story/1058949/tapi-gas-pipeline-four-countries-ink-deal-for-10-billion-project/

#### PAKISTAN UNDERGONE SERIES OF POSITIVE DEVELOPMENTS: FORBES

Business Recorder, March 05, 2016

Pakistan has undergone a series of positive developments meriting recognition and country's economy was on track to complete an International Monetary Fund (IMF) program from start to finish for the first time in its 70-year history. According to an article published in Forbes, American-based business magazine, the positive developments taking place in the country despite very poor country brand with the international media, set the table for the sort of policies and investments needed to move the country on a path travelled by Indonesia or Brazil.

The magazine stressed the United States and its allies to help address the core structural development problems within Pakistan that would also help resolve their security concerns. It also asked the US Administration to broaden the way it looked at Pakistan as security issues have dominated Washington's Pakistan agenda for decades while "soft" issues have been an afterthought.

From Islamabad's perspective, the "soft" issues included some of their most important challenges. These soft issues might be characterised as Pakistan's "6Es": (non-security) engagement, economics, entrepreneurship, education, energy, and (gender) equality. According to the magazine, most of the international community engage Pakistan through an "AfPak" lens or an "IndoPak" lens, but Pakistan cannot be defined completely by its relationships with its neighbours. Pakistan is the sixth largest country by population in the world and is projected to become the fourth largest country by 2050.

To understand Pakistan requires analysis through its own set of issues and opportunities. The country had its first peaceful democratic transition in 2013, and for now, the military, the civilian government, and civil societies are broadly aligned on security issues. Pakistan's growing middle class, which will expand from an estimated 40 million people today to 100 million people by 2050, represents a powerful engine for change, demanding both improved services and greater access to opportunities.

One key area of expanding demand and potential growth lies in the energy sector. Pakistan's abundant coal reserves and access to water flowing from the Himalayas mean it could be the "Saudi Arabia of Coal" and the "Saudi Arabia of Hydropower." Pakistan also has significant wind, solar and geothermal potential. It is in both US and Pakistani interests to see that Pakistan grows a lot faster. To seize its full potential, Pakistan is going to need more capable people to lead industries that will carry its future growth; run it's national, provincial and city governments; and grow its universities.

The government has made some increases in spending on education, up from 1.9 percent of GNP in 2004 to 2.5 percent in 2014; Pakistan aspires to spend 4 percent of GNP on education so it is still not where it needs to be. In Pakistan's higher education institutions approximately 45 percent of students are women, but at the basic education levels the numbers are much lower, with some provinces at eighteenth century education participation levels: more than 50 percent of girls in rural areas do not attend primary school, and more than 75 percent of girls do not attend secondary school.

Pakistan's government knows would have to simultaneously improve girls education levels in rural areas to come at par with a twenty-first-century economy, the magazine said.

http://www.brecorder.com/business-and-economy/189:pakistan/22738:pakistan-undergone-series-of-positive-developments-forbes/

# PAKISTAN, GERMANY TO LAUNCH RENEWABLE ENERGY FORUM The Express Tribune, March 6th, 2016

ISLAMABAD: German Ambassador Ina Lepel has said that a renewable energy forum will be launched in collaboration with Pakistan in a bid to bring together and connect stakeholders from public and private sectors of the two countries.

Speaking at the 5th International Exhibition and Conference on Renewable Energy and Energy Efficiency on Saturday, Lepel said the German Development Cooperation – an agency that cooperates in sustainable development – had been engaged in renewable energy and energy efficiency programmes since 1962, the year development partnership began between Pakistan and Germany.

"Our objective is to support sustainable electricity supply in Pakistan and to help improve efficient use of energy," she added.

The ambassador said besides financial and technical cooperation in the area of energy ranging from construction of hydroelectric power plants to supporting reforms and policy formulation, the goal was to leverage the business potential in renewable energy that existed in both countries.

She was of the view that Pakistan had a big potential for sustainable economic and social development due to its geographical realities as a trade corridor, its agricultural and human resources and the prospect of a competitive exporter of goods in high demand within the region and beyond.

Pakistan's potential in terms of renewable energy was even bigger than Germany as the former had more wind corridors, more solar power resources and also exceptional opportunities for hydroelectric power production, she said.

Lepel saw ample possibilities of engaging in business activities that would create employment and income opportunities and contribute to Pakistan's economic development.

She stressed that development partners could play a pivotal role, especially by providing expertise and specific technologies, in order to give a boost to the renewable energy sector.

Alternative Energy Development Board (AEDB) Chief Executive Officer Amjad Ali Awan said Pakistan's renewable energy sector had received encouraging response from the international market and mapping of solar and wind resources was in progress while biomass mapping had been completed.

He pointed out that efforts were being made to enhance the share of renewable energy up to 35% in the total energy mix in order to ensure energy security. Pakistan could generate over 40,000 megawatts of clean energy only through the Keti Bandar wind corridor and the same area could also produce solar energy, he said.

The AEDB has set a production target of over 3,000MW of electricity with the help of renewable energy resources.

Air University Dean Dr Zafarullah Koreshi, while underlining the need of promoting renewable energy, said over 40,000-50,000MW of electricity could be generated from hydel resources.

Renewable Alternative Energy Association of Pakistan Vice Chairman Asif said renewable energy was the only solution to the power outages.

http://tribune.com.pk/story/1060046/pakistan-germany-to-launch-renewable-energy-forum/

# **April 2016**

# NEWS COVERAGE PERIOD FROM APRIL 25th TO MAY 1st 2016

*SAVE K-ELECTRIC, POWER UTILITIES ORDERED TO REFUND RS2.83 PER UNIT* Dawn, April 27th, 2016

ISLAMABAD: The National Electric Power Regulatory Authority (Nepra) directed the Power distribution company of ex-Wapda on Tuesday to refund 35 per cent of fuel costs overcharged to consumers in March.

At a public hearing presided over by Nepra Chairman retired Brig Tariq Sadozai, Nepra approved a Rs2.83 per unit (35pc) cut in electricity tariff for all public sector distribution companies for one month to pass on the impact of lower international oil prices to consumers.

The Central Power Purchase Agency (CPPA), which had filed a request for monthly fuel price adjustment (FPA), also put on record that furnace oil-based power generation was now cheaper than gas-based generation because of imported re-gasified liquefied natural gas (RLNG) factor.

The reduced rates will not be applicable to all agricultural and domestic consumers using less than 300 units per month under a government decision because this was already a subsidised segment of the population. Likewise, consumers of K-Electric will not benefit from this.

The CPPA had solicited Rs2.78 per unit reduction in fuel-based power tariff for March claiming that the actual cost stood at Rs5.3 per unit against reference tariff of Rs8.09 per unit.

This, however, did not impress the regulator which pronounced at least two cost factors "illegal", thus allowing relatively higher refund of Rs2.83 per unit to consumers.

During the hearing, Nepra's case officers explained that the regulator had approved a reference fuel price of Nandipur power plant at Rs4.52 per unit but the authorities had invoiced its generation at Rs6.83.

Chairman Sadozai expressed displeasure over this and said that it was in violation of Nepra rules and established terms of tariff. The regulator, therefore, disallowed Rs255 million additional cost on account of the Nandipur plant.

He was also displeased over the utilisation of the Quetta thermal power station which was not allowed under the generation licence.

"The utilisation of this plant is illegal because it does not have a generation licence," Mr Sadozai said, adding that a criminal case could be filed against the CPPA and the National Transmission and Dispatch Company (NTDC).

However, NTDC general manager Mohammad Ilyas and CPPA's Mohammad Rehan did not offer any explanation.

Due to expensive power generation, Nepra had previously removed the Quetta plant from the licence at the request of the generation company. It was reported that the plant supplied 7.6 gigawatt hours (Gwh) of electricity at a rate of Rs8.60 per unit. Hence, the regulator also disallowed Rs65 million cost of power generated by the Quetta plant, putting the total reduction at Rs2.83 per unit.

In conclusion, the Nepra chairman was asked if the regulator's directives for observing merit in utilisation of power plants had been adhered to by the power authorities. Mr Sadozai said they had not changed their behaviour and were continuing as before. He said the regulator had initiated legal process for violation of merit order.

The CPPA reported that furnace oil-based power generation cost stood at Rs5.13 per unit, compared to gas-based cost of Rs5.86 and Rs11.64 for diesel-based plants, no fuel cost for hydropower plants and Rs1.16 per unit of nuclear plants. The fuel cost of electricity imported from Iran stood at Rs10.6 per unit.

The CPPA reported that a total of 6.58 billion units of electricity were supplied to distribution companies in March at a total cost of Rs35 billion.

It said hydropower contributed about 27.6pc generation while furnace oil-based plants over 29.6pc. Gas-based plants generated 33pc electricity for the national grid, followed by 6.52pc by nuclear and 0.18pc by diesel-based plants.

https://www.dawn.com/news/1254594

MARI TO SUPPLY GAS TO ENGRO FERT, POWER PLANT The Express Tribune, April 28th, 2016.

Zafar Bhutta

ISLAMABAD: The Economic Coordination Committee (ECC) is likely to direct an additional 91 million cubic feet of gas per day (mmcfd) to Engro Fertilizers and Genco-II power plant.

Officials familiar with the development said Mari Petroleum (MPCL) had informed the petroleum ministry that it had over 91mmcfd that could be allocated to Engro Fertilizers (60mmcfd) and Genco-II (31mmcfd). In turn, the petroleum ministry was seeking relevant approval from the ECC.

Moreover, the petroleum ministry will seek approval for any additional gas (beyond 91mmcfd) to be supplied to the fertiliser sector.

The precipitous uptake of gas comes on the back of Mari Petroleum's ability to charge a premium price for 10% additional reserves.

The additional pay for higher gas exploration was government's way of incentivising gas exploration companies into expanding and further exploring reserves. The Petroleum Policy 2012 has given the company the ability to benefit from the incentives that could help the company expand its operations.

Mari expected to bring on stream substantial new production (100 to 150mmcfd) by the end of 2016 due to the 2012 policy.

The tussle between power and fertiliser sectors to be the primary recipient of gas supplies has lasted over several years.

Under the Fertiliser Policy 2001, the government had dedicated shallow reserves of the Mari field to the fertiliser industry whereas deep deposits were earmarked for the power producers.

Originally a 60mmcfd reserve was allocated for the fertiliser sector. Of this, 34mmcfd was for Fauji, 13.5mmcfd for Fatima and 12.5mmcfd for Engro.

However, in April 2010, the ECC redirected 60mmcfd away from the fertiliser plants, when it approved allocation of 183mmcfd of gas to power producers with the consent of then prime minister.

On the other hand, the petroleum ministry insisted that 60mmcfd from the Mari field belonged to the fertiliser sector and therefore it should be permanently supplied to the Engro plant in order to avoid disrupting urea production in the country.

Later on, in July 2013, this gas would be diverted to Engro Fertilizers since Genco plant was undergoing construction and would not be able to use the gas before the end of 2015.

The ECC, in a meeting held two months back, diverted 60mmcfd to the fertiliser sector – the original allottee – from the Genco-II power plant. However, as per the original arrangement, Engro Fertilizers has received only a fraction (12.5mmcfd) of the supply.

http://tribune.com.pk/story/1093289/gas-allotment-mari-to-supply-gas-to-engro-fert-power-plant/

TWO LNG PLANTS TO SUPPLY POWER BY END OF 2017 The Express Tribune, April 29th, 2016.

ISLAMABAD: The Senate Standing Committee on Planning, Development and Reform was informed on Thursday that two power projects based on liquefied natural gas would start supplying 1,200 megawatts of electricity next year.

Briefing the committee that met at the Parliament House under the chairmanship of Colonel (Retired) Syed Tahir Hussain Mashhadi, a senior official of the Ministry of Water and Power said the two power projects being developed in Balloki and Haveli Bahadurshah would start producing 1,200MW by the end of 2017.

He said 45% of civil work had already been completed and the government had approved and allocated funds for the projects.

Furthermore, he told the committee that 28,000 agriculture tube wells were being provided electricity at subsidised rates in Balochistan. As part of a plan, 140 solar tube well pumps are also being installed to meet irrigation needs of the province.

He revealed that Gwadar city would be provided up to 100MW of electricity this year as negotiations were in final stages with the Iranian government for power supply.

Regarding the resettlement of people displaced by the Mangla Dam extension project, the ministry official said Rs4 billion were required for the purpose.

Responding to a question from a committee member, he said de-silting of Mangla Dam was not possible at this stage. Giving details of water projects, he said Darawat dam in Jamshoro district would be completed by June-end as 98% physical work had been completed. Satpara dam would be ready next year that will provide 17MW to Skardu.

Physical work on the Rainee canal has been completed while 87% work on Kachhi canal's phase-II has been done. The revised cost of this project is Rs102.07 billion. Once completed, it will irrigate 110,000 acres of land in Balochistan.

The committee also adopted a report of a sub-committee that contained all possible solutions and recommendations for controlling erosion in coastal areas of Sindh and Balochistan due to sea intrusion. The report would be submitted to the upper house of parliament while its copy would be sent to the Ministry of Planning and Development for incorporation in Vision 2025.

http://tribune.com.pk/story/1093850/half-of-work-done-two-lng-plants-to-supply-power-by-end-of-2017/

# PUNJAB GOVERNMENT FOCUSING ON ALTERNATIVE ENERGY RESOURCES: MINISTER Business Recorder May1, 2016

Provincial Minister for Mines and Minerals, Sher Ali Khan said that Punjab government is focusing on alternative energy resources and spending sufficient amount for promotion of alternate energy resources. He said this while speaking at a conference on "Economical Fuels for Power Plants in Industries" held at Lahore Chamber of Commerce and Industry (LCCI). He said that Punjab government is restructuring the mining sector as lack of modern technology is coming in the way of fully exploitation of coal mining.

He urged the private sector to come forward and invest in mining sector that would be a great service to the country. LCCI Senior Vice President Almas Hyder said that being an atomic power we should use our knowledge for power generation to get rid of the energy crisis. Mobilization of local resources is key to success therefore Pakistan should also avail full benefit from its indigenous resources for power generation like coal, solar, wind and hydel, he added.

There is a dire need to shift to alternative energy resources as conventional resources are not only failed to fulfill the rising energy demand but also one of the biggest reasons of trade deficit. He said that dependence on thermal resources could cause huge damage to the economy if an oil price rises again in the international market. He said that shift to the alternative energy sources would bring down the import bill and would also balance the current account.

He said that Pakistan has vast coal reserves that could be used for power generation. He said that modern technology has made possible to use all types of coal for power generation therefore urgent measures in this regard are need of the hour. "It is high time to adopt alternative energy solutions to address the shortage of energy in our country. Solar and wind energy are the best options but their high cost factor is hindering most of us", he added.

LCCI Vice President Nasir Saeed said that like the developed countries, the government should promote alternate energy resources on war footing. He said that Pakistan could produce over 100,000MW electricity through solar, wind and coal means. Bio energy is adaptable source that can be used to overcome electricity challenge besides making a considerable contribution to climate change phenomenon, he said. Biomass energy has the potential convert a wide variety of wastes into clean energy besides being substitution for diminishing global oil supplies, he added.

Chairman of the Standing Committee Mian Fazal Ahmad said that in view of rising energy demand it is highly imperative to use cheaper fuels and indigenous coal for long term benefits to national economy. With an estimated coal reserves of over 185 billion tons, Pakistan ranks sixth among coal-rich countries but yet coal's potential has not yet been exploited adequately.

He said industry should be facilitated through small power generation power plants from alternative energy resources and called for legislation in this regard. The other experts were of the view that bio energy could play a very vital role in production of carbon-neutral fuels of high quality. It could address many environmental issues, especially global warming and greenhouse gases emissions, and foster sustainable development among poor communities. Biomass fuel sources are readily available in rural and urban areas of all countries.

http://www.brecorder.com/fuel-a-energy/193/41655/

NEWS COVERAGE PERIOD FROM APRIL 18th TO APRIL 24th 2016 OFFSHORE HYDROCARBON PROSPECTIVITY Dawn, Business & Finance weekly, April 18th, 2016

Syed Mustafa Amjed

THE upstream oil and gas exploration sector in Pakistan is significantly off the radar for oil majors. Oil majors are not playing any significant role in the country despite its impressive geology and prospectivity.

In fact, over the decades, we have seen companies such as Exxon and BP selling off assets and pulling out of Pakistan.

Considering the nature of hydrocarbon exploration, and the mettle of oil and gas executives worldwide, the argument that companies are leaving Pakistan because of the security situation does not make sense, given that oil majors continue to operate in countries like Nigeria (Boko Haram), Iraq (ISIS), Mexico (drug cartels) and central Asian states.

If it were so, one also would not see oil majors making a beeline for frontier oil provinces such as Papua New Guinea and much smaller West African states. Frontier provinces, volatile security and political environments have not tended to deter oil and gas majors from pursuing hydrocarbon reservoirs and riches.

However, the bitter truth is that despite amazing geology, Pakistan has pretty much failed to market its upstream sector and is seriously short of both oil and gas while seeking imported oil, natural gas and LNG to satisfy domestic demand.

Given the current context, this article looks at the prospectivity of offshore basins.

Sedimentary basins cover 827, 000km2 including both onshore and offshore, which to date remain under-explored, especially the offshore basins. According to Pakistan Basin Study of 2009, the country has six onshore and two offshore basins; offshore basins being the Indus basin and the Makran basin.

Almost the entire land mass and the offshore areas can possibly have high potential hydrocarbon plays, especially the Abyssal Fan system of the Indus offshore basin.

Abyssal or submarine fan systems constitute underwater structures having huge sedimentary deposition systems over geologic time and are a result of sediment transportation and deposition from continental shelf down on to continental slopes. They are also referred to as turbidity currents and their effects can be amplified through tectonic activity. Abyssal fans are the largest systems through which organic matter, rocks, minerals gets transported from land to sea and possess huge potential for hydrocarbon and gold exploration.

Given this context, the Indus offshore basin, primarily a rift basin, is the second largest submarine fan system in the world after the Bay of Bengal and ought to contain various high probability hydrocarbon plays based on analogues.

To gain some perspective, the oil producing Mississippi fan (Gulf of Mexico), Amazon fan (offshore Brazil), Niger fan (offshore West Africa), Congo fan (offshore Angola) among others are prolific producers and analogous to offshore Pakistan being primarily Abyssal or Submarine fan systems, though much smaller in size.

The total recoverable reserves of natural gas as per brochure on Ministry of Petroleum website are given at 53.354TCF (trillion cubic feet), while remaining reserves are stated as 23.18TCF. The Economic Survey 2013-14 and Economic Survey 2014-15 state current gas reserves at 492bn cubic meters translating in to gas reserves of 17.3TCF (excluding shale).

As a contrast, the potential of submarine fan systems can be gauged from the fact that in place resource at the deepwater block in Bengal fan that contains the Dhirubhai discoveries initially stood at 25 TCF, essentially indicating that one find in the largest submarine fan in the world (Bengal) has a resource base greater than all remaining conventional gas reserves of Pakistan. This should get some bells ringing both at regulatory and commercial levels.

One can infer from these that the potential for hydrocarbon exploration and discoveries in the Indus offshore basin is huge, however, given the huge size of the basin itself, this will require intensive evaluation and commitment of capital. The 12 or so odd wells that have been drilled so far in Indus basin do not do justice to the hydrocarbon potential within this frontier basin. From a technical perspective, we should also be open to encountering high pressure, high temperature formations.

The Makran Offshore basin has a different geology than the Indus with both separated by the Murray ridge. Makran offshore is an oceanic and continental crust subduction zone with deepwater trenches and volcanic activity. The basin comprises oceanic crust and periodic emergence of temporary mud islands along the coast is strong evidence of huge hydrocarbon deposits. These temporary islands may imply improper sealing mechanisms but do ask for exploration laterally and of adjacent areas.

Makran basin is also a frontier basin with negligible exploration activity, though, a few wells have been drilled which encountered high pressure formations and a blowout in 1956. Analogs to Makran offshore include Cook Inlet, Alaska with a billion barrel oil equivalent reserve profile.

Hydrocarbon exploration has always been a high risk venture, however, given the geology that underlies offshore Pakistan, there is reason to believe in the prospectivity of the region. Based on analogous evidence, one can assume that offshore Pakistan is probably sitting on huge hydrocarbon deposits.

In view of the above discussion, and fiscal regime issues, it is imperative that Pakistani NOCs aggressively, and with an entrepreneurial spirit, start exploring for hydrocarbons in the Indus and Makran basins.

The National Oil Companies (NOCs) will have to take the lead and a strategic stake in offshore Pakistan, before any global oil major shows interest, given the particular business dynamics of the region and opening up of Iranian upstream sector to international market.

http://www.dawn.com/news/1252684/offshore-hydrocarbon-prospectivity

The Express Tribune, April 19th, 2016.

KARACHI: Three Gorges Second and Third Wind Farm Pakistan Limited, a Chinese firm, has won the regulatory authority's acceptance of its application seeking licences for 99-megawatt wind power projects in Jhimpir, Sindh, costing \$226.2 million.

The National Electric Power Regulatory Authority (Nepra) notified on Monday that it had permitted the company's application for "consideration of the grant of generation licence for its proposed wind power plant."

The firm had applied for two generation licences for two separate wind power projects of 49.5 megawatts each. Both the projects are to be set up in the vicinity of Jhimpir. The combined cost of the projects is estimated at \$226.2 million (or \$113.1 million each). This comprises 75% debt and 25% equity. Both the projects are expected to be commissioned in September 2017, the authority said.

The electric power generated from the projects will be supplied to the Central Power Purchasing Agency (Guarantee) Limited.

This is a flagship firm of China Three Gorges Corporation, which is one of the leading companies actively involved in developing hydroelectric power and wind power projects across the globe.

The company aims to produce wind power up to 2,000 megawatts in Pakistan in the next couple of years. Already, Three Gorges First Wind Farm has completed its project of 50 megawatts.

"This project has already been supplying electricity to the main grid from November 2014. The project site is located near Jhimpir, Thatta district," it said on its website.

China South Asia Investment Limited is its holding company that is engaged in investment and establishment of power generation projects in South Asian countries. It is working on developing power projects in Pakistan as well in the areas of hydroelectric, wind and solar energy.

The Chinese firm had filed applications for power generation licences in November 2015, but Nepra returned them with multiple objections.

Three Gorges Second and Third Wind Farm Pakistan CEO Wang Shenliang said they believed that Nepra's objections were not applicable in their case and requested the authority to reconsider the applications.

http://tribune.com.pk/story/1087394/green-light-nepra-accepts-request-for-wind-power-production/

LNG DEAL NOT YET ON THE WEBSITE Business Recorder, April 19, 2016

The Minister for Petroleum and Natural Resources Shahid Khaqan Abbasi had consistently maintained that commercial LNG deals are always undertaken in strict secrecy, as they are highly sensitive. This was the rationale he provided for his refusal to take the country into confidence with the more than two-and-a-half-year-long negotiations with Qatar.

Once the deal was signed, he had vowed that the price and details would be uploaded on the website for all to see. That unfortunately has yet to happen nearly two months after the deal was signed in Doha on 10th February this year, amidst much fanfare with Prime Minister Nawaz Sharif also in attendance.

Business Recorder has been keeping a close watch on the websites of the three relevant entities that may have uploaded the deal namely the Ministry of Petroleum and Natural Resources, Pakistan State Oil (which BR was informed a month ago would upload the deal in a day or two) and the Public Procurement Regulatory Authority

(PPRA) but so far the deal has not been uploaded on any of these entities' websites. Thus all the information that is currently available to the general public is based on statements/claims made by Khaqan Abbasi.

Pakistan has negotiated a 21 billion dollar 15-year-long contract with Qatar to supply Liquefied Natural Gas (LNG). Under the terms of the agreement Qatar will supply Pakistan with 500 million cubic feet per day (mmcfd) of LNG under a pricing formula that translates into a current price of LNG of 7 dollars per million British thermal units (mmbtu), a price lower than that paid even by Indian importers, who are currently paying close to 9-10 dollars per mmbtu.

In addition, it was also revealed that the 7 dollar per mmbtu does not include transport costs. Thus gas price that would be paid by Pakistani consumers would be higher than 7 dollar per mmbtu and include the cost of chilling it down to minus 170 degrees Celsius.

Two obvious observations come to mind. First that the 7 dollar per mmbtu is 2 dollars per mmbtu more expensive that the Iranian gas under the Iran-Pakistan gas pipeline project subject to the condition that the pipeline had been fully operationalized by now which is certainly not the case.

The Pakistan government consistently maintained that it would begin laying the pipeline once sanctions were lifted. Subsequent to Iran reaching a deal with the G5 plus one, Western sanctions were lifted on 16th January 2016 and it has been recently reported though unconfirmed that Iran may seek to renegotiate the price agreed previously under this project.

And secondly, the pricing formula was not revealed which understandably is why analysts were waiting for the agreement to be uploaded prior to giving their opinion on the deal. Had the government uploaded the deal a comparison with the usual LNG deals would have been possible, which are typically priced at around 10 to 15 percent discount to Brent, the global benchmark for crude oil pricing.

So who was taken into confidence with respect to the deal? Parliamentary Secretary for Petroleum and Natural Resources Shahzadi Umarzadi Tiwana told the National Assembly during question hour on 11th January 2016 that the sale and purchase agreement with Qatar for the import of LNG has been finalised and submitted to the Economic Coordination Committee (ECC) headed by Federal Finance Minister Ishaq Dar. The ECC approved it on 13th January. There is no evidence to suggest that the deal was ever discussed in a cabinet meeting.

Failure to take all stakeholders on board, including cabinet members as well as the general public has not only compromised Sharif administration's record on transparency but this style of governance does not generate any comfort level that decisions are being taken in a democratic manner after the views of all are heard and duly considered. To conclude, one can only hope that the government abandons this maula jatt style of governance and deals already signed and sealed should routinely become the property of the public.

http://www.brecorder.com/editorials/0:/37573:lng-deal-not-yet-on-the-website/?date=2016-04-19

KHAQAN WANTS PRIVATE SECTOR TO TAKE LEAD IN ENDING ENERGY CRISIS Dawn, April 21st, 2016

Khaleeq Kiani

ISLAMABAD: Amid calls for further deregulation of oil and gas market, Petroleum Minister Shahid Khaqan Abbasi on Wednesday asked the petroleum industry to invest in ending energy crisis, otherwise public sector companies would expand energy infrastructure, output and supplies.

"Market is there. The burden is now on companies. If the private sector companies do not invest (to take benefit of the market), the government-owned companies will do," he said at the annual conference of Petroleum Institute of Pakistan (PIP).

The minister said the government could not achieve economic growth, create jobs and increase revenues without energy but deplored that the government did not hear any support, suggestions or solutions from the industry, experts and the media. "We have now adopted common sense solutions" and working on increasing primary energy to resolve the crises.

To do this, he said there was a need to move away from oil and since hydropower generation took time, the only immediate solution left was increasing gas supplies. "We have heard about energy solutions in cow-dung and nuclear energy but these are no solutions".

He said the entire world was now moving towards gas-based energy and even oil producers were now importing liquefied natural gas (LNG) for power generation instead of using their own oil for power production. This, he said, was common sense because oil based plants offered plant efficiency of 25-32 per cent. "This is criminal," he said, adding that Pakistan was second-largest importer of furnace oil after China which was not a good thing to go about.

"The solution to energy shortfall is in gas. Fix the gas. Add more gas to the system and the problem will be over," he said. Therefore, he said the government was fast tracking LNG imports to bridge energy shortfalls. Against domestic production of around four billion cubic feet per day (bcfd) of gas, the demand was about 8 bcfd, he said.

The minister said around 70 gas discoveries had been made since the PML-N came into power in 2013 but these were so small that they could not even make up for the natural depletion of existing supplies. He said the exploration and development activities had been accelerated but this had its own limitations while the country required big finds.

Mr Abbasi said shale gas offered great potential but that too was difficult to be materialised in a low-oil price situation because the cost of oil production was less than \$5 per barrel. He said there had been talks of Turkmen gas imports for 22 years and it was still four years to be materialised as Turkmenistan government was now starting its development.

Moreover, the import of gas from Iran was also hit by sanctions which were now over and the project was expected to move forward. But all these supplies were for the future while the country needed immediate solutions to end energy crisis and hence import of LNG was the only solution to do that today.

He said despite hindrances the government has been able to start supplying 400 mmcfd of LNG which would be increased to 2 bcfd. He said that the private sector should come forward and take the lead because regulatory environment was already in place and the government was working through its gas utilities to enhance pipeline capacity through two gas pipelines — from Gwadar to Nawabshah and from Karachi to Lahore — with an investment of over \$4bn.

The minister said LNG was now available to all power plants that could be run on gas while fertiliser plants were again running to capacity and CNG sector stood revived and expected to grow further to replace liquid fuels while industry had round-the-clock gas supplies.

"This is just the start. Very soon, the system will deliver gas to anybody anywhere in Pakistan," he said, adding the solution to power crisis too was in gas because original engineering manufacturers (OEMs) of gas plants were providing 62pc guaranteed efficiency.

The minister said the government would wipe away existing power crisis in 2017 and do it in cost-effective and efficient manner on a sustainable basis. He said the base load sources — gas based power — need to be enhanced because renewable resources could also create problems.

The conference recommended the government to come up with an integrated energy plan, introduce regulatory reforms, ensure fool- proof security to the oil and gas industry on the pattern of CPEC, move oil consumption to 92RON and euro-II standards, completely deregulate LNG imports and petroleum margins and divide gas utilities into smaller distribution companies to overcome shortages.

http://www.dawn.com/news/1253328/khaqan-wants-private-sector-to-take-lead-in-ending-energy-crisis

FEARING DOLLAR FLIGHT, GOVT LOOKS FOR CHINESE FINANCING The Express Tribune, April 21st, 2016.

ISLAMABAD: The federal government has asked coal-based power producers to arrange financing from China instead of domestic institutions and markets in an attempt to prevent the outflow of dollars for the purchase of equipment, officials say.

However, it is feared that this government move will delay the completion of power projects by 12 to 18 months.

It must be kept in view that several coal-power projects are facing default on debt repayment in the United States and other countries in the wake of refusal by banks to provide financing. Environmental concerns are among the major reasons behind the reluctance of banks to fund the projects.

Talking to media, a senior US official revealed that it had been established that many premature deaths of children around the world had been caused by environmental hazards and therefore some countries were switching from coal to other sources of power generation.

China is the only country that could extend loans for the coal-power projects and reports suggest that it also wants to shift some abandoned old coal plants to Pakistan.

According to officials aware of the development, the Ministry of Finance has asked new coal-based power producers, who have so far been unable to raise funds for their projects, to scout for Chinese financing.

"This way the government will be able to stave off pressure on the country's dollar reserves," an official commented.

Meanwhile, the Ministry of Water and Power has recommended to the energy committee of cabinet that it should block the announcement of new tariffs for the power projects based on imported coal except for the plants being set up under the China-Pakistan Economic Corridor (CPEC), the projects of Lucky, Siddiqsons and others for which letters of support have been issued and the projects being shifted from furnace oil to coal with estimated capacity of around 4,920 megawatts.

The Lucky and Siddiqsons' projects are in the pipeline and they have been told to look for Chinese loans.

According to the officials, Siddiqsons is lobbying the government to include its project in the CPEC's priority list, but this may hurt some other schemes. However, they believe the project may be made part of the economic corridor programme.

The government has already placed the Thar coal project, sponsored by Engro Corporation, in the CPEC's priority list to ensure state guarantee and financing from China.

http://tribune.com.pk/story/1088961/coal-fired-power-plants-fearing-dollar-flight-govt-looks-for-chinese-financing/

\$3.5BN LNG PIPELINE DEALS WITH CHINA, RUSSIA IN TWO MONTHS Dawn, April 22nd, 2016

ISLAMABAD: The National Assembly Standing Committee on Petroleum and Natural Resources on Thursday was informed that Pakistan is set to sign commercial agreements with Chinese and Russian government in two months for construction of Gwadar-Nawabshah and Karachi-Lahore Liquefied Natural Gas (LNG) pipelines.

The committee meeting was chaired by Chaudhary Bilal Ahmed Virk.

Managing Director Inter State Gas Systems (ISGS), Mobin Saulat informed the committee that China will lay Gawadar-Nawabshah LNG pipeline at an estimated cost of \$1.5 billion and Russia will construct Karachi-Lahore pipeline at a cost \$2bn.

Mr Saulat said both pipelines will be completed by the end of 2017 and will help transport 1.2bn cubic feet gas per day (bcfd) imported LNG.

In phase one, LNG terminals in Gawadar and Karachi will be built each with a capacity to handle 600 million cubic feet LNG. In phase two, LNG terminals in Karachi and Gawadar will be completed with the same capacity.

INQUIRY ORDERED: The committee directed the Federal Investigation Agency (FIA) to conduct an inquiry into the reported theft of crude oil from Naspha Oilfield in Karak district, Khyber Pakhtunkhwa and submit its preliminary findings by May 24, 2016.

The issue of oil theft has been under discussion in the committee for more than a year, with accusations that police, local influential and even the employees of the company producing oil and gas from the region were involved.

DISCRIMINATION SLAMMED: Discussing another agenda item, committee member Nisar Khan observed that provincial governments were discriminating against the oil and gas producing district and tehsils in terms of allocation and utilisation of royalty and production bonus.

The committee directed the representative of provincial energy departments to present details of the royalty remitted to the provinces by the federal government and its subsequent allocation in the past three years.

The committee also sought details of executed and ongoing schemes in the relevant oil and gas producing district and tehsils. The committee directed involvement of local representatives in identification of development schemes in future.

The meeting also asked Director General Petroleum Concession, Saeed Ullah Shah to verify the figures provided by the provincial energy departments.

Mr Shah told the committee that the licences of non-performing oil and gas exploration and production companies have been revoked out of which 12 companies have gone into litigation and were granted stay orders by the courts.

### https://www.dawn.com/news/1253588

ASIA-PACIFIC TO ACCOUNT FOR 40PC OF ENERGY INVESTMENTS BY 2040 Dawn, April 24th, 2016

ISLAMABAD: The Asia-Pacific region is expected to account for over 40 per cent of the \$68 trillion of cumulative energy investments until 2040, according to a document prepared by the United Nations regional commission for Asia and the Pacific (UN-ESCAP).

The document prepared for the policy dialogue on energy for sustainable development in Asia and the Pacific opening in Bangkok on Monday, says with energy demand in Asia and the Pacific forecast to nearly double from 2010 to 2035, access to reliable and adequate energy services will remain a focus for the decades to come.

Of the \$68 trillion, \$22 trillion will be needed for investments in energy efficiency. It is expected that two thirds of projected investments will be in non-OECD countries and in Asia, and about half of this will be required in the power sector (i.e. generation, transmission and distribution) to fill much needed demand and access gaps.

The region's energy imports have grown rapidly from 525 mega tonnes of oil equivalent (Mtoe) in 1980 to 2.3 billion Mtoe in 2013. Compared to 1980, the region's energy import share of the global total has nearly doubled from 23 per cent to nearly 44 per cent in 2013. Compared to imports, overall exports have remained more or less stagnant at around one third of global energy exports since 1990.

The region is expected to remain dependent on oil in the medium term, as the mobility and transport of goods and people is critical for economic development. Currently, transport is currently heavily dependent upon oil and is the fastest growing source of global carbon emissions. With growing middle class in the region and rapid urbanization, overall oil demand for personal mobility and transportation of goods is expected to rise significantly.

Three future trends are likely to dominate the Sustainable Development Agenda for the Asia-Pacific region. First, the next few decades will see a tremendous rise in the urban population globally, but particularly in the region; and new cities and new buildings will have to be built to cope with rapid urbanization. Second, the world will witness a major rise in global middle class: from 1.8 billion in 2009 to 4.9 billion by 2030.

Asia will represent 66 per cent of the global middle class population and 59 per cent of global middle-class consumption, compared to 28 per cent and 23 per cent today. The emergence of a large middle class will have a significant impact on energy demand and on the goods and services that have embedded energy.

In order to effectively progress energy connectivity within Asia and the Pacific there is a need for a common understanding of the benefits by member States. This could lead to a shared vision for energy connectivity that could encompass a connected and fully energized Asia-Pacific region.

Regional integration will not solve all energy challenges, but smart region-wide energy connectivity can play a valuable role in improving energy supply and minimising the environmental impact. It is possible for the Asia-Pacific region to expand supplies, reduce overall cost of energy produced and consumed, lower environmental and social costs, and reduce energy insecurities if energy networks are connected, it says.

According to the 'Regional Trends Report on Energy for Sustainable Development in Asia and the Pacific', energy access has remained as the major challenge and the energy poverty is acute in the region impeding development process and economic growth.

In the region, there are 455 million populations live without access to electricity and 2.06 billion relying upon solid fuels for cooking and heating. Mostly the rural populations in the region are deprived of energy access due to unaffordability, low per capita consumption, lack of technological capacity and high capital investment required.

New initiatives are emerging in this region major energy exporter the Russian Federation is turning to the Asian market and major energy importer China formulated the Belt and Road initiatives, both look into energy cooperation with other countries.

The new established Asian Infrastructure Investment Bank, the BRICS New Development Bank, the Silk Road Fund and Shanghai Cooperation Organization will play an important role in regional investment and cooperation, including regional energy connectivity.

https://www.dawn.com/news/1254018/asia-pacific-to-account-for-40pc-of-energy-investments-by-2040

NEWS COVERAGE PERIOD FROM APRIL 11th TO APRIL 17th 2016 BENEFIT FROM SYNERGIES Dawn, Business & Finance weekly, April 11th, 2016

Ajay Kumar

The Hub Power Company Limited (Hubco) has entered into a joint venture with China Power International Holding Limited for the development of 2x660MW coal-fired power plants at Hub. Hubco plans to have a 26pc of equity interest in the project with an option to increase it to 49pc any time before its commercial operation deadline, which is expected in FY20.

The company's investment outlay for the project will be Rs16.5bn (26pc stake) and our preliminary estimates suggest that the investment will add Rs2.43/share towards the company's bottom-line.

During the project's initial years, we expect the company will benefit from fuel savings and lower O&M expenditures. Hubco is also expected to benefit from the synergies provided to the company due to its location next to its existing plant and also because of Hubco's stake in Sindh Engro Coal Mining Company (SECMC) — incorporating all the benefits and synergie

Hubco has agreed to invest \$20mn (6pc stake) in SECMC to develop the Thar coal mine, which will have an initial capacity to mine 3.8m metric tonnes of coal annually. SECMC's is expected to provide a dollar based IRR of 20pc.

The company has decided to demerge the Narowal plant, which has a capacity of 220MW. Narowal contributes around 20pc to Hubco's earning with a per share impact of Rs1.10/1.86 during FY14/15, respectively.

Hubco has taken over its O&M operations rather than outsourcing since 2QFY16. The company has also sent a notice to Tenaga National Berhad Repair and Maintenance Company for discontinuation of O&M for its Narowal plant. HPSL will take over its O&M of Narowal plant from 4QFY16.

HPSL will also be managing O&M of its new 2X660MW coal based power plant once its production starts. Due to economies of scale, we believe company will be able realise substantial O&M savings.

http://www.dawn.com/news/1251403

#### WORLD MOVES AWAY, PAKISTAN GOES TOWARDS COAL

The Express Tribune, April 11th, 2016.

Zafar Bhutta

ISLAMABAD: Reports have emerged that several coal mining companies are defaulting on payments including those working in the United States and China following a slowdown in economic growth and an anti-pollution drive that has pushed coal prices to near four-year lows.

In a climate conference held in Paris late last year, 195 countries agreed on a landmark deal and committed to limiting the rise in global temperatures to two-degree Celsius a year.

At a time when the world is making intense efforts to tackle global warming and move towards clean energy such as wind, hydel, gas and solar resources, Pakistan is pressing on with plans to develop coal-based power plants, especially in energy-starved Punjab. This indicates that the policies being designed by the government lack a vital due diligence exercise.

The government must have an understanding where coal prices will be headed in the future, particularly in the backdrop of an increasing number of coal mining companies defaulting on payments.

Their inability to clear debts will create a scenario where most of the companies will abandon the mining business and the gap between demand and supply of coal will widen greatly. In this case, a hike in coal prices will be inevitable.

Under the Paris climate deal, many countries have pledged that they will bring down coal consumption levels in power plants. The US has already embarked on a plan to minimise its reliance on coal-based power plants.

However, China and Japan are still banking on such plants. In the first nine months of 2015, China's central and provincial governments gave environmental approvals to 155 coal-fired power plants at an average of four per week. It also consumes imported gas from Turkmenistan for producing electricity.

On the other hand, Japan had hitherto been meeting most of its needs from nuclear energy, but now it has started replacing these plants with coal-based electricity projects.

Interestingly, Beijing also vowed in the Paris meeting that it would contribute to the efforts aimed at reducing global warming and would shift most of the coal power plants to developing countries. Pakistan is one of the destinations that China is targeting for installing coal power plants, including some old plants, as suggested by some reports.

At present, Pakistan and China are working on inter-connecting the electricity grid, which suggests that Beijing could set up more coal power plants in Pakistan to meet its energy needs. They are set to develop over 10,000-megawatt plants including coal projects.

China is the only country that is providing financing for Thar coal mining under the economic corridor project, though many coal mining companies there have defaulted on bank debt repayments.

The Paris climate deal has restricted financing for coal power plants and Washington has already refused to dole out funds for such projects in Pakistan.

In such a scenario, China would have monopoly over financing for coal projects, which may be provided at higher rates. This was the reason behind the National Electric Power Regulatory Authority's (Nepra) decision to increase the rate of return from 17% to 22% for Engro coal mining projects in Thar, which was funded by China.

Pakistan has not yet developed fully-fledged policies for setting up coal power plants in the country. A couple of them are being developed in the Punjab areas of Sahiwal and Kot Addu. In Kot Addu, reports suggest that locals are protesting against the threat to environment by the coal plants.

The government should devise a strategy that will allow it to execute different types of power projects depending on the resources available in a region.

Azad Jammu and Kashmir and Khyber-Pakhtunkhwa are suitable for hydroelectric power projects whereas Sindh and Balochistan, which are rich in natural gas, provide a fertile ground for gas-fired power plants.

Thar, situated in Sindh, has abundance of coal and here coal-powered plants should be set up at the mouth of mines. In Punjab, the most populous province of the country, power plants should be run with the help of imported gas, including liquefied natural gas.

This appears to be the most appropriate strategy that the government could adopt to tackle energy crisis in the country and silence critics of environmental hazards but the state seems to be following its own order to serve the vested interests of some investors.

http://tribune.com.pk/story/1082322/against-the-tide-world-moves-away-pakistan-goes-towards-coal/

LNG PIPELINES: BODIES SET UP TO NEGOTIATE CONTRACT PRICES Dawn, April 12th, 2016

Khaleeq Kiani

ISLAMABAD: The Economic Coordination Committee (ECC) of the federal cabinet has decided to constitute two committees to negotiate contract prices with Russian and Chinese contractors for laying two separate gas pipelines worth around \$5 billion for the transport of liquefied natural gas (LNG).

Presided over by Finance Minister Ishaq Dar, the ECC at a meeting on Monday approved restructuring of the Gwadar-Nawabshah LNG Terminal and Pipeline Project (GNP) from build, operate and transfer (BOT) basis to build, operate, own and transfer (BOOT) basis for construction by a Chinese firm, China Petroleum Pipeline Bureau (CPP).

It constituted a price negotiation committee, which will be led by the petroleum secretary and comprise the finance secretary's nominee, secretaries of law, board of investment and managing directors of the Sui Southern Gas Company (SSGCL) and the Sui Northern Gas Pipelines Limited (SNGPL) to negotiate the project cost and ensure that the revised strategy does not result in increasing the overall cost of the project.

This 700km-pipeline will transport 600mmcfd of re-gasified LNG (RLNG) in the first phase that will be completed by December 2017. It would ultimately be connected with the North-South Gas Pipeline at Nawabshah for onward transportation to the SNGPL's network in Punjab.

The second price negotiation committee will work on the proposal for the North-South Gas Pipeline from Nawabshah/Karachi to Lahore. The committee would monitor implementation of the project and negotiate the contract price and pipeline pricing with the Russian firm under a government-to-government agreement.

Because of strong opposition from the Oil and Gas Regulatory Authority (Ogra), the ECC did not take a decision on the setting up of three LPG-Airmix facilities in Murree and their financing through natural gas tariff. It, however, noted that in view of the recent approval of the LPG policy for 2016 by the Council of Common Interests (CCI), "there is no need for further approval from the ECC as the LPG Airmix projects were already covered. Now it is for the Ogra to implement the approved policy in letter and spirit".

The petroleum ministry had proposed that on successful implementation of the three plants in Murree, similar liquefied petroleum gas (LPG) Airmix plants could be opened at 30 locations across the country.

According to petroleum secretary Arshad Mirza, the government was working for the "provision of LPG through Airmix plants to areas where the pipe gas was not economically feasible". These areas include Murree, Galliat, the northern hilly areas and Azad Kashmir. "Three locations of tehsil Murree have been identified for the installation of LPG Airmix plants as adequate land is available for construction," he wrote to the ECC.

The SNGPL has already conducted the tendering process for the sites and its board of directors approved the procurement of LPG Airmix plants early last month. Ogra, however, said these plants were "economically unfeasible, constitutionally discriminative and legally inconsistent with the existing framework and the federal government's earlier decisions".

"There is no rationale to provide a product at high rates when it is easily available at a far less price in the form of cylinder gas. Resultantly, the proposed projects are uneconomical and shall involve significant subsidies that shall be borne by existing natural gas consumers," it said.

http://www.dawn.com/news/1251541/lng-pipelines-bodies-set-up-to-negotiate-contract-prices

PREMIER TO VISIT TAJIKISTAN FOR CASA-1000 PROJECT IN MAY The Express Tribune, April 12th, 2016

Zafar Bhutta

ISLAMABAD: Prime Minister Nawaz Sharif will visit Tajikistan next month to attend the ground-breaking ceremony of the Central Asia-South Asia 1,000 (Casa-1,000) project that will help Pakistan get cheaper and clean energy to minimise electricity shortages.

"The ground-breaking of the project will take place on May 11 and the premier will attend it," a senior government official said, adding Afghanistan's president was also likely to attend the event.

The official said all agreements had been signed to implement the project and the process of laying the transmission line was under way.

He said the Casa-1,000 power import project would help Pakistan get cheaper and clean energy to minimise electricity shortages and build close economic relations with countries in the region, particularly Kyrgyzstan and Afghanistan.

He said the project was feasible despite the security situation in Afghanistan and it would help demonstrate Kabul's viability as a transit country linking the two regions.

"Afghanistan has given a guarantee to ensure security of the transmission line that will transmit 1,000 megawatts from Tajikistan to help Pakistan minimise electricity shortages," the official said.

Among other sectors of the economy, he said the energy sector of Tajikistan had been showing sustainable growth over the last 15 years. During this period, hydroelectric power generation has been stable. In addition to big plants, he said, there were also 20 medium and 40 small hydel power plants in the remote mountainous areas, with capacity ranging from 5 kilowatts to 1,500KW.

A Tajik Embassy official stressed that Tajikistan was the world's third largest producer of hydroelectric power after the US and Russia. Hydroelectric generation accounts for 76% of the total energy output in the country.

In Pakistan, the rate for firm energy is 13.2 US cents per kilowatt hour (kWh) and the rate for non-firm energy is 9.2 cents per kWh, while the generation cost in Afghanistan is estimated to be at least 6 cents per kWh based on the information provided. The electricity cost of Casa project including all charges will be 9.35 cents per unit. Pakistan was importing electricity for Gwadar at a rate of 10 cents per unit.

The project will not only alleviate electricity shortages in Pakistan but will also replace oil-based electricity generation for Afghanistan and Pakistan.

Afghanistan, the Kyrgyz Republic, Pakistan and Tajikistan have been pursuing the development of electricity trading arrangements and the establishment of the Central Asia-South Asia Regional Electricity Market.

The initial plan was to transmit power in the range of 1,000 to 1,300MW from the Kyrgyz Republic and Tajikistan to Pakistan and Afghanistan. The major share of the exported energy will be consumed by Pakistan and approximately 300MW will be absorbed by Afghanistan.

The project envisages transportation of surplus electric power available in summer (May 1 to September 30) from the Kyrgyz Republic and Tajikistan to Afghanistan and Pakistan.

The estimated cost of the project is \$1.17 billion, but the final cost would be determined through a competitive bidding process. This includes the estimated cost of \$232 million required for the Pakistan portion of the transmission line and convertor station.

In addition to Casa-1,000, plans for supply of an additional 1,000MW are being studied for which transmission lines will be laid from Tajikistan to Chitral in northern areas.

Tajikistan is about to embark on a historic construction of the Rogun Dam – a structure that will power the world's tallest hydroelectric plant providing cheap, secure and sustainable energy to Tajikistan and its neighbours. This project will help to materialise the second transmission line project..

http://tribune.com.pk/story/1083017/power-import-deal-premier-to-visit-tajikistan-for-casa-1000-project-in-may/

GE, CMEC DEAL: TWO 330MW BOILERS FOR ENGRO

The Express Tribune, April 12th, 2016.

LAHORE: General Electric on Monday announced a deal with China Machinery Engineering Corporation (CMEC) to supply two 330-megawatt boilers to Engro Powergen Thar (Private) Limited; CMEC's joint venture with Pakistani companies for the Thar Block II Power Plant.

The project will support Pakistan's move to use its ample coal reserves in the Thar desert to meet power generation needs, spur economic development and bring energy security to the country, the company said in a statement.

The Thar II project will be the country's first project fired with lignite from the Thar coal field. It is expected to help reduce pressure on foreign exchange reserves, support energy independence and promote the country's goal under Vision 2025 to increase the percentage of indigenous sources of power generation to over 50%.

http://tribune.com.pk/story/1083060/ge-cmec-deal-two-330mw-boilers-for-engro/

GOING SOLAR Dawn, April 14th, 2016

Nadeem Hussain

PICTURE a country with 12-hour power outages every day. Such is the story of 144 million people in Pakistan that make up more than 65pc of its population. A nation that started out on energy sector reforms in 2007 alongside countries like Turkey and the Philippines now suffers up to \$15 billion in losses to the economy while Turkey trumps an alternative highway of energy supply to Europe.

Our dependence on imported fuel to generate electricity did not sustain the shock of rising prices, and unsustainable government subsidies have thus far cost the exchequer more than \$20bn among other problems.

Worsening crisis of recent years has given way to urgency among industrialists and stakeholders on diversifying the country's energy mix. Solar power has emerged as a popular answer to the growing deficit. The Pakistan Economic Forum claims that if industry were to utilise a modest 17.1pc of today's technological efficiency and 1pc of the 770 billion square metres in total available space, we could generate more than 300,000 MW of electricity. This is a game changer in times where current capacity deprives every 35 of 100 individuals.

Pakistan's energy layout is roughly drawn in the ratio 53:47 on-grid to off-grid. While on-grid continues to be the focal point of government action on power distribution to already served areas, off-grid presents almost 40,000 villages consisting of 69 million people who do not receive any form of power from present capacity.

These people often use alternative equipment such as harmful kerosene lamps, alkaline battery lights, candles and torches to meet their daily requirement. This along with mobile phone charging in nearby towns at Rs20 per charge approximates to an annual off-grid spend of around \$1.2bn. There is also an estimated on-grid spend of \$1.1bn every year because of power outages and interrupted energy supply to connected communities.

The advent of technology has made it easier than ever to move down the socioeconomic pyramid and present sustainable energy solutions to improve standards of living. The East African experience shows a massive upsurge in solar-powere

d lighting and household solutions in recent years with companies serving millions of customers. M-Kopa alone has added over 300,000 Kenyans to its customer base in three years. We have only to see regional counterparts to witness palpable empowerment brought about by solar-based lighting solutions in off-grid areas. Bangladesh and India are prime examples of a thriving solar products industry.

Grameen Shakti in Bangladesh has seen laudable success with 1.5 million system installations across the country, serving more than eight million people. The Bangladeshi government operates a public-private partnership model whereby it sets equipment standards, offers cost of equipment financing and capacity building for partner organisations.

The approach ensures higher likelihood of good quality products in collaboration with the private sector. There is also the refinancing facility that covers partners for up to 70pc of the cost of equipment making sure that organisations remain interested through project viability while having skin in the game.

A workable model in Pakistan will have to centre on private-sector initiatives to balance the government's attention on the on-grid. Given cost imperatives, solar power will always constitute a small percentage of the total energy mix, making it suitable for the unserved population that cannot viably be brought onto the grid. What we need is an industry association.

The right ingredients are in place by way of microfinance institutions with a rural footprint, the foray of certified vendors, and importantly, demand from customers. Like the financial services sector that has seen transformational change through branchless banking, Pakistan is in need of a disruptive solution like Africa's M-Kopa to revolutionise the power industry.

The A-grid of challenges identified in the path of progress towards solarisation constitutes awareness, accessibility, acceptance and action. Wholesome initiatives such as the IFC's Lighting Pakistan programme to educate customers, engage vendors with local distribution, and loop in financing practitioners are the sort of action required of the private sector to power one home, one village, one province at a time.

A number of products can be introduced to cater to the needs of the off-grid market. Products can be packaged into solutions to suit the requirement of customers. These can be designed so that they run the community tube well during the day and power communal village lights at night. Solutions can also be designed along a range of simple to complex powering capacity, catering to basic housing needs of light bulb, fan and mobile charger in its simplest form, and advance to power for televisions, fridges and portable air conditioners.

A consortium of solar power players is required on an immediate basis to call upon the infinite renewability of nature's energy, and formulate affordable and effectively distributional solutions for the country.

http://www.dawn.com/news/1251938/going-solar

# PAKISTAN EYES RS100BN IN SUKUK FOR POWER PROJECT Dawn, April 14th, 2016

ISLAMABAD: The government will guarantee Rs100 billion (\$955 million) worth of Islamic bonds (sukuk) to fund what would become the country's fourth largest hydropower plant, aiming to address power shortages that have hindered economic growth.

The deal would be one of largest infrastructure sukuk sold to date, helping expand a funding format that has largely been confined to handling mid-sized deals with shorter tenors.

The 10-year sukuk, to be privately placed by the Neelum Jhelum Hydropower Company (Private) Limited, was given a preliminary AAA rating by credit rating agency JCR-VIS with a stable outlook.

The rating will be finalised upon review of legal documents and the issuance of the government guarantee, which will cover the issuance amount and profit payments, JCR-VIS said in a statement.

Unlike conventional bonds, sukuk are investment certificates which follow religious principles that forbid interest payments, instead paying returns linked to an underlying asset.

The project's total cost is estimated at Rs40bn, with around three quarters of that being funded through debt. The plant would generate 969 MW of power adding around 5 per cent to the country's total installed power generation capacity, with the first generating unit expected to start operation in mid 2017.

Infrastructure sukuk have been slow to appear, partly because they often require the transfer of assets into special purpose vehicles, which can be problematic for political or legislative reasons when it comes to large state projects.

http://www.dawn.com/news/1251914/pakistan-eyes-rs100bn-in-sukuk-for-power-project

ATOMIC ENERGY BODY SEEKS BILLIONS TO FINISH PROJECTS The Express Tribune, April 15th, 2016.

Shahbaz Rana

ISLAMABAD: Billions of rupees have been sought by the Pakistan Atomic Energy Commission in additional funds for timely completion of the ongoing work on nuclear power plants with a total output capacity of 2,880 megawatts on time, as the government struggles to create fiscal space for timely commissioning of these projects.

Asking for the government's continued financial support, PAEC Chairman Muhammad Naeem also announced that Chashma-3 nuclear power plant with a generation capacity of 340 megawatts would start producing power in August this year. Chashma-4, with a similar capacity, would start generating power in the first quarter of 2017, he added.

He was speaking at the 2016 convocation of the Pakistan Institute of Engineering and Applied Sciences (PIEAS) – an offshoot of the PAEC that is producing quality nuclear scientists.

Minister for Planning, Development and Reform Ahsan Iqbal and Director-General of Strategic Plans Division (SPD) Lt-Gen Mazhar Jamil also attended the event.

"We look forward to the much-needed support from the government", said Naeem. The chairman said that the commission also needed government support for completing Karachi Nuclear Power Plants, K2 and K3, with a combined generation capacity of 2,200MW.

The PAEC chairman comments were made at a time when the federal authorities are trying to allocate scarce financial resources, while remaining within the limits prescribed by the International Monetary Fund.

The PAEC had approached the Ministries of Finance, Planning and the Prime Minister's Office, seeking funds for critical power projects, said the officials.

In a meeting with Prime Minister Nawaz Sharif, the Planning Minister sought a development budget of Rs1 trillion for the next fiscal year against the Finance Ministry's proposal of Rs655 billion.

The PAEC needed nearly Rs15 billion during the current fiscal year to fast track work on Chashma nuclear power plants. For the next fiscal year, the Commission also needed nearly Rs200 billion for completing work on K2 and K3 nuclear power plants. The K2 and K3 are scheduled to be completed by 2022 and 2023.

However, the government's ability to set aside additional funds are inhibited not just by inadequate fiscal space but also because of its skewed priorities for setting 2018 as the completion date for the projects aimed at fulfilling an electoral promise.

Projects maturing before 2018 would get the required funding, said the sources.

A key consideration, according to the officials, is the amount of money needed to generate a megawatt of electricity to meet the 2018 deadline. The per megawatt cost of instaling a nuclear power plant was higher than other sources, but once completed it is one of the cheapest sources of power.

Ahsan Iqbal said that some power plants fuelled by coal and liquefied natural gas would be completed within the next couple of years, adding that Bin Qasim Power Plant and Sahiwal Power Plant would also be commissioned by next year. LNG-based power plants, capable of producing 3,600MW, would be completed by 2018, he added.

The minister said that 10,000MW of electricity would be added to the national grid by 2018.

http://tribune.com.pk/story/1084864/atomic-energy-body-seeks-billions-to-finish-projects/

#### SCHOOLS GOING SOLAR

The Express Tribune, April 16th, 2016.

Persistent power outages have been a permanent feature of life in Pakistan for the best part of a decade. While it has led to a multitude of problems for households and businesses alike, this problem has also resulted in a burgeoning of creative solutions to solve our power woes.

Though the majority continues to rely on more traditional means, solar power has found enthusiasts in the most unlikely of places. It has been shunned in the past due to the initial expense necessary for purchase and installation of panels. However, regardless of this, we can now see panels being installed often in the poorest communities of the country simply because they are not served by Wapda, as recently reported in a story about a slum in Islamabad.

The government has been slower to catch on to the full potential of the alternative energy movement but Khyber-Pakhtunkhwa (K-P) has decided to lead the way. The K-P minister for education has announced a developmental initiative, which could potentially benefit thousands of schoolchildren.

Solar panels have been installed in over 400 schools across the province and there are plans to expand the initiative to other institutions in the future. In the face of Pakistan's abysmal performance on developmental indicators, this is welcome. Our children deserve to have a place to study in which their main concern is learning, not wiping sweat from their brow.

A comfortable classroom should be a basic facility provided to all schoolchildren and not reserved for those whose parents can afford the exorbitant fees demanded by private institutions. This is indeed a laudable step taken by the K-P government.

Alternative sources of energy have become important internationally, as the world comes to grips with the realities of global warming and the impending shortage of fossil fuels in coming decades.

Our governments need to exhibit foresight when dealing with the energy crisis Pakistan is currently facing, and which is likely to worsen, given our growing needs. The sooner solar panels become a fixture rather than a novelty, the better.

http://tribune.com.pk/story/1085228/schools-going-solar/

#### MEGA PROJECTS NEED TO HAVE MEGA ECONOMIC RETURNS

The Express Tribune, April 4th, 2016.

Ali Salman

ISLAMABAD: When Tarbela and Mangla Dams were built in the 1960s, they changed the course of our economy. They played a crucial role in water management and agricultural development. Through the water tributary system, they fuelled the Green Revolution.

They also provided a fundamental input for industrialisation — low cost, sustainable and reliable electricity. These were largely funded by the World Bank project loans, under the Indus Basin Treaty. In today's terms, it would have been a \$75 billion investment.

The Tarbela-Mangla complex has generated positive economic returns, many times over. Tarbela-Mangla complex was Pakistan's first mega project. It was a game changer, rather in modern political lingo, a true fate changer.

More recently, the new acclaimed fate changer is the China Pakistan Economic Corridor (CPEC), with its promised \$46 billion, of which \$35 billion are meant for electricity generation.

These will be mostly coal-fired projects, at the guaranteed return of 27% and hence will be producing expensive electricity. Will the CPEC power projects be able to produce comparable economic returns for the economy? Will they match, to some degree, the mega projects of Tarbela–Mangla complex?

There are fundamental differences between the two mega projects. Tarbela-Mangla was about water, which we had plenty and still do if we can manage. According to noted economist Dr Salman Shah, during the 21 days of 2010 floods, we wasted water enough to sustain the economy of the size of California for a year. California is the world's eighth largest economy.

CPEC is about coal, which we will need to import for this purpose, despite having large reserves of our own.

The politics of Tarbela-Mangla was largely consensual; the politics of CPEC is largely divisive with its East West route debate.

The CPEC power sector projects, once fully functional, will create external annual liability of \$5 to \$6 billion. It is clear that it will not be a public debt in strict sense, and largely a private investment outflow but it will be obviously a significant new pressure on foreign exchange reserves.

In that sense, a long term non-commercial loan such as the one we contracted for Tarbela-Mangla could have been much cheaper.

For CPEC to produce positive economic returns, the utilisation of 10,000 megawatts of electricity they will produce, in an optimistic scenario, will have to be utilised by high value industry. These high value industries are usually high tech industries, for which the electricity cost is a relatively minor input cost. Our current industrial mix is low tech in the broadest sense. We are still a resource driven economy, a far fetch from the modern knowledge-led economies.

For CPEC produced electricity to be useful, in terms of positive economic returns, we will need to lay down an entirely new industrial infrastructure. The current shortage of electricity will already be met by improving the level of production and distribution.

In Karachi, the industrial capital of the country, which caters for 70% of our industrial output, this shortage is something of a past- a fait accompli by the privatized K-Electric, a resounding success story of privatisation. There is no more load shedding for Karachi's industries. In such scenario, who will be the buyers of CPEC electricity?

Understandably, it is always an energy mix and hence, CPEC will just be a new array of IPPs in the national grid. But for the sake of understanding, we need to ask this fundamental question: will our new industry be ready to buy electricity when CPEC IPPs will be operational?

The Board of Investment has recently prepared a list of economic zones which will be built in CPEC zones. But how much time will it take to build these new zones and to populate them is a very big question. Pakistan already has around 90 industrial zones, which are heavily under-utilised and under-populated.

In the CPEC context, as far as Pakistan's economic, and hence national, interests are concerned, the road connection is the easiest part. The sources at Frontier Works Organisation claim that some sections of the CPEC's Western alignment are already complete. However, no one has a clue of what industrial infrastructure could be built around it? How much industry have we developed along the M-2 — the Lahore-Islamabad Motorway — in the last 20 years? The fishing village of Gwadar will take several decades to show signs of a commercial port city, only when we really set ourselves for that end. Current Gwadar vision is largely strategic.

High tech industry with reasonable job-absorption capacity is needed to justify the loans and investment in CPEC, without which its economic returns will be most likely in the accounting red zone when we construct our national balance sheet. These are not the signs of changing fate of a nation that will use the success stories from the mega projects of Tarbela and Mangla as benchmarks to evaluate CPEC.

http://tribune.com.pk/story/1078248/under-the-scanner-mega-projects-need-to-have-mega-economic-returns/

GOVT ENCOURAGING FOREIGN INVESTMENT FOR POWER GENERATION The Express Tribune, April 6th, 2016.

LAHORE: The provincial government is encouraging foreign companies to invest in energy generation projects. It is particularly interested in attracting Chinese companies to invest in the province, Provincial Minister for Finance Ayesha Ghaus Pasha and Minister for Mines and Mineral Chaudhry Sher Ali Khan said on Tuesday.

They were speaking at the Pakistan-China Energy Forum. They said foreign investment could be useful in eliminating energy crisis, enhancing industrial production and generating job opportunities for the youth.

The ministers said that the country's gross domestic product (GDP) would have been two percent more than the current figure had there been no energy crisis. They said the provincial government was taking all out measures to improve power generation. Several mega projects had been started for the purpose in collaboration with Chinese companies, they added.

They said investment in the power sector would help generate jobs for the unemployed youth. They said the China Pakistan Economic Corridor projects would help the country utilise its natural resources to their potential for power generation purposes. They praised the Chinese government for committing to \$36 billion investment for power sector projects.

Earlier, China Western Power Industrial Company Vice Chairman Mr Lee briefed the participants about the services provided by his company. University of Engineering and Technology Vice Chancellor Fazal Ahmad Khan, Lahore Chamber of Commerce and Industry representative Shehzad Azam, Advisor to Chief Minister Shahid Riaz Gondal, Energy Secretary Asad Rehman Gillani and NSRE chairman Farooq Amjad Mir also spoke at the occasion.

http://tribune.com.pk/story/1079368/govt-encouraging-foreign-investment-for-power-generation/

POWER CONSORTIUM ARRANGES RS 540 MILLION FOR SOLAR PLANT Ismail Dilawar

Nishat Group Companies and Associates (Nishat) has arranged over Rs 540 million through its subsidiaries for the construction of 20 megawatts solar power project at \$31.2 million in Punjab. The grid-connected photovoltaic (PV) modules solar power plant would be developed by Nishat, having submitted an Expression of Interest to Punjab Power Development Board, at Mehmood Kot of District Muzaffargarh under the revised Punjab Power Generation Policy 2009.

Incorporated on November 19 last year, Lalpir Solar Power, a wholly-owned subsidiary of Nishat Power Limited (NPL), would be building, owning, operating and maintaining or investing in the project. With its notional cost estimated at \$1.56 million per megawatt, the alternative energy venture"s financing is based on 75 percent debt and 25 percent equity.

"The equity will be apportioned in terms of joint venture agreement executed among consortium members," said Khalid Mahmood Chohan, Nishat"s company secretary, in a stock filing Wednesday. Tuesday saw the Boards of Directors of Lalpir Power Limited and Pakgen Power Limited, members of the Nishat consortium, allowing their respective company managements to invest Rs 270.27 million each in the shares of Lalpir Solar.

The authorised investment would be made "by way of acquisition", from time to time in a three-year period, of 27.027 million ordinary shares of the targeted firm each at a face value of Rs 10. Also, the board has allowed Lalpir Power to extend a loan of up to Rs 1 billion to Pakgen Power as running finance facility when required by the latter.

As a separate stock filing shows, Pakgen Power is supposed to further lend this Rs 1 billion financing to Lalpir Solar as and when required by it. "The return on such running finance shall be equivalent to the average borrowing cost of the company for each month with minimum rate of one month KIBOR + 0.50 percent," Chohan said.

The loan in question, he said, shall be for a renewable period of one year. In a statement under Section 160(i)(b) of the Companies Ordinance 1984, the secretary said NPL shall be the main sponsor of the project with equity stake of 34 percent finally.

NPL would be entitled to hold, until the sixth anniversary of successful commissioning of the project, not less than 20 percent of the total issued and paid up share capital of Lalpir Solar. The consortium members shall collectively hold at least 51 percent of the total issued and paid up share capital of Lalpir Solar until the sixth anniversary of successful commissioning of the project, he said. "The directors have carried out their due diligence for the proposed investment," he said.

http://www.brecorder.com/fuel-a-energy/193/33099/

### **May 2016**

NEWS COVERAGE PERIOD FROM MAY 23rd TO MAY 29th 2016

AFTER ITALY, PAKISTAN IN TALKS WITH FRANCE FOR LNG SUPPLY

The Express Tribune, May 26th, 2016.

Zafar Bhutta

ISLAMABAD: Pakistan and France are engaged in negotiations for a government-to-government contract worth billions of dollars for the supply of liquefied natural gas (LNG) to Islamabad, officials say.

The French government has designated state-run energy company GDF Suez, renamed as Engie, for signing a commercial contract with energy-starved Pakistan. This is the second European country after Italy that is holding talks with Pakistan for LNG supply.

The Italian government has nominated its energy giant Eni to clinch an LNG contract as the company is already engaged in oil exploration business in Pakistan.

Eni is eager to start supplies immediately and to pave the way for a commercial contract. The government of Pakistan has sent draft of a state-to-state deal to the Italian government.

"Pakistan has prepared and forwarded a separate contract draft to France as well," a senior government official said.

Engie is making another attempt to secure an LNG deal in Pakistan. During Musharraf and Pakistan Peoples Party governments, it had tried to win a \$25-billion contract but because of reports of alleged corruption during the process, the project landed in the Supreme Court and later the PPP administration shelved it.

During the Musharraf rule, state-run gas utility Sui Southern Gas Company floated a tender for the scheme called Mashal LNG project, which was won by GDF Suez.

However, the Supreme Court took notice of the deal during PPP's rule and directed the government to place the matter before the Economic Coordination Committee. Then law minister Babar Awan did not clear the project and GDF Suez had to abandon it.

It was an integrated project under which the French company had to supply 3.5 million cubic feet of LNG per annum and Netherlands-based 4Gas had to build a terminal.

The scrapping of the Mashal LNG project caused a loss of \$3.6 billion to the national exchequer due to the price difference between LNG and furnace oil. 4Gas claimed at that time that it had spent \$12 million since participating in the tender in May 2006.

"This time, the PML-N government is pushing France to strike a government-to-government LNG supply deal," the official said.

At present, Pakistan is receiving LNG from two sources. First is Qatar state companies that have signed a long-term LNG supply deal. The other source is Gunvor that has got a contract for providing 60 LNG ships.

Three ships arrive in Pakistan every month from Qatar and one vessel is sent by Gunvor.

Total supply stands at 300 million cubic feet per day (mmcfd) from Qatar and 100mmcfd from Gunvor with the price for both sources being 13.37% of Brent crude rate.

Gas distribution companies in Pakistan have a pipeline capacity that could transport 400mmcfd of gas. They are currently working to lay new 42-inch pipelines to transport 1.2 billion cubic feet per day. These will be completed by the end of December 2017.

http://tribune.com.pk/story/1110601/energy-source-italy-pakistan-talks-france-lng-supply/

GOVT INITIATED RS800 BN GAS PROJECTS: KHAQAN Dawn, May 27th, 2016

ISLAMABAD: Minister for Petroleum and Natural Resources Shahid Khaqan Abbasi said on Wednesday that the government had initiated gas-related projects worth Rs800 billion, including setting up of LNG terminals and gas pipelines, to meet energy needs of the country.

"By the grace of Almighty Allah, Pakistan will have surplus power due to effective policies of the government by 2018," he said.

He was speaking at the launching ceremony of the Universal Gas Distribution Company, the first-ever company which has secured Liquefied Natural Gas (LNG) import and sale licence to feed the Compressed Natural Gas (CNG) stations.

The minister invited other private companies to come forward and get such licences as it would create an atmosphere of competitiveness in the market.

He said that LNG was cheaper than any other fuel and it would end reliance of the CNG sector on Sui Northern Gas Pipelines Limited and Sui Southern Gas Company to run their outlets.

LNG would have great significance in strengthening the national economy even after the arrival of gas through Iran-Pakistan and Turkmenistan-Afghanistan-Pakistan-India pipeline projects, he said.

With the import of LNG, he said Pakistan that was importing one million tonne fertiliser, now it had 1.5 million tonnes surplus fertiliser. All gas-based power plants are in running condition, CNG sector was back to its business and industrial sector was getting full supply, he added.

The minister said the CNG sector was moving on the path of revival gradually and hinted that in the coming years, it would be preferred over petrol.

CEO Universal Gas Distribution Company Ghiyas Abhullah Paracha said that CNG stations are consuming 100mmcfd gas per day and it would go up to 250mmcfd per day soon,"

Ghiyas said that the association had so far made agreement with 1,351 CNG stations to get LNG through the gas companies distribution system and it was confident that the CNG sector would achieve 'complete revival' due to ongoing efforts.

Among others, Minister of State for Education Baligh ur Rehman, Adviser to Ministry of Petroleum Zahid Muzaffar, President Federation of Pakistan Chambers of Commerce and Industry Abdul Rauf Khalid, representatives of the business community and Ogra attended the ceremony.

#### http://www.dawn.com/news/1260862

## OMV PLEDGES \$45 M INVESTMENT IN PAKISTAN THIS YEAR The Express Tribune, May 28th, 2016.

ISLAMABAD: While pledging to step up oil and gas exploration in Pakistan, Austria-based OMV has announced that it will pump \$45 million into tapping hydrocarbon reserves this year to meet energy needs of the country.

"OMV has invested \$2.5 billion in oil and gas exploration since commencing operations in 1991 in Pakistan and the company is investing \$45 million this year," OMV Aktiengesellschaft Executive Board Chairman and CEO Dr Rainer Seele said while addressing a ceremony held on Thursday to celebrate 25 years in Pakistan. Petroleum and Natural Resources Minister Shahid Khaqan Abbasi also spoke at the event.

Recalling the company's journey, the CEO said OMV started working in Pakistan 25 years ago and within two years it made the first discovery at Miano field in the Thar desert of Sindh. In 1998, it discovered gas at Sawan field, which is also located in Sindh.

From 1991 to date, the company has expanded operations from Sindh to Balochistan and Punjab.

At present, OMV is producing 8% of Pakistan's total natural gas output and is increasing investment.

OMV (Pakistan) has established itself as the largest international gas producer in Pakistan with a volume of more than 110,000 barrels of oil equivalent per day from Kadanwari-Miano and Sawan fields.

OMV CEO said parallel to the Sawan development work, the company also took over the Kadanwari gas processing plant in January 2003 from Lasmo, currently Eni.

OMV has remained quite aggressive in development work as capacity of the Kadanwari processing plant has been enhanced to 232 million cubic feet per day (mmcfd) while capacity of the Sawan plant has gone up to 400mmcfd.

"To further meet raw gas requirements, drilling has continued successfully in both fields," he said.

Petroleum Minister Shahid Khaqan Abbasi, while pointing to a huge gap between the demand and supply of gas, said they were striving to bridge the shortfall through import of liquefied natural gas and exploration of domestic oil and gas deposits.

He saw a big potential for tight, shale and conventional gas production in Pakistan and highlighted that the government was offering the most attractive wellhead oil and gas prices and asked international and local companies to take advantage of the situation.

http://tribune.com.pk/story/1111697/omv-pledges-45m-investment-pakistan-year/

NEWS COVERAGE PERIOD FROM MAY 16TH TO MAY 22 ND 2016 FIRST HYDROPOWER PLANT PAVES WAY FOR MORE Dawn, Business & Finance weekly, May 16th, 2016

Dilawar Hussain

The energy crisis is a serious one, yet the renewab le energy generation receives a low priority in policymaking and investment as compared to questionable current fossil fuel generation.

There is a misconception that renewable energy is not competitive and can survive only on governmental subsidies. Let us analyse this argument along with other wrong perceptions. Current thermal plants [furnace oil (FO) and high speed diesel (HSD) produce 40pc of the total electricity.

Since price of FO and HSD are linked to international oil prices and rupee exchange parity, the end user price of electricity is subsidised. The Tariff Differential Subsidies (TDS) are the difference between the actual costs of electricity and what consumers pay.

In the last five years alone, the government has paid TDS of Rs1.5tr since consumers can't afford to pay for the expensive energy our system produces.

With this subsidy, almost 5,000MW of new renewable energy capacity could have been added to the national grid. Thermal energy is not cheap. And if people think renewable energy is expensive, just remember price tag of Rs1.5tr as subsidies for thermal generation in the last five years alone.

Critics say the cost of producing electricity from renewable energy exceeds the cost of electricity from thermal generation, hence thermal generation should be preferred.

This is again a matter of perspective. Let's suppose if we would have built our energy system based on small distributive, community-driven system rather than large-scale, centralised system that we currently operate in, we would not have needed sprawling costs that we incur today on things such as large scale transmission lines, transformers, distribution grids, cables, meters, people to read meters, planners and headquarters etc.

In local parlance, this cost is typically known as distribution margin (DM) and is typically one-fifth of the total cost of electricity today. Add to this the cost of line losses that we incur today on our centralised energy systems and power theft, which almost always cripple the power system and ask for higher subsidies and enormous debt problems.

Even at large-scale production now, renewables are competing against thermal and coal power generation. The best wind turbine in town is producing electricity at the same cost as large scale coal generation.

Hydel generation is so cheap that even if we tap 20pc of the total hydro potential, these will require no subsidies. What renewables further provide is fuel price hedging since the price of solar and wind resources have been bestowed by nature for free.

Even if we install renewables at a higher price, we no longer have to worry about fuel price volatility and exploding fiscal deficits in times when price of oil balloons up. Further, the externalities such as environmental and health costs of producing renewable energy far outshine the cost of thermal generation.

No doubt renewable energy is intermittent (only when sun is shining and wind is blowing) and thermal generation is baseload (can run 24 hours). This argument is technically true. Solar energy produces mostly during the day time but we also need most electricity during that time period only.

Wind generally blows during the night time and if combined well with solar can give a powerful solution to intermittency. Hydro generation produces maximum electricity during summer time, just when we need most electricity.-

Technical intermittency remains an issue but we need to re-define intermittency in Pakistan's context. The question we need to ask is: have we received uninterrupted electricity supply on thermal generation?

The obvious answer is a resounding no. With up to 18 hours of daily load-shedding, intermittency is a problem more for thermal-based generation rather than renewables.

Renewables may encounter engineering or natural intermittency problem. But thermal generation produces far greater financial intermittency problems since the power sector cannot afford high furnace oil and diesel prices.

Think of creeping circular debt bailouts time and again, nationwide petrol crisis and large scale blackouts because somehow the power sector has not generated enough financial muscle to cater to increasing production levels at higher prices. Intermittency is a major risk for thermal generation and not for renewables.

As consumers of electricity, we have not been given choice over the supply of electricity. Consumers should be given a broad based choice to pick and choose from newer and efficient technologies.

Right now, we are left with only an obsolete option for electricity generation which is expensive and at the same time less efficient. We need to enlarge our menu, open up more choices, benefit from renewable energy prices of today and use current low thermal prices to plan an effective transition from this gigantic, inefficient power sector to a new, efficient one.

http://www.dawn.com/news/1258613/first-hydropower-plant-paves-way-for-more

#### IN DEFENCE OF RENEWABLES

Dawn, Business & Finance weekly, May 16th, 2016

#### Khurram Lalani

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#### http://www.dawn.com/news/1258612

SHIFT FROM TRADITION: BIOGAS-POWERED PUMPS HELP FARMERS GROW RICHER, GREENER The Express Tribune, May 17th, 2016.

FATEH JHANG: For farmer Mujahid Abbasi, switching the power source for his irrigation pump from diesel to biogas has brought economic and health gains.

The 43-year-old from Fateh Jhang village, some 26 miles (42 km) from the capital Islamabad, has benefited from a pilot project led by the Punjab government to provide biogas equipment at a subsidised rate.

Abbasi uses dung from his 30 buffalo to produce nearly 40 cubic metres of gas per day, which powers his irrigation pump for six hours and his family's cooking stove.

The father of five says cutting out diesel has saved him around \$10-\$12 daily over the past 13 months.

He has used the money to plant seasonal vegetables on five additional hectares that had lain fallow for several years due to a lack of funds.

Turning a lever to start his groundwater pump, Abbasi recalls how the 20-horse power engine used to consume around 13 litres of diesel each day. But he has not bought diesel since he installed the biogas-run pump in March 2015.

"This is a brilliant saving," he said. "This means additional income of \$1,150 for me annually. It has helped improve our family's economic well-being."

Close to 20 other farmers in his area have followed suit and are also running their irrigation pumps on biogas, thanks to the government-backed project. Vegetable farmer Naeem Raza Shah uses slurry left over from the biogas production process to fertilise his 19 hectares, cutting out chemical fertiliser which previously cost him around \$850 per year.

Abbasi and Raza are among nearly 17,000 beneficiaries of the \$67 million programme that aims to convert 100,000 irrigation pumps from diesel to biogas by the end of 2017 across Punjab.

According to Punjab Agriculture Minister Farrukh Javed, the initiative aims to reduce dependence on diesel and boost farm productivity by improving access to irrigation water and promoting the use of bio-fertiliser, while fighting groundwater contamination from chemical inputs. The government is paying half of the conversion cost for diesel-powered pumps, which ranges from Rs200,000 to Rs400,000 (\$1,912-\$3,824) per tube well.

The subsidies are weighted in favour of farmers with less land, who usually have lower incomes and would struggle to afford the pump conversion without additional financial support.

The programme is expected to avoid the use of 288 million litres of diesel, worth Rs30 billion each year. It will help cut the diesel import bill and boost farmers' profits, while reducing environmental pollution. It is expected to shrink the sector's carbon footprint by more than 5%.

Agriculture accounts for nearly 39% of Pakistan's annual carbon emissions, which are increasing at a rate of 6% per year.

http://tribune.com.pk/story/1104545/shift-from-tradition-biogas-powered-pumps-help-farmers-grow-richer-greener/

# CHINESE FIRM BOWS OUT OF COAL-BASED POWER PROJECT Dawn, May 18th, 2016

Khaleeq Kiani

ISLAMABAD: A major Chinese firm has bowed out of a Punjab-based 330MW coal-based power project that was scheduled to start electricity production by end-2017.

The \$590 million mine-mouth project was a key component of the high profile \$46 billion China-Pakistan Economic Corridor (CPEC) launched last year by President Xi Jinping and Prime Minister Nawaz Sharif. A letter of interest (LoI) was issued to develop the project on local coal at Pind Daden Khan in Punjab's Salt Range.

Sources told Dawn that China Machinery Engineering Corporation (CMEC) lost interest in the project because of issues relating to feasibility of producing enough energy for running a 330MW project and a tariff allowed by the National Electric Power Regulatory Authority (Nepra) that was lower than its expectations.

The company which is also a key contractor in the \$4 billion 969MW Neelum-Jhelum Hydropower Project in Azad Jammu & Kashmir had been lobbying for 11.67 to 12.4 cents per unit tariff that was far higher than upfront tariffs for projects on Thar coal and imported coal. Nepra allowed a 30-year levelised tariff of 8.55 cents per unit.

Sami Rafi Siddiqui, spokesman for the Private Power and Infrastructure Board — the one-window organisation for private power projects — confirmed that the project was not moving. He said the PPIB had encashed \$300,000 performance guarantee of the project sponsor for its failure to deliver on LoI conditions. He declined to give further details at this stage.

The government's power policy required submission by the sponsor of a performance guarantee of \$1,000 per megawatt for fulfillment of LoI conditions and \$5,000 per MW performance guarantee for letter of support conditions. The guarantees are confiscated by the government in case of sponsor's failure.

The project envisaged power generation along with coalmining project in the area of Choa Saden Shah with an average production of about 6,000 tons of local coal per day. The CMEC had promised to introduce semi-mechanised mining technique for the first time in the region with an investment of \$200 million.

#### http://www.dawn.com/news/1259048

NANDIPUR PLANT PRODUCED 1371 MILLION KWH SINCE 2015: KHAWAJA ASIF The Express Tribune, May 18th, 2016

ISLAMABAD: Minister for Water and Power Khawaja Asif on Tuesday informed the upper house that Nandipur Power Plant has generated 1371.21 million kilowatt-hour (KWh) since its start last year.

"The Nandipur project achieved Commercial Operation Date (COD) on July 2015 and generated 1371.21m KHW units till May 8," Asif said, in response to a question by Senator Moshin Khan Leghari.

Laghari had sought details about the current status of the project, including its production capacity and actual production of the project since June 2014.

According to the minister, the National Electric Power Regulatory Authority (Nepra) has determined per unit cost of electricity generated by Nandipur plant as Rs11.6361 per kWh.

Responding to a query by Senator Sassui Palijo about details of wind energy projects in Sindh, he said six wind power projects with a cumulative capacity of 308.2MW were operational in district Thatta while nine wind projects were under construction and expected to complete by 2017.

Minister for Petroleum Shahid Khaqan Ababsi informed the house that the circular debt balance of Pakistan State Oil (PSO) had reduced to Rs204billion from Rs222b in January 2015. He shared these details in response to a question by Senator Col (retd) Syed Tahir Hussain Mashhadi.

He said the Hub Power Company's (Hubco) circular debt had reduced to Rs42.2b from Rs57.7b, Kot Addu Power Company's (Kapco) debt had reduced to Rs0.4b from Rs0.6b and Saba Power and Southern Electric debt had reduced Rs0.4b from Rs0.6b.

"However, the circular debt of Wapda and Potomac Electric Power Company's (Pepco) had increased with Rs59.3b from Rs50b due to late payment interest," he added.

http://tribune.com.pk/story/1105452/question-hour-nandipur-plant-produced-1371m-kwh-since-2015-says-asif/

### SOLAR PANELS YET TO TAKE OFF Dawn, May 22nd, 2016

Aamir Shafaat Khan

KARACHI: Energy-starved Pakistan, where sunlight is available for up to 10 hours for a better part of the year, particularly in Sindh, Balochistan and southern Punjab, can benefit immensely from solar energy technology, Inam ur Rahman, CEO Reon Energy Limited, told Dawn on Saturday.

"While the potential is for 250,000 megawatts, through prudent policies the country may see about 10,000MW of solar power in the next five years," he said.

He added that vast land is available for utility scale generation, selling to Wapda, and for distributed generation, solar solutions for residences, commercial areas, and industries.

Currently there is zero duty on imports of any solar panels. However ancillary solar equipment like inverters/charge controllers, etc, have to be brought in for specific projects in order to benefit from zero duty.

He said the country was at the introductory stage of solar technology as most users are still trying to understand how it can be implemented to their benefit.

In the meantime, low quality equipment has been dumped in to the market creating uncertainty about the effectiveness of the solutions, he claimed.

Since the equipment is tax-free and completely unregulated, some traders are bringing rejected panels and selling them as new which needs to be probed for consumer protection, he said.

The government has not brought about a coherent policy on induction of solar power into the energy mix.

"This means that there is a lot of dangerous and unfettered experimentation going on," Mr Rahman said.

He said the government must give a clear five-year policy for the integration and adoption of renewables in to the national energy supply, followed by proper implementation of the policy.

He said net-metering is an effective policy that is already in place by the government but there is a serious lack of implementation due to certain technical and commercial concerns at the distribution company level. As soon as it is implemented, Pakistan will see a rapid rooftop conversion on solar.

He, however, did admit that not everyone could afford to buy solar equipment in one go.

"The government also has to make consumer financing easily available for people to be able to purchase solar solutions similar to car and housing financing. The government should also encourage commercial banks to invest in solar solutions," he said.

Mr Rahman claimed that the cost of energy from a solar system is less than grid price today and the expected system life is 25 years. An investment has to be made in the panels, etc but it is all worth even in the short term.

He said his company is working with banks to ensure that cheap and easy options are available for people to invest in solar systems.

"The expected payback time is around three years and there is minimal maintenance required throughout the life of the solar energy system. Even if financed through a bank, the cost can be met in five years," he said.

Per hour cost of running an average-sized tubewell on diesel is Rs173 and on solar energy it is Rs83. Farmers can save over Rs314,400 per year on each tube well if they opt for solar tube wells, he added.

Over the past five years, a rise has been noticed in the visibility of solar panels in cities as well as rural areas.

Dealers selling solar panels said people from interior Sindh are more interested in buying solar panels than those in Karachi.

Many shops at main electronics market in Saddar have displayed the alternative energy options. The dealers now claim improvement in the number of buyers — mostly from small towns and rural areas — as compared to five years back when they started they dabbled in the business of solar panels.

They claimed sales have now increased to 20-25 per cent compared to the negligible sales five years ago.

They said rich people in rural areas purchase big systems costing over Rs one million while people having limited cash in rural areas facing long duration of load shedding usually prefer purchasing a small solar panel for running a single fan and an energy saver bulb.

A shopkeeper estimated a one KVA solar panel set at Rs70,000-80,000 for running five energy

savers and five fans. The set includes a 150 watt inverter, dry or water battery, wires and installation charges along with panels.

For six fans and six bulbs, a two KVA set-up costs Rs110,000-150,000 depending on the brand of inverter, battery, wires and labour charges.

A three kVa solar set for three fans and three energy savers, television, 0.5 horse power motor, fridge, etc, costs Rs180,000. The package comes with a one-year warranty.

Another retailer offered three fans and eight energy savers solar option for Rs95,000 without warranty while the same option with warranty came down to Rs150,000.

Claiming the panels are brand new and imported from China, the shopkeepers said there was hardly any shop in the Regal Area which was selling used solar panels.

They said for Karachi weather, mono panels are being offered to customers while solar panels with the name of Polly are being sold for interior Sindh buyers.

http://www.dawn.com/news/1259841

NEWS COVERAGE PERIOD FROM MAY 9TH TO MAY 15TH 2016 COMMERCIAL DYNAMICS OF RENEWABLE ENERGY Dawn, Business & Finance weekly, May 9th, 2016

Syed Mustafa Amjed

OVER the years, renewable energy has gained substantial traction and now contributes more than 20pc to the electricity generation worldwide.

In 2013, 120GW of renewable electricity generation capacity was added internationally with solar capacity exceeding wind for the first time.

Major reductions in technological costs, climate change issues, government support and incentives, oil and gas price volatility and potential for liability for green house gas emissions have been at the forefront of the move towards renewable energy along with massive public support for solar, wind and hydro. The movement has even compelled some oil majors such as BP and Statoil to invest in renewable energy both onshore and offshore, however, not all are convinced of joining the green energy movement.

This is happening in a market environment where the whole paradigm of 'Peak Oil and Gas', has been made questionable with the development of unconventional hydrocarbon resources. Smaller countries such as Iceland and Norway now generate all their electricity through renewable sources while others including Germany want 80pc green electricity by 2050.

However, whether renewables make economic and technical sense for Pakistan, the world's 6th most populous country in the world, is another story and needs serious consideration in view of our perennial power shortages and transmission losses. At peak summer electricity demand, we are regularly short of about 5,000 MW generation capacity, which is a substantial amount per se.

Hydro, solar and wind are resources that are in abundant supply in Pakistan and should play a significant role in the electricity mix, albeit in view of certain very strategic considerations.

Renewables, especially solar and wind power, have issues of reliability, intermittent supply variation, cost and equipment specifications which need to be carefully considered based on geographical location and environment of the proposed solar and wind farm locations in Pakistan. Furthermore, the ability of the national grid to adapt to major supply of solar and wind power also needs to be considered along with the effect of higher solar and wind tariffs on overall electricity costs to the population.

Since we are a perennially electricity deficient country needing base loads rather than peaking loads, we also need to carefully determine the share and timelines of adding renewables to the national grid with the exception of perhaps utility scale hydro projects.

It is pertinent to mention here that solutions to electricity generation variability and related issues as mentioned above are being constantly improved, however, their adaptability to Pakistan is questionable given our infrastructure and demand supply profile. A lot of ground has to be covered before we are able to develop a diversified matrix of renewable energies with intelligent technologies and smart grids to manage both base and peak loads.

Hydroelectricity is arguably the cheapest source of electricity worldwide, however, all countries are not blessed with a river system such as Pakistan's. In 1985, a not too-distant past, Pakistan generated almost 67pc of its electricity through hydro and was, by default, a great follower and proponent of renewable energy. This share has now dropped to 30pc as the country's focus moved away from cheap hydro to relatively expensive fossil fuel based electricity generation.

On a positive note, we are now again focusing on hydropower development with a number of utility scale and smaller projects in the pipeline including Suki Kinari 870MW, Azad Pattan 640MW, Karot 720MW, which is being developed by China Three Gorges International. These would be very welcome additions to the national grid while providing affordable energy to the country. The levelised tariff that has been approved for these plants ranges from \$0.053 – \$0.088/kwh which is quite reasonable.

This needs to be seen in contrast to the levelised tariff of \$0.14-0.15/kwh approved by Nepra for solar projects, with higher tariffs for the initial 10 years. The difference in tariff, for lack of details, could primarily be due to higher Pakistan-specific costs.

But international comparison is rather stark with competitive solar power now being generated at \$0.08/kwh without subsidies. The overall 5GW solar project by DEWA Dubai was recently bid at \$0.0585/kwh for second round. However, interestingly the third phase of this project was bid at \$0.0299/kwh. Solar power has had many false dawns and one needs to see this through.

Pakistan has wind potential of 50,000 MW with quite a few sweet spots for wind power. However, offshore areas present a much higher wind potential as compared to onshore. Wind power is contributing a miniscule 0.25pcof total electricity generated and the ratio needs to be enhanced significantly.

Internationally, low cost onshore wind power is now being developed at \$0.05/kwh whereas, the levelised tariff now allowed in Pakistan is \$0.13/kwh. As renewable power projects normally have a range of cost profiles which are dependent on resource quality, equipment cost and performance, capacity factors, operational and maintenance costs, economic life, regulation, capital costs and discounting factors, a comparison with international norms would require a detailed study of project dynamics

Having said this, the reality is that costs, especially for solar power, have gone down by 50pc over the last four years and this reduction should be reflected in local allocated tariffs.

Given the above scenario, technology cost reductions and economic dynamics, the following steps should be undertaken to adequately develop the renewable energy sector:

The Renewable Energy Policy 2006 needs to be reviewed in view of changed market dynamics and costs. The policy provides for zero risk to investor on account of variation in wind speeds and hydrological flows and a rather generous 17pc return on equity (ROE) on wind projects. The investor is compensated for resource quality risk leading to a higher tariff for local consumption. This needs to be revised in view of international best practices as the industry has graduated from subsidies and government incentive schemes.

https://www.dawn.com/news/1257114

PAKISTAN, ITALY LIKELY TO SIGN LNG SUPPLY DEAL The Express Tribune, May 10th, 2016.

#### Zafar Bhutta

ISLAMABAD: Pakistan and Italy are likely to sign a government-to-government deal for the supply of liquefied natural gas (LNG) as Italian firm Eni has offered to provide gas to Pakistan, according to officials familiar with the development.

Eni has been engaged in exploration activities in Pakistan and has been working since long. Now, it has conveyed to the Pakistan government that it could not continue to explore oil and gas as a profitable business and wants to export LNG. "For this purpose, Eni has taken the Italian government on board and says it will sign a deal for LNG supply on a government-to government basis," an official said.

It said it could provide 3 million tons of LNG per year. The Pakistan government has sent a draft of the government-to-government agreement it signed with Qatar to Italy for examination.

Pakistan insists it has inked a model LNG agreement that will be offered to other countries. It is waiting for response of the Italian government.

According to the official, the Pakistan government has also cited the benchmark price agreed with Qatar and Gunvor, which is 13.37% of the price of Brent crude oil. Therefore, it will not sign a deal over and above this price.

At present, Pakistan is receiving LNG from two sources. The first source is Qatari state companies with which it has signed a long-term LNG supply deal. The other source is Gunvor that has received a contract for providing 60 ships.

The country is receiving three ships every month from Qatar and one vessel from Gunvor.

Total supply stands at 300 million cubic feet per day (mmcfd) from Qatar and 100 mmcfd from Gunvor. The price for both supply sources was 13.37% of the Brent oil rate.

Gas distribution companies in the country have a pipeline capacity that could supply 400 mmcfd of gas. These companies are currently working to lay new 42-inch pipelines to transport 1.2 billion cubic feet of gas per day. These will be completed by the end of December 2017.

With such developments, Pakistan needs to sign deals with some more potential suppliers of LNG.

According to the official, the government is engaged in negotiations with a Malaysian firm that has offered to supply three million tons of LNG per year. But this company could not provide gas immediately, instead it has conveyed that it will be able to provide gas in 2018.

China has also offered to export LNG to Pakistan that it is receiving from the supplier.

http://tribune.com.pk/story/1100254/agreement-on-the-cards-pakistan-italy-likely-to-sign-lng-supply-deal/

FOREIGN COMPANIES TO TAKE OVER DIAMER BHASHA DAM The Express Tribune, May 11th, 2016.

Zafar Bhutta

ISLAMABAD: All provinces have agreed on a draft of the new hydroelectric power policy that calls for handing over mega projects of 24,200-megawatt capacity including the gigantic Diamer Bhasha dam to foreign companies, mainly Chinese firms, for their swift implementation.

The consensus was reached after multilateral donors gave a poor response to requests for financing the power projects.

The provinces, however, demanded that the projects should be returned to them after the expiry of lease contract.

As part of the policy, private investors will be offered exemption from duties and taxes during construction phase of a project as well as income tax holiday for the first five years of operation.

However, major stakeholders in the hydroelectric power projects including Azad Jammu and Kashmir (AJK), Gilgit-Baltistan (G-B) and Federally Administered Tribal Areas (Fata) have sought an increase in power tariff, like that allowed to Khyber-Pakhtunkhwa, in the new policy. This will increase their share in the net hydel profit.

Briefing the media, Water and Power Development Authority (Wapda) Chairman Zafar Mahmood said a high-level meeting was held on Tuesday with all provinces and regions like AJK, G-B and Fata for giving a presentation on the new hydroelectric power policy.

He revealed that the provinces demanded the transfer of projects after the expiry of 30-year lease whereas AJK, G-B and Fata wanted an increase in their share of net hydel profit with a tariff hike.

"I personally believe that their share in hydel profit should be increased," he said, but expressed fear that a denial could spark negative perceptions among them.

A summary has been sent to the Ministry of Water and Power for seeking approval of the Economic Coordination Committee in this regard.

Responding to a question, Mahmood said the new policy would be tabled before the Council of Common Interests for approval as all provinces had agreed on its draft. "Chinese companies are interested in executing the power projects," he said.

However, the National Electric Power Regulatory Authority (Nepra) and the Central Power Purchasing Agency have pointed out that the projects could not be transferred to the provinces legally.

About Pakistan's inability to raise funds, Mahmood said feasibility studies and detailed engineering designs required significant financing without return and international financiers were also conscious about the displacement of people and the environmental impact.

Donor sensitivity regarding dislocation of people, loss of employment, heritage, way of life and a negative impact on environment hampers financing for the projects.

"In some cases, the private investors succeeded in getting the indicative tariff approved, but failed to acquire financing for the project due to land acquisition and resettlement issues."

This lengthy process has resulted in inordinate delay in the implementation of projects.

Under the new policy, the government will give two options to the private sector. In the first option, a project for which the detailed engineering design has been completed by consulting firms, the government will invite investors to execute the scheme according to the design already approved.

Preference will be given on the basis of early completion and Nepra will announce an upfront tariff.

Before offering the project to the private investors, Wapda will undertake a host of measures such as upgrading the feasibility study and engineering design, environmental impact assessment, land acquisition and resettlement, construction of access roads and bridges, power transmission plan, power purchase agreement, feasibility stage tariff determination and engaging international experts for the selection of bidders.

In the second option, bidders will be ranked on the basis of their ability to complete work early and the successful bidder will provide a performance bank guarantee for the project. The investor will develop his own design and preference will be given on the basis of early completion and maximum output.

Mahmood said the World Bank was funding the Dasu hydropower project that had unlocked financing for such schemes. Wapda has secured Rs100 billion for the Neelum Jhelum hydropower project and Rs140 billion for the Dasu project. "Financial close of the Neelum Jhelum project will be achieved this month," he added.

http://tribune.com.pk/story/1100776/hydropower-policy-foreign-companies-to-take-over-diamer-bhasha-dam/

PAKISTAN'S SECOND LNG TERMINAL CONTRACT TO BE AWARDED THIS MONTH The Express Tribune, May 13th, 2016.

Zafar Bhutta

ISLAMABAD: The government will complete the process of awarding second LNG terminal contract to the successful bidder during the on-going month after the requisite go-ahead from the board of directors.

Talking to The Express Tribune, Minister of Petroleum and Natural Resources Shahid Khaqan Abbasi said Pakistan LNG Terminals Limited's (PLTL) board of directors was working on the second LNG terminal contract. "I hope the process of awarding contract to the successful bidder will be completed in May."

The government is to award contract to the successful bidder in 10 days after board's approval.

PLTL board of directors, in a meeting held on May 6, approved the financial bid submitted by Pakistan GasPort Limited (consortium), which emerged as the lowest bidder for setting up the country's second LNG import terminal at Port Qasim in Karachi.

Pakistan LNG Terminals made the evaluation report public after a meeting of its board of directors. Bids were submitted by two parties, Pakistan GasPort Limited (consortium) and Akbar Associates (consortium), on February 26. The former qualified in the technical evaluation round, while the latter stood technically disqualified.

The next step would be to sign an LNG Services Agreement (LSA). This agreement would be negotiated with the successful bidder.

The National Accountability Bureau (NAB) and the Public Procurement Regulatory Authority (PPRA) have already given clearance to PLTL to award the contract in accordance with the law.

The Pakistan GasPort consortium includes Fauji Oil Terminal and Distribution Company (Fotco). The evaluation report states the consortium has offered a levelised (service) charge of \$0.4177 per million British thermal units (mmbtu) for a capacity of 600 million cubic feet per day (mmcfd). The project has to be implemented in 11 months at Port Qasim.

Responding to a question about pipeline capacity, Abbasi said gas utilities, Sui Southern Gas Company (SSGC) and Sui Northern Gas Pipelines Limited (SNGPL), were already working to enhance the existing capacity by laying 42-inch pipelines to gradually increase the capacity to 1,200mmcfd.

Abbasi said there would be price differential in electricity rate of 4 cents per unit through LNG-based power generation compared to oil-based generation.

"The second LNG terminal will have 600mmcfd re-gasification capacity which would be transported to three LNG-based power plants with total generation capacity of 3,600 megawatts," he said, adding it would lead to the revival of economy which had suffered due to energy crisis.

"The country will make around \$1.5 billion annual savings by using imported gas through the second LNG terminal," he said, adding Pakistan would not only have clean energy but it would be cheaper.

However, Abbasi's claims directly contradict the National Electric Power Regulatory Authority's (Nepra) estimate that the electricity generated by gas was Rs0.73 per unit expensive than that generated via furnace oil (for the month of May).

Nepra elaborated that in one year (May 2015 – May 2016) gas prices had gone up 28% while oil prices slid by 47%. Since the imported gas prices are pegged with oil, it is unlikely that resurgence in oil price would present a cost-saving scenario either.

Pakistan's first LNG terminal was set up by Engro in March 2015. Engro's levelised (service) charge is \$0.6601 per mmbtu for a capacity of 400mmcfd.

At present, it is receiving three ships every month from Qatar, averaging 300mmcfd, and one ship from Gunvor company, averaging 100mmcfd. Both sources are providing LNG at 13.37% of Brent crude price.

http://tribune.com.pk/story/1102444/liquefied-natural-gas-second-terminal-contract-to-be-awarded-this-month/

### CHINESE OFFER TO FINANCE WHOLE \$2B LNG PROJECT Zafar Bhutta

ISLAMABAD: It appears that the Rs184 billion the government had collected to finance gas infrastructure projects will never be used for their intended purpose, as Chinese have agreed to finance the whole LNG Gwadar terminal and pipeline project.

Originally, the Chinese side was to provide 85% of the financing for the \$2 billion project while the remaining 15% (\$300 million) was to come from Pakistan's side. For that purpose, Gas Infrastructure Development Cess (GIDC) was to gather the needed funds for the project.

Under the cess, Rs184 billion was collected, which translates to around \$1.8 billion, far exceeding the \$0.3 billion needed to finance the project.

The Express Tribune previously reported how these funds had already been spent on projects like Metro and Orange Line, according to officials.

When the Chinese pressed, the finance ministry stalled. The reluctance to even release the token money for the project, gave away the truth: funds were no longer available.

After having weighed Pakistan's inability to pay for the infrastructure project, the Chinese asked the government to apply for a loan – an expensive and burdensome alternative but better than nothing. But the government continued to drag its feet as it wanted to have Project Cycle-1 (PC-1) approved from the Planning Commission beforehand.

Left with no alternative and irked by government's inability to even apply for a loan, the Chinese have agreed to finance 100% of the project, instead of the original 85%.

All the chain of events beggar the question, if Chinese were to indeed be allowed to finance the whole project, what of the Rs184 billion cess?

At a time when gas shortage was becoming less of a probable scenario and more of an imminent threat, Pakistan conceived Gwadar-Nawabshah pipeline dream.

It was originally proposed as an alternative to the Iran-Pakistan pipeline, since US sanctions on Tehran at the time meant Pakistan was to surrender its own energy interests.

The project is to be developed under a government-to-government agreement with the Chinese side responsible for project implementation alongside financing.

http://tribune.com.pk/story/1103009/lng-terminal-and-pipeline-chinese-offer-to-finance-whole-2-billion-project/

### NEWS COVERAGE PERIOD FROM MAY 2nd TO MAY 8th 2016 ENERGY CRISIS TO END BY 2018, ACCORDING TO KP GOVERNOR

Business Recorder, May 02, 2016

Khyber Pakhtunkhwa Governor Engr. Iqbal Zafar Jhagra has said the incumbent government was striving hard to meet the target of 100 pc literacy rate in the Federal Administered Tribal Areas. He said due to the efforts of the incumbent Government we are heading towards path of peace, progress and development.

He said the load-shedding and energy crisis in Pakistan will end by 2018 and we will have the surplus energy. He further added that education is imperative for the progress of any society and illiterate nations could never be able to hold any significant place in the world.

He expressed these views while addressing as the chief guest at the Annual Day ceremony of the Latif Foundation School, Rawat on Sunday. Principal of the school, Najam Khan on this occasion presented the annual progress report and also highlighted curricular and extra-curricular activities of the school in detail. Governor also witnessed the display of Co-Curricular activities and distributed the awards among the position holder students and best teachers.

Besides, Senator Salim Zia, Chairman Latif Foundation, Ishtiaq Latif, Ilyas Latif, the ceremony was largely attended by scores of students and their parents. On the occasion, the Governor also announced Rs 0.5 million grants to the Latif Foundation School and Rs 5,000 each to the students getting top positions in their examinations. Addressing the ceremony, the governor acknowledged the role of Latif Foundation School, Rawat in the promotion of education and said quality teachers are critical for quality education.

The Governor said that the students are the precious assets and future of the nation and their successes are indeed the result of the endeavours and sacrifices of their parents and faculty members. He said whole the nation stood united with our security forces in the war against terrorism adding that we are committed to root out the wave of militancy and terrorism throughout the country one and for all.

The Governor said that efforts are being made to ensure the rehabilitation and successful repatriation of TDPs to their native homes in FATA. He said education is an instrument for socio-economic development of a country adding that basic education is the right of every child. He said in this regard steps have been taken and education sector is on the top of our priorities. He said their focus was on provision of quality education. He said education was the key to success and it plays pivotal role in the future development and prosperity of the nation. He said by improving the standard of education we can only compete with the world as an illiterate nation can never achieve the goals of development and progress.

Congratulating the distinguished students on this occasion, the Governor advised them to pay their full attention towards their studies and to highlight the name of their respective institution. Governor said to achieve the goal; students must devote all their energies towards acquiring knowledge which is essential for them and the country's prosperous and bright future. Youth was the leaders of the future, he added. He also called upon the students to prepare them and fully concentrate on their study.

He admired the substantial contribution made by the institution to fight against illiteracy and enabling deprived and underprivileged students to get quality education.

He also reassured his full support and cooperation for this noble cause. He said that our students are very talented adding that our youth is our assets and all of us need to support government as well to meet the target to fulfil the dream of an educated Pakistan.

http://www.brecorder.com/fuel-a-energy/193:pakistan/42349:energy-crisis-to-end-by-2018-according-to-kp-governor/

ONE LNG, TWO COAL-FIRED POWER PROJECTS APPROVED Dawn, May 4th, 2016

Khaleeq Kiani

ISLAMABAD: The government on Tuesday gave the nod to three more power projects by the private sector, with a cumulative capacity of 880 megawatts.

The projects, including two coal-fired power projects of 330MW each in Thar, involve private investment of around \$800 million.

The decision was taken at a meeting of the board of directors of the Private Power and Infrastructure Board (PPIB) presided over by Minister for Water and Power Khawaja Mohammad Asif.

A senior PPIB official told Dawn the board decided to issue letters of interest (LoIs) to the two companies — Hub Power Company (Hubco) and Thal Power Company — to enable them to apply for upfront tariff already announced by the National Electric Power Regulatory Authority (Nepra) for separate projects of 330MW each.

Under Nepra's upfront tariff regime for coal-based power projects, investors can apply for unconditional acceptance of upfront tariff to move forward on completion of legal, financial and physical activities for setting up a plant.

The upfront tariff regime offered a rate of 8.178 US cents per unit for plants of about 350MW capacity based on local coal, foreign financing and 85 per cent plant factor. The plants having 60pc plant factor, foreign funding and local coal are promised 9.969 cents per unit tariff for 30 years.

Similarly, power plants of around 350MW generation capacity with local financing and coal, and 85pc plant factor could avail upfront tariff of about 9.259 cents per unit for 30 years. Similar specifications of plant with 60pc plant factor are entitled to 11.25 cents per unit upfront tariff.

A PPIB statement said Hubco and Thal will build 330MW power project each at Block-II of Thar. Thal power is a joint venture of House of Habib, Novatex and Descon Engineering.

While presiding over the PPIB meeting, the power minister said the country's immediate power requirements were being catered for through a mix of fuels — both imported and local. However, medium- to long-term requirements would be met through indigenous resources like hydropower, local coal, wind, solar, etc.

"Thar coal can be highly instrumental in injecting a large chunk of megawatts into the system through cheap electricity generation," the minister said, adding that the district's 175 billion tonnes of reserves were attracting a large number of domestic and foreign investors who were keen in setting up power plants.

The board also appreciated the achievement of the financial close of a 660MW project by Engro Powergen last month. It was informed that the company had now started construction activities.

PPIB Managing Director Shah Jahan Mirza briefed the board on the current status of various ongoing power generation projects being handled by the PPIB, with particular emphasis on projects under the China-Pakistan Economic Corridor (CPEC). He said a total of 11,000MW capacity was in various stages of implementation.

#### LNG-BASED FAST-TRACK PROJECT:

Mr Mirza also told the board that after the mode of international competitive bidding, Atlas Power Ltd was considered qualified to develop a 220MW re-gasified liquefied natural gas (RLNG)-based independent power producer (IPP) at Sheikhupura, Punjab.

The board approved the submission of the proposal of Atlas Power to Nepra for further processing.

The PPIB welcomed the contribution of private companies in developing Pakistan's power sector and pledged to remain focused on tackling electricity crisis with affordable means.

#### http://www.dawn.com/news/1256077

### CONVENTIONAL ENERGY RESOURCES: GOVERNMENT URGED TO FOCUS ON BIOTECHNOLOGY AS SUBSTITUTE

Business Recorder, May 4, 2016

Lahore Chamber of Commerce and Industry (LCCI) has urged the government to shift its focus from non-productive to the productive sectors like biotechnology which has immense potential to act as "fate-changer" as it is one of the best replacements of conventional energy resources.

LCCI President Sheikh Muhammad Arshad in a statement on Tuesday said the renewable and sustainable energy resources are the best substitute to the conventional fuels and energy sources as the business community understands that bio-fuels will reduce our dependence on petroleum to some degree and enhance energy security. Likewise it will also contribute in rural economic development, he added.

Sheikh Muhammad Arshad said the countries like USA, Brazil and China are leading consumers of ethanol. Many countries world over have gradually introduced flexible-fuel vehicles (FFV) which engines are designed to run on more than one fuel. In Brazil, for instance, 70 percent of all new cars sold now are FFV. He said that sources of deriving ethanol are corn, sugarcane, soybeans, palm oil etc. Europe has also progressed remarkably in this connection by utilising grain starch, sugar beets and rapeseeds etc. Further research and development has made it possible to use different kinds of wastes and herbs for bio-fuel production, LCCI President said.

There is abundant availability of cultivable area in the shape of barren and waste land in our country. The government should encourage utilising this land for growing jatropha plant at a wider scale. We can extract non edible oil from this herb to produce bio-diesel. This can be used in vehicles by way of mixing up to 10 percent with diesel. It will certainly help to a great deal in bringing down the import of oil but also serve as an environment friendly source of energy, he added.

He stressed the need for highlighting the importance of bio-fuel at national level and also projects this area as a profitable sector for national and foreign investors. It is high time that public and private sector must come up and join hands in order to utilise the untapped potential of bio-fuel and especially Punjab government should take initiative to utilise barren and waste land for bio-fuel production.

He urged the government to provide biogas plants to the rural community at subsidised rates to promote alternate energy resources. Since more than 60 percent of country's exports belong to agriculture therefore biotechnology is of prime importance. It is very unfortunate that the country is getting no benefit of its bio-fuel potential while by reportedly next year neighbouring India would be fulfilling 20 percent of its total energy needs through bio-fuels. He

urged the government to take measures on war footing to promote bio-fuels that would not only help government to overcome the energy crisis but would also reduce the oil import bill.

http://www.brecorder.com/fuel-a-energy/193/42781/

ELECTRICITY TRADE: WORK ON CASA POWER PROJECT TO BEGIN ON MAY 12 The Express Tribune, May 5th, 2016.

Zafar Bhutta

ISLAMABAD: Leaders of Pakistan, Afghanistan and Kyrgyzstan will gather in Tajikistan on May 12 to launch development of the much-awaited Central Asia South Asia (Casa) 1,000 power supply project called "peace line", a move that will lead to regional integration.

Speaking at a press conference on Wednesday, Tajikistan Ambassador Sherali S Jononov also announced the start of direct flights to Pakistan in order to enhance people-to-people contacts and trade between the two countries.

Pakistan, Afghanistan, Kyrgyzstan and Tajikistan have been working for a long time on reaching electricity supply arrangements and the establishment of a Central Asia-South Asia regional electricity market.

Initially, Kyrgyzstan and Tajikistan will export 1,000 to 1,300 megawatts of electricity to Pakistan and Afghanistan. Pakistan will consume a major share of exports whereas Afghanistan will receive around 300MW.

According to the ambassador, Tajikistan has received confirmation from the Foreign Office of Pakistan that Prime Minister Nawaz Sharif will attend the launching ceremony of the power import project, which would take place in a city near Dushanbe.

"Afghan President Ashraf Ghani and Kyrgyzstan President Almazbek Atambayev will also be present on the occasion," he said, adding it would be a peace line project that would connect neighbours in the South and Central Asia regions.

Jononov said the project would be completed in two years at a cost of \$1.2 billion. Pakistan will get clean hydroelectric power at cheaper rates that will ease energy shortages in the country. The project will also lead to closer economic relations among these countries.

The ambassador said Tajikistan was rich in hydel resources as it had more than 1,000 rivers and lakes. All legal, technical and financial matters have been settled before launch of the project.

Speaking about security fears in Afghanistan, he said Afghanistan was a sovereign country and had given sovereign guarantees to protect the power transmission line that would pass through it. "We have maintained two transmission lines from Tajikistan to Afghanistan for the last 17 years with no security issues."

He said Tajikistan had offered investment opportunities to investors of Pakistan and these could be facilitated by enhancing air links.

The ambassador stressed that Tajikistan's energy sector had been showing sustainable growth for the last 15 years. Apart from big plants, there are 20 medium and 40 small hydroelectric power stations in remote mountainous areas, with capacity ranging from 5 kilowatts to 1,500 kilowatts.

In Pakistan, the rate of firm energy is 13.2 US cents per kilowatt-hour (kWh) and the rate of non-firm energy is 9.2 cents. The power generation cost in Afghanistan is estimated to be at least 6 cents per kWh. Pakistan is importing electricity for Gwadar at 10 cents per unit.

The Casa power project will not only ease electricity shortages in Pakistan but will also replace fuel-based electricity in Pakistan and Afghanistan. It will establish Kabul as a viable transit nation and offer electricity to other countries during the off-peak season.

Jononov announced the launch of direct flights between Pakistan and Tajikistan and termed it a big achievement to enhance trade and people-to-people contacts. It will also lead to enhancing educational, cultural and business cooperation between the two nations.

Tajikistan's Somon Air representative Nadeem Z Cheema said first flight would depart from Lahore to Dushanbe on May 6. There will be two flights a week. "In the second phase, we will start flights from Islamabad and Karachi," he said. Each flight would have cargo capacity for four to five tons, meaning traders will be able to export 20 tons of cargo every month.

http://tribune.com.pk/story/1097514/electricity-trade-work-on-casa-power-project-to-begin-on-may-12/

LAND OWNER INSTALLS BIOGAS PLANT AFTER VILLAGE IS DENIED GAS The Express Tribune, May 5th, 2016.

SUKKUR: Necessity is the mother of all inventions, and if Chaudhry Akhtar, a land owner from a village named after him near Arore, had not been denied a gas connection 12 years ago, he would not have created a biogas plant to fuel his house.

"I tried to get a gas connection for my village 12 years ago when natural gas was supplied to some villages nearby but it was denied due to political influence," Akhtar, 75, told The Express Tribune. Akhtar's village is located near Islamabad Takri in Arore union council, some 20 kilometres away from Sukkur city. "Since I often visit Faisalabad, where biogas plants are quite common, I copied the design and came back to start working on it with the help of a mason."

The machine cost Akhtar around Rs45,000 at that time and he estimate that the cost must have doubled by now. The main tank is spread over 12 square-feet and covered with a concrete round block, with half-an-inch diameter pipe fixed in the middle. There is a six-inch-diameter pipe that pours dung into the tank. The concrete block serves as a cover to avoid gas leakage, he explained.

"The only thing I have to do is pour around 10 kilogrammes of dung in the tank, which is quite sufficient to produce gas for 24 hours," he explained, adding that the plant runs sugarcane crushing and wheat grinding machines. "By installing the biogas plant, I am not only getting gas for domestic use but also able to run generator in case of power failure," said Akhtar, visibly proud of his achievement.

Learned technique from Faisalabad and had local mason's help to create the machine

Sometimes the gas pressure increases in the tank and, to keep it safe, an outlet has been built through which used dung overflows into another concrete tank, he added. This used dung serves as a very good fertiliser for the land, he pointed out. Akhtar is a proud owner of a large tract of agriculture land, around 35 buffaloes, five cows, dozens of goats and chickens.

Akhtar advises other land owners in the vicinity to also switch over to biogas plants, especially if they have buffaloes on their land. "Our forests are shrinking due to merciless cutting of trees used for burning wood," he pointed out, adding that vanishing forests and rampant use of natural gas, electricity and petroleum products are the key factors behind climate change. "At least in the rural areas where people often have buffaloes and cows, biogas plants can easily be installed to save the forests," he suggested.

Akhtar's ideas are endorsed by the Environment Protection Agency, whose director, Waqar Hussain Phulpoto, said animal waste is a good source of renewable energy, making biogas plants very eco-friendly. The plants are very

beneficial for people living in rural areas as most of them have around 10 buffaloes or cows, he told The Express Tribune.

"Cow dung contains methane, which if released in the air, can add to pollution," he said. "The same dung can be mixed with water and then added to the tank to produce biogas."

Even after the dung has been used to produce gas, the remaining waste can serve as organic manure for the agriculture land, he pointed out. Emission of methane gas in the air is adding to global warming, therefore, its use in biogas plants minimises these hazards, he said.

Phulpoto suggested setting up larger bio-gas plants in cattle colonies, such as the ones in Karachi and Sukkur. These plants will not only be able to produce gas for domestic and commercial use but the remaining waste can be used in agricultural fields.

http://tribune.com.pk/story/1097457/taking-matters-into-own-hands-land-owner-installs-biogas-plant-after-village-is-denied-gas/

GOVT TO INVITE BIDS FOR \$1.7B JAMSHORO COAL PLANTS The Express Tribune, May 7th, 2016.

Zafar Bhutta

ISLAMABAD: The Ministry of Water and Power has decided to invite international competitive bids for engineering, procurement and construction (EPC) contract for installing \$1.7 billion Jamshoro coal-based power plants.

An official said the Asian Development Bank (ADB) has given no-objection certificate for the bid document for setting up two coal-based power plants with 660-megawatt generation capacity each at Jamshoro.

Jamshoro power plants are an important part of the government's plan to increase the share of coal-based power generation to 24% of the total fuel mix by 2019. This is to be achieved by reducing the share of oil-based power generation from 38% to 14%.

In February 2014, Pakistan signed a loan agreement amounting to \$900 million with the ADB, terming it a big step towards achieving the goal of increasing the share of coal in power generation.

Additionally, the Islamic Development Bank will also provide \$220 million for the project.

In the first 15 years of the new millennium, 39% of the power generated globally came from coal, while only 6% was generated through oil, since it is considered significantly more expensive.

During 1980 to 2014, the United States produced 44% of power from coal, Russia 14%, China 75%, India 67% and Pakistan 0%.

At present, Pakistan is producing 30.82% from hydro, 4.2% from nuclear, 38.9% through furnace oil and 25.3% from natural gas compared to a minuscule 0.1% from coal.

Throughout the world, most of the coal is used in the country where it is produced since transportation cost accounts for a large share of the total delivered price of coal. Many countries, however, continue to import and use the cheap energy fuel.

Post-Fukushima plant disaster, Japan plans to build 43 coal-fired power projects to replace the loss of nuclear power capacity.

China has shut thousands of coal power plants but these plants were inefficient and are now being replaced by new state-of-the-art coal plants. About 155 new coal-fired power plants received the green signal in China during the first nine months of 2015 alone.

The US Energy Information Administration still predicts in its most recent annual energy outlook that coal will account for the largest share of the US electricity generation mix through 2034.

A World Resources Institute report says that currently 1,200 coal power plants are being planned in the world. Even Dubai has announced putting up a coal power plant (2x660MW).

Affordable power is one of the key elements required for socioeconomic development of Pakistan. Severe shortage of electricity has been a major impediment to achieving economic stability and sustainable growth for the country.

At present, the demand for electricity exceeds the current generation capacity by up to 5,500MW.

http://tribune.com.pk/story/1098582/power-generation-govt-to-invite-bids-for-1-7b-jamshoro-coal-plants/

UN-ACCREDITED BODY SELECTS PAKISTANI ENGINEER FOR PRESTIGIOUS PROGRAMME The Express Tribune, May 7th, 2016.

#### Shahram Haq

LAHORE: Pakistan's intelligentsia continues to make their mark globally as recently 32-year-old Muhammad Anwarul Haq has been selected by the World Energy Council (WEC) to participate in its prestigious "Future Energy Leaders" programme.

WEC – a United Nations' accredited global body – has picked Lahore-based energy risk professional to become part of a programme for which individuals from over 90 countries would be selected for an average of three years.

Graduated from the University of Engineering and Technology Lahore, Haq has already gained global working experience of over eight years serving for organisations like Schlumberger and World Bank and showing his expertise in energy modelling, technology rollout, strategy consulting, project finance and risk management.

In an interview with The Express Tribune, Haq said he would try to connect Pakistan with this forum so the country could move forward and adopt best global practices in its crumbling energy sector.

"I will make an effort to open a chapter for Pakistan at the WEC in order to connect the country's key energy stakeholders so they may understand global energy practices and have an access to the latest global information, data and expertise."

For Haq, Pakistan currently is disconnected with the world in terms of latest technologies and innovations in the energy sector. In addition to this, inconsistent and overnight shift in energy policies has irked international investors, which impeded capital inflow and technology.

"If Pakistan connects with international forums, then inflow of capital, expertise and policymaking might get better in coming years and this could help the country meet its growing energy demand," Haq said.

During his one-year employment with the Punjab government as chief strategy officer of the Quaid-e-Azam solar park, Haq discovered that the government had involved itself excessively in business and was trying to complete projects via bureaucracy.

"There is competency issue with the government which tends to execute projects through bureaucracy without realising market dynamics and requirements; they don't know how to close a project. For instance, organising road shows to attract potential investors outside Pakistan for energy projects is a job of competent and experienced bankers not government agents," Haq said.

"I managed to bring two American companies to Pakistan to get licences for solar parks, however, to date they have not got permission from the government to start the projects as the government has abruptly changed its stance on solar plants," he said.

"This is the prime example why international investors are hesitant to invest in Pakistan, despite the fact that the Pakistani energy market is one of the most attractive markets in the world."

Haq also shared his reservations about the government's promise to end the energy crisis till 2018.

"The demand currently is suppressed, but the time you start providing electricity round the clock and that too at reasonable tariff, the demand will grow exponentially. The government is predicting 8% annual growth, whereas it could reach up to 15%," he said.

http://tribune.com.pk/story/1098580/un-accredited-body-selects-pakistani-engineer/

### **June 2016**

NEWS COVERAGE PERIOD FROM JUNE 27TH TO JULY 2 ND 2016

NEPRA 'REVIEWING' COST HIKE FOR NANDIPUR POWER PROJECT Dawn, June 28th, 2016

Khaleeq Kiani

ISLAMABAD: The National Electric Power Regulatory Authority (Nepra) has admitted for second review under political pressure a request by a government-owned generation company to enhance the cost of Nandipur Power Project by 55 per cent to Rs65 billion.

The power regulator has taken the decision to allow second review in relaxation of rules and is expected to jack up Nandipur's 30-year power tariff by Rs4 per unit.

In April last year, Nepra had approved the 30-year tariff at Rs11.63 per unit with project cost at Rs42 billion.

As the controversy progressed over the 425MW Nandipur project, cost overruns, delays and mismanagement, the Generation Company-V (Genco-V) – a subsidiary of the Ministry of Water and Power – sought a review of the Nepra decision with a request to increase its estimated cost to Rs65bn.

Nepra heard the review petition and decided on Jan 29 this year in which it rejected most of the cost escalations demanded by the Genco-V.

A senior Nepra official said that the government was now against seeking Rs23bn increase in the project cost with an impact of Rs4 per unit increase in the 30-year tariff of the project. He said it was a rare case in which the regulator was allowing a second review of its own decision that too in relaxation of regulations.

He said that any party feeling aggrieved by the regulator's decision could file a review motion within 15 days of the issuance of the Nepra determination. The government and its generation company have already missed this opportunity to file a second review petition within the stipulated deadline.

However, the ministries of water and power and finance have pressured the Nepra chairman and other members to condone this requirement and find a way out given the fact that expenditure had already been made on the project cost escalation.

A finance ministry official said the fact of the matter was that an expenditure had been made because of the cost escalation which had to be recovered from somewhere and regularised. He said no government functionary could be expected to fund the cost difference from his own pocket.

In its second review petition, the Genco-V said the project cost had increased due to increase in the engineering procurement and construction cost and for laying a pipeline to supply Liquefied Natural Gas to the plant site. The pipeline alone costs an additional Rs8bn.

It demanded that because of the higher cost, a revised generation tariff of Rs15.63 per unit be allowed for 30 years of the project life.

The Nepra had previously held that the pipeline cost should be borne by the gas company which would earn return on LNG supply and it should be at the expense of the power plant.

While disposing of the first review petition in January this year, the Nepra had approved the cost of engineering, procurement and construction at \$109 million instead of \$382 million demanded by the government. It had asked the government to adjust the higher cost in equity for the project.

The Nandipur controversy had erupted last year when the plant was shut down due to a technical fault and tussle between the chief of the power company and the Ministry of Water and Power. This led to a series of audits, probes and parliamentary debates, but nobody was held accountable.

Nepra had put on record in one of its determinations that during the tenure of the previous federal government, the law and justice ministry was responsible for delaying the project for about four years during which period the project cost increased by about 160pc — from \$329m to \$847m. In the process, the ministry caused a loss of over Rs113bn to the nation until three years ago.

"The Ministry of Law, Justice and Parliamentary Affairs is responsible for causing a delay in completion of the documents. (Due to) the negligence on the part of executive authorities of the Ministry of Law, which has caused the delay, an approximate loss of more than Rs113bn has been caused to the national exchequer up to April 2012," the regulator said, quoting a report of judicial commission, headed by a former judge of the Supreme Court, Rehmat Hussain Jafferi.

#### http://www.dawn.com/news/1267651

### ECC OKAYS PAYMENT FOR RLNG-BASED POWER PROJECTS Khaleeq Kiani

ISLAMABAD: The Economic Coordination Committee (ECC) of the cabinet on Tuesday approved an unprecedented payment and fuel supply mechanism for Regasified Liquefied Natural Gas (RLNG)-based public sector power projects.

The decision was aimed at facilitating setting up of 3,600MW plants in the public sector and switching about 900MW of private power projects to RLNG from domestic natural gas. These signature projects of the PML-N government are

yet to achieve financial close. The objections of the National Electric Power Regulatory Authority (Nepra) were not taken up by the ECC.

The ECC meeting presided over by Finance Minister Ishaq Dr also approved payment of two-month (February-March 2016) salary to the employees of Pakistan Steel Mills ie Rs435 million for February and Rs380m for March. The ECC also allowed sale of Rs5 billion worth of mills' inventory to meet day-to-day expenses.

Three RLNG-based projects — one sponsored by the government of Punjab and two by the federal government in Punjab of cumulative capacity of 3,600MW — would be set up in the public sector and then privatised. The projects having 30-year contractual life would be provided RLNG for 15 years through imports from Qatar but then there is no fuel supply arrangement for the remaining period.

"Due to unique nature of the projects being in the public sector and also peculiar supply chain risks associated with import and delivery of RLNG at project sites, and the terms of gas supply agreement being 15 years with no alternative fuel arrangement in sight for remaining term of the power purchase agreement (30yrs), new security package documents were required to be developed," said the ministry of water and power.

Therefore, a new power purchase agreement (PPA) was developed in a major departure from all the past PPAs with the condition that in the event of non-supply of RLNG at the complex, the power producers shall make the complex available for power dispatches on the most expensive fuel i.e. high speed diesel.

After the exhaustion of the requested fuel stock of seven days at full load, the power producers will be entitled to declare Pakistan Political Force Majeure Event, but with the condition to place firm orders for replenishment of the daily consumption of HSD in minimum possible time. As such, "risks associated with the supply of RLNG at the complex would be initially parked with the government-owned CPPA-G (Central Power Purchasing Agency-guarantee) to be subsequently reimbursed by the defaulting party/agency to the CPPA.

Interestingly, to convert this arrangement into reality the CPPA and Sui Northern Gas Pipelines Limited and its suppliers have not been signed yet owing to a host of differences of opinion.

The new PPA also entails a condition of 15 years back-to-back arrangement of fuel by SNGPL with Qatar Gas which will require CPPA or NTDC to categorise these plants as "must run" owing to the peculiarity of the mechanism of importing of RLNG.

The ECC had previously approved to cover net proceed differential which was to be paid out of the government subsidy or direct revenues. The new PPA entailed a new implementation agreement (IA) as well with additional changes required under the power policy and for the purpose of consistency mirror clauses.

"As the aforesaid risk allocation under the PPA to be reflected and backstopped under the IA adds significantly additional financial obligations under the government guaranteed compared to past standard guarantee being issued to private power projects, new changes have been approved for RLNG based projects.

The ECC also decided that net proceeds differential accruing on account of fuel supply risk to the power complex being the differential between the notified price of RLNG at the complex and notified price for utilisation, as a mean of mitigation, be provided as standard term for the public sector in the PPA.

The board of directors of the Private Power and Infrastructure Board (PPIB) was also authorised to make and approve any project specific amendments in the draft IA required during negotiations for financial closing requirements of Haveli Bahadur Shah and Balloki power projects without increasing GOP obligations.

The PPIB board was directed to ensure that amendments to agreements comply with Nepra's tariff determination. It was also decided that the Privatisation Commission before discharging the responsibility under the law shall review

and adjust the risk allocation exclusively meant for public sector projects at the time of privatisation in the light of the then prevailing power policy.

The ECC also approved amendments in agreement between CPPA and M/S Rousch, Fauji Kabirwala Power Company Limited (FKPCL) and Davis Energen pertaining to revised payment mechanism to facilitate payments of imported RLNG by IPPs to gas suppliers.

The ECC also granted under duress the tax exemption on scanning equipment donated by the government of Saudi Arabia to Anti-Narcotics Force (ANF) to enhance its capabilities in eradicating narcotics/drugs. It directed that in all such cases in future, advance approval for exemptions may be sought by the ministries/divisions concerned. The Economic Affairs Division was also directed to issue a circular to all the ministries/divisions in this regard.

http://www.dawn.com/news/1267941

PAKISTAN'S OIL AND GAS DISCOVERIES TOUCH RECORD The Express Tribune, June 29th, 2016.

Zafar Bhutta

ISLAMABAD: Pakistan has made the highest number of oil and gas discoveries in the current month as exploration companies found fresh hydrocarbon deposits in six wells that will add 50.1 million cubic feet per day (mmcfd) of gas and 2,359 barrels per day (bpd) of oil to the existing production levels.

Of these, major discoveries have been made in Sindh that already has a big share in total gas output in the country.

Petroleum and Natural Resources Minister Shahid Khaqan Abbasi, while speaking during a meeting of the National Assembly Standing Committee on Petroleum and Natural Resources chaired by Bilal Ahmed Virk on Tuesday, said four discoveries were made in Sindh and the remaining two in Khyber-Pakhtunkhwa.

Of these, Oil and Gas Development Company made two finds, MOL Pakistan two and Petroleum Exploration Limited and United Energy Pakistan one each. The discoveries have shown presence of 31.6 mmcfd of gas and 339 bpd of crude oil in Sindh and 18.5 mmcfd of gas and 2,020 bpd of oil in K-P.

Sui Northern Gas Pipelines Limited (SNGPL) Managing Director Amjad Latif warned that the country's gas reserves were depleting and no gas was available for the domestic consumers in Punjab. He pointed out that the purchasing cost of gas for domestic consumers stood at Rs510 per million British thermal units (mmbtu) but the consumers coming under the first slab were receiving it at Rs110 per mmbtu.

Eighty-five per cent of domestic consumers were paying less than 50% of the cost of gas and the industrial and commercial consumers were cross-subsiding the domestic consumers, he said.

However, now industrial and commercial consumers were being provided imported liquefied natural gas (LNG), so the burden of cross-subsidy had been shifted to SNGPL that was feeling the strain on its finances.

Though the gas production was declining, Latif told the committee that the company would lay pipelines over 8,000 km in the current year. At present, 1.5 million applications for new gas connections are awaiting approval of the company.

The country was facing gas shortages as politicians were using it as a tool to win elections.

During the meeting, National Assembly member Mian Tariq Mehmood, who belonged to the ruling PML-N, alleged that SNGPL had provided 100 gas meters in his constituency to please his political rival Imtiaz Safdar Warraich, though his requests for new meters were turned down repeatedly.

He insisted that the provision of gas meters to his opponent had damaged his political image. NA Standing Committee Chairman Bilal Ahmed Virk accused Director General Petroleum Concession Saeedullah Shah of not responding to the committee for the last two years.

Describing Shah's attitude as non-sense, he said he was not cooperating with the committee and sought the record of past meetings to show response of the director general of petroleum concession.

The committee also took up for review the issuance of licences for liquefied petroleum gas (LPG) stations to the defaulters that were previously running CNG stations.

It recommended that rules of Oil and Gas Regulatory Authority (Ogra) should be amended to ensure the clearance of outstanding bills of SNGPL, Water and Power Development Authority and banks before issuing licences for setting up LPG stations.

http://tribune.com.pk/story/1132448/pakistans-oil-gas-discoveries-touch-record/

NEPRA GRANTS ALTERNATIVE ENERGY PRODUCTION LICENCES The Express Tribune, July 1st, 2016.

KARACHI: The National Electric Power Regulatory Authority (Nepra) has accepted four applications seeking licences for power generation from wind, solar and bagasse, according to notifications.

The four projects are to be designed to give a combined production of around 133 megawatts (MW) and bear a cumulative cost of approximately \$265 million.

Artistic Wind Power (Private) Limited and ACT2 Wind (Private) Limited, Karachi based firms, have each applied for a power generation licence of 50MW.

Artistic Wind Power said in the application that it would set up the project at a cost of \$109 million at Jhimpir in Sindh's Thatta district.

ACT2 Wind would also setup its project at Jhimpir and it would bear a cost of \$110.13 million.

The cost of both projects is said to comprise of 75% debt and 25% equity.

Chanar Energy Limited (CEL), a Lahore based company, said in the application that it would produce power from bagasse, the dry pulpy residue left after the extraction of juice from sugarcane. It is used as a fuel like furnace oil to produce the power.

It would be a "bagasse based cogeneration power plant...with high pressure boilers and turbo-generators."

The proposed project would have an installed capacity to 22MW at Faisalabad district in Punjab.

The project would cost \$27 million, including 75% debt and 25% equity. It is expected to take 18 months to start generating power from the time it meets all the financial arrangements.

"CEL intends to supply electric power... to National Transmission and Dispatch Company, Chanar Sugar Mills Limited / bulk power consumers," the notification said.

Lalpir Solar Power (Private) Limited, another Lahore based company, said in the application that it wanted to set up a solar based power project in district Muzaffargarh, Punjab.

The project would have a capacity to generate 10MW and it would cost them \$18.72 million. The project is expected to start power production from April 2017. The expected life of the generation facility is stated to be 25 years.

http://tribune.com.pk/story/1133797/nepra-grants-alternative-energy-production-licences/

### \$5 BN KHALIFA REFINERY TO BE REVIVED: MINISTER Dawn, July 2nd, 2016

ISLAMABAD: Claiming that Pakistan will have surplus gas and power by 2017, Petroleum Minister Shahid Khaqan Abbasi said the government had decided to revive the \$5 billion Khalifa Coastal Oil Refinery stalled during the PPP government after a company owned by the UAE government walked out.

He told journalists that Pak-Arab Refinery Company Ltd (Parco) would start setting up the 250,000 barrels per day deep-conversion modern refinery at Khalifa Point in Balochistan's Lasbela district from its reserved money and chip in private investors to complete the project. It will take three to five years to complete.

The minister said a similar refinery was required to be set up in mid-country to meet the demand in upcountry and export market in neighbouring countries. The government was considering various proposals for setting up the second refinery, he added.

The UAE government had nominated International Petroleum Investment Company Limited (IPIC) to set up the Khalifa Coastal Refinery project in collaboration with Parco after 2000, but later gave up the plan. The plan originally envisaged 76 per cent sharing by IPIC and 24pc by Parco.

Khaqan Abbasi said Parco would now take the initiative. "All approvals have been made; the board (of directors of Parco) has approved it," he said without elaborating the project's funding structure.

The UAE holds 40pc share and Pakistan 60pc in Parco.

"This will be the country's largest refinery," the minister said, adding that Pakistan was importing 100pc petrochemicals and this refinery would produce them in the country. He said the government was working on a strategic direction shift to importing crude oil, instead of finished products, to ensure fuel security for which storages would be required. "It's better to import crude and refine required end-products of our choice, instead of looking for shipments for various end-products."

At present Pakistan is importing more than 70pc petroleum products, most of them unique in the world, and the Khalifa refinery would help address the issue of energy scarcity.

Mr Abbasi said Pakistan was also a big importer of liquid fuel and importing substandard 87RON petrol, which was being mixed with Naptha or something else to meet Pakistan-specific product. He said the government had now decided to import and market 92RON in October.

He said local refineries would be upgraded to enable them to improve products by mixing them with imported petrol. It will result in better efficiency of car engines and reduction in carbon emissions.

The minister said Euro-2 diesel would be introduced in January next year, adding that petrol consumption grew by 23pc and diesel by 6-7pc over the past five years.

Mr Abbasi said that 83 oil and gas discoveries had been made since the PML-N government came to power and the government had exceeded its own target of drilling 94 wells this year by drilling 98 wells despite a decline in investment in the petroleum sector because of lower oil prices.

He said the government had cancelled 16 exploration licences due to non-performance and would now sell them along with fresh bids for new blocks. He said the government was also working on a shale pilot project to establish its price economics even through shale development was not economically feasible at present because of lower oil prices.

The minister said the cost of shale drilling was over \$10 per MMBTU against the price of imported gas at \$5-6 per unit.

He said gas supply had been increased but 0.3 million new consumers had been added to the system. With the completion of ongoing LNG projects and pipelines, Pakistan would have surplus gas in 2017, he claimed.

He said the government was working on spot, medium- and long-term LNG supply agreements and two new LNG companies had been set up to handle LNG terminals and imports. He said that no focus had been given on capacity augmentation of pipelines and gas utilities were working on enhancing capacity to handle 1.2bcfd gas at a cost of Rs140bn.

The project will complete this year.

He said LNG would replace diesel in the power sector as the former was cheaper by 30-35pc, but ultimately the government would phase out furnace oil in the power sector and replace it with LNG.

http://www.dawn.com/news/1268566/5bn-khalifa-refinery-to-be-revived-minister

NEWS COVERAGE PERIOD FROM JUNE 20TH TO JUNE 26TH 2016 REFINERIES ALLOWED INCENTIVE TO UPGRADE DIESEL TO EUROPEAN STANDARDS Dawn, June 20th, 2016

Khaleeq Kiani

ISLAMABAD: The government has agreed in principle with petroleum refineries to allow an incentive in the diesel price to upgrade their product to European standards.

This would mean a relatively higher price for high speed diesel (HSD) of better grade produced locally. The step would allow an increase in deemed duty on HSD from 7.5 per cent to 9pc on low sulphur product produced by local refineries which have completed their dehydration plants.

The understanding has been reached between Minister for Petroleum and Natural Resources Shahid Khaqan Abbasi and local refineries under the umbrella of Oil Companies Advisory Committee.

"It was agreed that these arguments have merit," said a senior government official quoting minutes of a recent meeting which decided to take up the matter with the Economic Coordination Committee (ECC) of the cabinet at the earliest for approval.

The meeting was called on the demand of refineries which had been protesting over a recent ECC decision that suspended incentives package for refineries for their failure to upgrade their products by an extended deadline last year.

The petroleum ministry was informed that in the light of government directive of 2013 to upgrade refineries for diesel production, the Pak Arab Refinery Co Ltd (Parco) took the lead among the refineries and set up the first Diesel Hydro Desulpurisation (DHDS) plant at a cost of \$120 million producing 500ppm Sulphur HSD. This was followed by Attock Refinery Limited which undertook refinery expansion and upgradation with \$251m in 2013.

The engineering, procurement and construction contractor of ARL started implementing the project on a fast-track basis for completion in July 2015 – five months earlier than the Dec 31 deadline. But the project could not be

completed by the deadline because of unilateral withdrawal of SRO575 that resulted in delays at ports where consignments got stuck due to litigation and certification issues at the Engineering Development Board.

This was followed by inland transportation blockades due to security situation arising out of political sit-ins and floods. All these issues were being tackled in consultation with the petroleum ministry which noted that certain hurdles were out of the refinery's control and hence the DHDS plant would be commissioned in the second quarter of 2016.

While only Parco completed the DHDS project well within the first deadline given by the government, further deadline of imposition of penalties on refineries not producing Euro-II HSD has now been extended till June 30, 2017, but the price incentive of 1.5pc deemed duty on HSD has not been extended, which is discriminatory.

The refineries were of the view that the ECC had approved the 1.5pc increase in deemed duty for the conforming refineries to provide a recovery mechanism for the heavy capital expenditure. ARL was of the view that without 1.5pc increase in deemed duty, they will not be able to even recover their operating costs of the DHDS because the product otherwise did not have any value addition to profitability.

In that case, ARL cannot afford to commission and operate their unit having already lost \$23m due to project price escalation and additional duties and related taxes on imports as well as another loss of opportunity cost to the tune of \$6.2m for nine months — August 2015 to May 2016 — on the sale of HSD. Parco was also of the view that while it had completed the DHDS plant much earlier, it had not received 9pc deemed duty promised by the government. "In all fairness, the incentive must accrue to Parco as well."

Under the incentive package approved in March 2013, the PPP government had allowed major refineries — Attock Refinery, Pakistan Refinery, National Refinery and Byco Refinery — to charge 9pc deemed duty, instead of 7.5pc, on diesel to produce Euro-II fuel. This meant the sulphur content had to be reduced to 0.05pc from 0.5pc and 0.1pc of varying degrees prevailing at the time.

For this, the refineries were required to set up DHDS plants by December 2015 and isomerisation plants for petroleum products of international standards and reduce import reliance. The PPP government at the time had also deferred the penalties until December 2015 on production of low-grade diesel which was earlier put in place in February 2013.

Under the said decision, the refineries were also required to set up an Escrow account to park available cash balance amount of their special reserve fund to be jointly operated by the finance ministry and the refineries for modernisation and upgradation of refineries. Total expenditure for upgradation was estimated at Rs200 billion.

The ECC was told early last month that none of the refineries was able to meet committed deadlines even though they had already missed three deadlines. They also failed to open an Escrow account until February 2015 and even then could not deposit surplus funds in it, saying they already had spent about Rs35bn against their original investment commitment of Rs150bn.

The ECC last month then extended the deadline for completion of isomerisation and DHDS plants until June 30, 2017, instead of Dec 31, 2015, deadline set in early 2013, but withdrew 1.5pc incentive.

#### http://www.dawn.com/news/1266039

AT GROUND ZERO OF WARMING, GREENLAND SEEKS TO UNLOCK FROZEN ASSETS Business Recorder. June 20, 2016

On top of the world, by a fjord in western Greenland, a remote hydro power plant is buzzing with extra water from the melt of ancient glaciers. This island at ground zero of global warming is seeking to be one of the few places on Earth to benefit.

Outside the Buksefjord plant, the biggest of five hydro-electricity stations built in Greenland since 1993 in a push to move away from imported oil, cod that usually only thrive further south can be seen swimming in the clear water.

And a worker at the facility is preparing to grow potatoes and turnips on land close to the Arctic Circle that is usually too cold for anything other than lichen and reindeer.

The north Atlantic island "is in the midst of new thinking", Environment Minister Mala Hoy Kuko said, to capitalise on an alarming thaw that included a record early melt on the vast ice sheet in April 2016 before a cooler May.

Hydro power "potential will grow even bigger with the warming of the climate", Kuko said in the capital Nuuk, which gets power from Buksefjord 56 km (35 miles) away. Above his desk is a 2-metre tusk of a narwhal, a whale known as the unicorn of the sea.

Climate change, caused mainly by greenhouse gases from burning fossil fuels, is set to cause economic harm in almost all parts of the world by spurring ever more droughts, heat waves and floods, according a UN panel.

Low-lying tropical island states from the Maldives to Tuvalu view Greenland's 3,000-metre (10,000 ft) thick ice sheet with foreboding since it contains enough ice to raise world sea levels by 6 metres if it ever all melted, over many centuries.

But for the 56,000 inhabitants of Greenland, a giant island a quarter the size of the United States, the melt may be unlocking frozen assets and helping businesses including fishing, farming, mining, shipping and tourism.

"Unfortunately I can't sit down and weep and say it (climate change) is bad because overall it's good for Greenland," said Henrik Leth, chairman of both Greenland's biggest private company, Polar Seafood, and the Greenland Business Association.

His firm's pre-tax profit rose to 335 million Danish crowns (\$51 million) in 2015 from 235 million in 2014 thanks to high prices for its main products, prawns and Greenland halibut.

About 90 percent of the island's exports are fisheries, and many hunters and fishermen welcome shifts in currents, apparently linked to warming, that have brought cod to west Greenland for the first time in two decades, and mackerel to the east.

Prime Minister Kim Kielsen, whose island has wide powers of self-rule within the kingdom of Denmark, cautioned that "there are pros and cons" to the melt. Arctic regions are warming at about twice the global average, partly because a melt of white ice and snow reveals darker ground and water that soaks up ever more heat.

Most worryingly for Greenlanders, the melt threatens the livelihoods of indigenous hunters in the north who use dogsleds and rely on ice to hunt seals. And some buildings and airports standing on permafrost are at risk.

Faced with such threats, the islanders are looking to extract as many benefits as possible from the changes. The ice melt could help the government meet its target of raising the share of its electricity that comes from hydro to 90 percent by 2030, from about two-thirds now.

Officials say hydro plants that could draw directly from the ice sheet could power a proposed new aluminium smelter and iron ore mines such as for iron ore.

Buksefjord gets water from a lake, fed mostly by rain and melting snow, with some from ancient glaciers, officials say.

Climate change could also boost the island's hopes to develop minerals ranging from rare earths to oil and gas, even though low prices have put most plans on hold. Melting snow and ice makes prospecting less complicated and improves access to sites.

"There will be more open water for shipping and it will be cheaper for companies to get out minerals," said Josephine Nymand, a scientist at the Greenland Institute of Natural Resources.

The opening waterways could prove a boon for the tourism industry too, giving visitors better views of spectacular glaciers, such as at Ilulissat. This summer, Crystal Cruises LLC plans to send a first cruise ship through the Northwest Passage from Alaska to New York, calling at Greenland.

Among other projects linked to the Greenland melt, scientists are also studying how to tap some of a billion tonnes of milky coloured sediment that gets washed every year from the ice sheet into the sea. "It could be dredged up and shipped to tropical nations as nutrients" for farming, said Minik Rosing, a professor of geology at Copenhagen University.

Economists say it is hard to pin down the net effects of climate change for Greenland, named by the Vikings about 1,000 years ago during a natural warm period.

For farmers, for example, warmth and a longer growing season in the south have been offset by drought – some have hauled icebergs from the sea to help irrigation.

Prime Minister Kielsen, pointing to the ceiling of his office, about 3 metres high, said that in the north: "Just 15 years ago the sea ice thickness could be compared to the height of this room." In some places, it was now too thin to walk on, he added. Showing the importance of ice for transport, Greenland's statistics bureau documents about 15,000 sled dogs on the island against just 4,033 cars, two motorbikes and "railways: 0 km".

The pace of change this year has been disorientating, even though Greenlanders have adapted to sharp shifts in climate since people first arrived from North America 4,500 years ago.

Many people in Nuuk, a town of 17,000, were shocked when organisers of the Arctic Winter Games in early March, usually a snowy month, had to generate artificial snow.

Among the drawbacks of warming, rising temperatures are thawing permafrost such as at Kangerlussuaq on the Arctic Circle, the site of the island's main airport. And in 2012, a flood of melt water from the ice sheet washed away a bridge.

"It was a disaster," said Kim Ernst, a former chef at the Roklubben restaurant that was cut off for three months.

Many glaciers worldwide are shrinking because the summer melt exceeds the amount of snow that falls in winter and gets compressed into ice. In many nations, from the Andes to the Himalayas, this will disrupt hydro power and irrigation.

http://www.brecorder.com/general-news/172/58717/

KP GOVT TO EXPAND MICRO-HYDEL POWER STATIONS PROGRAMME Dawn, June 21st, 2016

Manzoor Ali

PESHAWAR: The Khyber Pakhtunkhwa government has decided to increase the number of micro-hydel power stations in the province from the current 53 to 1,000 in the next few years and hinted at extending the programme to central parts of the province.

The energy and power department has been setting up 356 small MHPs in 12 hilly districts of the province through NGOs since the PTI government took over in the province.

Energy and power minister Mohammad Atif Khan and Pakhtunkhwa Energy Development Organisation chief executive officer Akbar Ayub told reporters at a local hotel that the government had decided to increase the number of MHPs to 1,000.

The Pedo chief said his organisation had also planned to extend the MHP programme to central parts of the province, including Mardan, Charsadda, Swabi and Nowshera, where small power stations would be built on canals.

He said the Asian Development Bank was extending support to the government in that respect and that it would fund the establishment of MHPs.

Mr. Ayub said the construction of 350 MHPs was to benefit over 350,000 people, while 1,000 MHPs would provide cheap power to around one million households.

He said currently, the Pedo had planned 29 hydel power projects under short, medium and long term framework at the estimated cost of \$12 billion.

The Pedo chief said three short-term projects with installed capacity of 124 megawatts were to cost around \$124 million.

He said in the medium term, five projects with installed capacity of 214 megawatts were to cost \$678 million, while 21 long term projects with installed capacity of 3631 was to cost \$11, 150.

Mr. Ayub said the government had prepared feasibility studies of at least 18 projects and government has planned to execute these projects with the help of private sector.

He said currently, the government had offered six projects with installed capacity of 666 megawatts to private sector and have received overwhelming response from international as well as local investors.

"We've received 56 proposals for pre-qualification from international as well local firms to invest in these seven projects," he said.

The Pedo chief said the organisation was not only working on hydel power but was also working on solar, thermal and wind as well.

He said the department could also venture in transmission and dispatch sector.

Mr. Ayub said the ADB had agreed to fund 300 megawatts Balakot hydel power station at the estimated cost of \$600-\$700 million.

He said it would be for the first time that ADB will do such a huge investment in the province.

The Pedo chief said the department would also work on 100 megawatts of solar power projects and issued two letters of interest of 50MW each.

He said of 356 MHPs, feasibilities of 284 were ready, while 188 were under construction and 53 have been completed and operational, while five have been inaugurated so far.

Mr. Ayub said 356 MHPs would generate around 35MW power and provide cheap electricity to over 350,000 households in 12 districts.

On the occasion, energy and power minister Mohammad Atif Khan said the previous government had begun work on 57MW projects in five years but the current government had launched work on 214MW projects.

He said \$2 billion investment would be made in the power sector, the largest in the province's history.

http://www.dawn.com/news/1266234

SOLAR PLANE BEGINS ATLANTIC CROSSING Dawn, June 21th, 2016

NEW YORK: The Solar Impulse 2 aircraft was soaring on Monday over the western Atlantic, one of the most difficult legs of its record-breaking bid to fly across the globe using only solar energy.

The plane, which took off from New York's JFK airport at around 2:30am, is piloted by Swiss adventurer Bertrand Piccard, who is expected to spend approximately 90 hours — during which he will take only short naps — crossing the Atlantic.

"It's my first time taking off from JFK," Piccard said over a live feed from the aircraft as he headed off into the night sky en route to Spain's Seville Airport.

Several hours later, he posted on Twitter that despite a previous full moon there is "now a pink sky in front of me, the day is waking up." The voyage marks the first solo transatlantic crossing in a solar-powered airplane and is expected to last four consecutive days and nights, depending on weather.

The plane, which is no heavier than a car but has the wingspan of a Boeing 747, is being flown on its 35,000-kilometer trip in stages with two pilots Piccard and Swiss entrepreneur Andre Borschberg taking turns at the controls.

The pair have flown alternating legs of the journey, with Borschberg piloting the flight's final Pacific stage, a 6,437-kilometer flight between Japan and Hawaii.

The 118-hour leg smashed the previous record for the longest uninterrupted journey in aviation history.

The plane, now on the 15th leg of its east-west trip, set out on March 9, 2015 in Abu Dhabi, and has flown across Asia and the Pacific to the United States with the sun as its only source of power.

"Smooth takeoff and all #Si2 systems have been checked here at the Mission Control Centre for the #Atlantic Crossing," Borschberg posted on Twitter soon after Solar Impulse 2 was off the ground.

A few hours into the flight, which could be tracked via internet on the solarimpulse.com website, the flight team wrote that the flight was blessed with "a beautiful day without a single cloud."

In another post about seven hours into the flight, Piccard described spotting a cluster of whales in the ocean waters.

http://www.dawn.com/news/1266131

PAKISTAN, AZERBAIJAN AGREE TO INK ENERGY DEALS The Express Tribune, June 21st, 2016.

Zafar Bhutta

ISLAMABAD: Continuing with its recent drive to promote regional economic cooperation, Pakistan on Monday agreed to sign government-to-government deals with Azerbaijan in various fields including supply of electricity, crude and refined oil products, liquefied petroleum gas (LPG) and liquefied natural gas (LNG).

The agreements will allow the two countries to sign multibillion-dollar arrangements for trading in oil and gas without going through the bidding process. This is being proposed along the same lines as the LNG deal with Qatar and petroleum products deal with Kuwait.

Officials familiar with the development said a draft of an inter-governmental agreement had been vetted by the Ministry of Law and shared with the authorities in Azerbaijan.

Pakistan has long been an importer of crude and refined oil products from Middle Eastern countries and is now exploring opportunities of importing LNG from other countries including Italy, France, China and Malaysia.

According to a protocol signed between Pakistan and Azerbaijan, they have agreed to explore possibilities of cooperation in the field of energy.

Authorities in Azerbaijan, Pakistan's Alternative Energy Development Board and the Ministry of Water and Power are due to hold discussions on the participation of Azerbaijan companies in the development of small hydroelectric power, wind, solar and bioenergy projects.

The two sides have already agreed on facilitating negotiations and the subsequent signing of a memorandum of understanding between the state oil company of Azerbaijan and Pakistan State Oil (PSO) and other nominated enterprise by Pakistan. Additionally, the inter-governmental agreement is aimed at promoting trade in crude, refined oil products and LPG as well as joint development of new facilities for their import.

They have also agreed on conducting joint research for setting up a laboratory and undertaking production tests in the field of oil and gas.

Furthermore, they will share scientific and technological developments in the areas of oil and gas exploration and production, while also committing to training of professionals working in the petroleum industry.

Both sides have decided to jointly evaluate the possibility and support of relevant sides in oil and gas exploration and development projects in Azerbaijan and Pakistan.

They have also decided to constitute a joint working group for the exploration and production of hydrocarbon and to explore opportunities in the two countries.

http://tribune.com.pk/story/1126613/promoting-ties-pakistan-azerbaijan-agree-ink-energy-deals/

SSGC ASKED TO UTILISE IDLE CAPACITY OF LNG TERMINAL The Express Tribune, June 22nd, 2016.

Zafar Bhutta

ISLAMABAD: The federal government is pressing Sui Southern Gas Company (SSGC) to enter into an agreement with Elengy Terminal Pakistan Limited (ETPL) to utilise the remaining capacity for handling imports of liquefied natural gas (LNG), an official said.

At present, the terminal operated by ETPL at Port Qasim has the capacity to re-gasify 600 million cubic feet of LNG per day (mmcfd). It is processing 400 mmcfd according to an agreement with the government and could utilise the remaining volume for the private sector.

On behalf of the government, state marketing company Pakistan State Oil (PSO) is importing 300 mmcfd from Qatar and 100 mmcfd from Gunvor.

"ETPL has an unutilised capacity of 200 mmcfd since the start of operation in March 2015, which has put an extra burden on gas consumers," an official said, adding the levellised tariff of the company was 66 cents per million British thermal units (mmbtu) but it could go down to 45 cents if the entire 600mmcfd capacity was utilised.

So, the consumers are paying around 20 cents per mmbtu in additional charges.

According to the official who is aware of the developments, the government has now decided to put to use the unutilised capacity and SSGC is under pressure to cooperate in this regard. The decision was taken in a high-level meeting on May 17, 2016.

However, SSGC, which is a state-owned company, could not consume this capacity without inviting bids from interested parties.

After the commencement of LNG terminal operation, ETPL faced a controversy, leading to a probe by the National Accountability Bureau into the LNG services deal between SSGC and the terminal operator.

Now, ETPL and SSGC could get mired in another scandal if they inked any agreement for consuming the remaining capacity of 200 mmcfd.

The Oil and Gas Regulatory Authority (Ogra) had allowed 66 cents per mmbtu as terminal charges according to a decision of the federal cabinet. In this regard, the Ministry of Petroleum and associated companies entered into an agreement with ETPL for over 20 years.

As a result, ETPL billed government enterprises an effective tariff of \$1.45 per unit in the beginning because of lower volumes starting with just 100 mmcfd in the initial months.

The ministry and ETPL were of the view that average levellised tariff would be 66 cents per unit and not a flat rate of 66 cents. The ECC in its last meeting decided that terminal charges of \$1.45 per unit for initial flows should be taken from the LNG consumers.

"This is what the government has done to pump money into ETPL, rather than allowing private sector like textile and fertiliser industries to import LNG to fully utilise the terminal capacity," the official said, adding that now the petroleum ministry was pressing SSGC to ink a deal with ETPL for consuming its remaining capacity.

Gas utilities – Sui Northern Gas Pipelines and SSGC – had also created hurdles in the way of utilising full capacity of the LNG terminal as they had earlier reported that they had the capacity to transport 300 mmcfd of LNG through their pipeline network. Now, 400 mmcfd is being transmitted through the pipeline system.

"The real issue is that gas utilities are receiving 17.5% guaranteed rate of return and want to continue to enjoy the monopoly on gas supply," the official said, adding this was the reason they were not ready to allow the private sector to import LNG.

http://tribune.com.pk/story/1127668/pressure-ssgc-asked-utilise-idle-capacity-lng-terminal/

UPSET OVER UNAFFORDABLE HESCO BILLS, WASA OPTS FOR SOLAR SOURCE Dawn, June 25th, 2016

Mohammad Hussain Khan

HYDERABAD: The Water and Sanitation Agency (Wasa) management is planning to switch over to solar energy to run its system of reservoirs for uninterrupted water supply to consumers.

They are at an initial stage of negotiations with a private company that would install solar energy system at the Thandi Sarak reservoir.

Wasa that works under the Sindh government's local bodies ministry is embroiled in a power dues controversy with the Hyderabad Electric Supply Company (Hesco) on the ground that it is issued inflated and exaggerated bills by power utility and still they do not get regular power supply. It is involved in litigation at the high court level with Hesco against disconnection of its (Wasa) power connections.

According to civic agency's sources, Wasa is not getting power supply from Hesco despite having dual sources of power, considering the fact that Hesco ensures load-shedding at both sources of energy supply simultaneously under its load management programme.

This eventually complicates issues for Wasa as far as water supply to the city is concerned.

To overcome the issue of power outage once and for all, the Wasa management is negotiating with a private company for installation of solar energy system at Thandi Sarak reservoir. This facility is one of Wasa' installations where electricity bills have been reconciled and the management is aware of its electricity consumption.

"The company is currently doing feasibility of reservoir. It will not be paid any capital cost from Wasa's account, but monthly electricity bill's payment will be given to the company concerned once this idea/proposal is approved by the Sindh government," said an official source.

With switching over to the solar power system, Wasa would be able to get round-the-clock power supply which was not the case in conventional electricity supply system, he said. The company, as per proposal, would also ensure a backup system to keep the reservoir energised amidst monsoon and cloudy seasons that last for longer periods often.

Under the Hyderabad Development Package (HDP), Wasa is also upgrading its 30MGD filtration plant off the Jamshoro road by increasing its capacity to 50MGD with addition of two more clarifiers, raising their number to five from three. Space is still available for building more clarifiers. Tap water which is lifted from river Indus is treated in plant's clarifiers. A 10MGD filtration plant of Wasa is located adjacent to this 30MGD plan, but it needs rehabilitation.

"Filter beds for two additional clarifiers have been completed but a supply line between filtration plant and Thandi Sarak is lying incomplete and until its completion only 30MGD of water would be achieved," said a Wasa engineer. Overall filtered water capacity would be increased to 60MGD once its pending works were completed and 10MGD plant was rehabilitated, he added. He said that unless these pending issues resolved practically, capacity of 30MGD would remain unchanged.

Distribution network of the agency, however, is faced with serious issues and people continued to complaint about non-availability of water to their areas for the last two to three months. Wasa sources claimed that it was basically blockage problems that were hampering supply of water to areas of units-9 and 11, Tando Mir Ghulam Hussain, Sadaat colony (in Latifabad) and Islamabad Mohallah, Vishan Nagar, Effendi Town, Faqir Ka Pir, Sero Ghat (in old city areas). The problem seems to have become chronic in the absence of lack of investment in the system, according to an officer.

He said leakages and damages coupled with prolonged power outage brought the system to a standstill.

It is learnt that installation of additional motors is required at Thandi Sarak to boost water supply for water stressed areas of Latifabad unit-11 where people, including children and women, fetch water from different areas or are buying potable water from private filtration plants in Ramazan.

#### http://www.dawn.com/news/1267052/upset-over-unaffordable-hesco-bills-wasa-opts-for-solar-source

# NEWS COVERAGE PERIOD FROM JUNE 13TH TO JUNE 19TH 2016 HASSLES IN SOLAR ENERGY INVESTMENT Dawn, Business & Finance weekly, June 13th, 2016

Syed Zahir Salahuddin

THE falling solar energy installation cost is making it competitive to other sources of energy. In the first week of May, a solar developer company bid for Dubai Electricity for as little as 2.99 cents a kilowatt per hour to develop 800MW of solar power projects. This price is almost 50pc less than quoted in 2015.

If successful, the electricity generated from solar panels will be cheaper than that of the coal plant commissioned in Dubai last October.

In Pakistan, electricity demand is rapidly increasing at 8-10pc per annum. Solar energy is greatly unutilised in Pakistan, though the country has an abundant source of sunlight. With more than 3,500 hours of sunshine a year, the total solar energy per unit area in Pakistan is nearly three times higher than Germany, which has an installed capacity of 40,000MW.

With such a wealth of solar resource, Pakistan's government has recently dedicated land to establish a 1000MW solar park. However, foreign response to this investment opportunity has not yet been forthcoming, in spite of being offered the highest tariff (14-15 cent / KWh till 2015) in the region with tax incentives, and the government's guarantee to purchase electricity.

The question here is why are investors not willing to invest? While Pakistan's credit rating has improved and its risk spread has reduced from 1011 basis points in 2013 to 461 basis points in 2015; it still has a higher financing cost compared to other places like Dubai. Cost of financing in Dubai is minimal with no land lease charges, which substantially reduces the overall project development cost. On the contrary, the tariff offered in Pakistan offsets both financing and project development costs.

An investor who is interested in setting up a solar power plant has to deal with multiple regulatory bodies. The investors have to work with provincial governments as well as the Alternate Energy Development Board (AEDB) to carry out a grid interconnection study and seek approval from the National Transmission and Dispatch Company (NTDC) or the distribution company. They need to carry out environmental studies, develop feasibility reports, apply for tariff and finalise the power purchase agreement with the buyer.

This entire process is cumbersome and time-consuming. With so many time-consuming stages a project turns unattractive by the time the approvals are obtained; or the project may never even be approved.

To avoid such delays and to facilitate investments in renewable energy, investor-friendly policies need to be implemented. To save time and cost, the whole process can be structured to become a one-window operation.

To expedite things, one-window operation is needed to hold a bidding round for different sizes of power plants and offer different sites with solar data to investors. The entire specifications particular to a block should be provided before the bidding process. Investors could then make a bid based on the unit rate of electricity.

Matters like dealing with NTDC, power purchaser and other stakeholders, the acquisition of land and security issues, should be dealt by the government. Multiple bidding rounds would ensure healthy competition and offer the lowest tariff for that area. This methodology would reduce time and ensure transparency in getting the best deal.

It is estimated that one in three Pakistani households do not have access to electricity. To address this power deficiency, solar power is believed to be the best off-grid generation solution, primarily for rural areas.

Setting up transmission grids over thousands of kilomettres in remote areas is difficult, time consuming and costly. In order to address the energy crisis the government should invite solar developers to set up a model solar village. Solar energy in these areas can also be used in the form of solar geysers for heating purposes. Other utilities include solar water pumps to operate tube-wells and solar street lights.

The global energy landscape is changing and Pakistan is lucky to be blessed with ample sunlight. Hydrocarbon makes two-thirds of Pakistan's energy mix in comparison to less than 1pc of renewable energy (excluding hydel). It is indeed important for a country with over 200m of population to have more renewable energy.

http://www.dawn.com/news/1264528

#### ALLOCATION FOR ENERGY SECTOR CUT TO RS9 BN

Dawn, June 14th, 2016

LAHORE: The Punjab on Monday "rationalised" energy allocations for 2016-17 to Rs9 billion against Rs31bn last year as it was able to attract "sufficient private investment" for the sector, with a number of projects already at various phases of completion.

Out of these Rs9bn, Rs4.36bn would go to small hydro projects which the government has been executing for the last few years at Marala, Pakpattan, Chianwali and Deg Outfall.

The remaining amount would go to the Renewable Energy Development Sector Investment Programme (Redsip). Last year's major initiatives, which have started, included RLNG project (Rs15bn), establishment of coal base powers (Rs9bn) and development of hydro power projects under Redsip.

Next year, the provincial government plans to continue financing 1,200MW Re-gasified Liquefied Natural Gas (RLNG) power project in the central Punjab region (Bhikki, district Sheikhupura).

It would also start 15MW Bio Mass Power Project at Faisalabad and launch the Energy Efficiency and Conservation Programme. Construction of Energy Resource Centre and Solar Solution for Basic Health Units is also included in the provincial plans.

"The Punjab government is also working with leading international financial organisations to create an energy fund of \$1.5bn to \$2bn for development of energy infrastructure," says a White Paper of the Punjab.

This is going to be huge step forward contributing to improve the provincial financial indicators and boost the investors' confidence. As the Punjab government has succeeded attracting private investment in the sector and a number of projects already on track.

"All of them (projects) are scheduled on fast track completion within two to three years, adding 8,000MW to national grid, the allocation to power sector, therefore, has been rationalised to Rs9bn," the paper concludes.

http://www.dawn.com/news/1264666/allocation-for-energy-sector-cut-to-rs9bn

GOVT ORDERS \$1.2 PER UNIT INCREASE IN R LNG PRICE Dawn, June 15th, 2016

Khaleeq Kiani

ISLAMABAD: Despite strong resistance by the regulator, the government on Tuesday ordered increasing the price of re-gasified liquefied natural gas (RLNG) by about \$1.2 per unit by allowing a series of factors in its price previously rejected by the Oil and Gas Regulatory Authority (Ogra).

The decision was taken at a meeting of the Economic Coordination Committee (ECC) of the Cabinet presided over by Finance Minister Ishaq Dar.

The committee allowed Gwadar Port Authority to select a Chinese company along with Chinese equipment for Engineering, Procurement and Construct (EPC) contracts of Gwadar Port.

A senior government official said that Ogra had allowed 66 cents per Million British Thermal Unit (MMBTU) terminal charges for LNG on the basis of a previous decision of the federal cabinet. However, the petroleum ministry and its companies entered into an agreement with Engro Terminal for levelised charge of 66 cents over 20 years.

Resultantly, Engro billed to government entities effective tariff of \$1.45 per unit for first few years because of lower volumes — starting with 100mmcfd in initial few months. The petroleum ministry and Engro viewed that average levelised tariff would be 66 cents per unit and not flat 66 cents per unit.

The ECC decided that actual terminal charge billed by Engro (i.e. 145 cents per unit for initial flows) be charged to RLNG consumers. "Port charges will also be taken at actual, including amount reimbursed to suppliers as per relevant agreement."

Secondly, the ECC directed Ogra to allow actual system losses (about 11 per cent on average) for calculation of RLNG price for its consumers which was originally rejected by the regulator. Ogra had allowed only 4.5pc system losses in RLNG price.

Thirdly, Ogra had rejected the \$0.025 charge of LNG price to Sui Southern Gas Company for its LNG Supply Agreement, saying it was not covered under the law and the SSGC was not making any additional investment LNG import or its infrastructure. The ECC, however, directed Ogra to allow \$0.025 per MMBTU to SSGC. "SSGC's Margin for LSA Management to be determined at \$0.025 per MMBTU to be treated as non-operating income".

Fourth, Ogra had disallowed Infrastructure Cess imposed by the Sindh government in RLNG price saying the cess was not applicable on other petroleum products and since RLNG had been declared by the federal government as petroleum product, it should convince the provincial government to do away with that cess.

The ECC, however, directed Ogra to allow this cess in the RLNG price until a decision could be reached with the provincial government. PSO was advised to take up the matter with the Sindh government for non-applicability of Sindh Infrastructure cess in line with other 'petroleum products'.

The Ministry of Petroleum and Natural Resources was also advised to facilitate Pakistan State Oil (PSO) accordingly. It was also agreed that pending the ultimate settlement of this issue, the said Cess will also be included in RLNG Price.

Port charges will also be taken at actual, including amount reimbursed to suppliers as per relevant agreement. There was a consensus that all relevant cost may be allowed to the Port Qasim Authority to sustain its operation along-with a reasonable profit margin.

PSO would also be entitled to have a margin at 2.50 per cent of LNG price.

The ECC also approved a proposal for transfer of Heavy Mechanical Complex to Strategic Plans Division/Pakistan Atomic Energy Commission from the ministry of industries and production.

While giving approval the committee emphasised that the transfer would take place by ensuring due process and that the rights of complex employees would be fully protected. An amount of Rs500 million was also approved to cover essential expenditure of the company and salaries till June this year.

Out of this amount, Rs253 million will be adjusted on account of salaries already paid to the complex employees as per approval given by the ECC. The SPD/PAEC officials assured the ECC that all efforts would be made to revive HMC to its maximum potential.

The ECC also approved a proposal of the Ministry of Ports and Shipping for the Gwadar Port Authority to proceed with the procurement of one of the three listed Chinese companies through bidding process as well as preference for the use of the Chinese equipment, in accordance with the Framework Agreement, under Section 21 of PPRA Ordinance, 2002 and Rule 5 of the PPRA Rules, 2004.

#### http://www.dawn.com/news/1264966

INVESTMENT IN SOLAR ENERGY GOES UP Dawn, June 16th, 2016

ISLAMABAD: South Asia bagged only 5 per cent of the total global private infrastructure investment of \$111.6 billion in 2015, according to data released by the World Bank.

The combined investment of \$5.6bn from 43 deals represented a decline of 82pc from the five-year average of \$30.5bn. Consistent with historical trends, India generated a majority of projects – 36 out of 43.

Pakistan had four projects, totaling \$749.9 million, solely focused on renewables. Out of the remaining three projects, two were in Nepal and one in Bangladesh. Notably, 26 of the 36 projects in India, amounting to \$2.0bn, targeted renewable energy.

Data from the World Bank Group's Private Participation in Infrastructure Database shows that globally, solar energy investments climbed 72pc higher than the last five year average, while renewables attracted nearly two-thirds of investments with private participation.

The 2015 global private infrastructure investment stood at \$111.6 billion compared with \$111.7 billion in 2014 and \$124.1 billion over the past five years.

Turkey's \$35.6 billion infrastructure investment to build new international airport in Istanbul saw the largest single investment commitment ever recorded in the World Bank data base. Turkey enjoyed a banner year in 2015, with financial closings on seven projects totaling \$44.7bn, or 40pc of global investment.

Though on par with the previous year, global private infrastructure investment in 2015 was 10 per cent lower than the previous five-year average because of dwindling commitments in China, Brazil, and India.

Renewables jumped ahead in 2015 as private infrastructure investments in solar energy swelled to \$9.4bn — 72pc higher than the last five years. Renewables on the whole made up 63pc of global investment, signaling greater adoption of wind, hydro, and geothermal power.

The transport sector took the highest commitment of \$69.9bn, or 63pc of global investment, followed by energy at 34pc and water at 4pc. Out of 300 projects in 2015, energy captured the most with 205, well ahead of transport with 55 and water and sewerage with 40 projects.

Project sizes are also becoming larger in the last four years, with the highest ever average size of \$419.3m in 2015.

## NEWS COVERAGE PERIOD FROM JUNE 6TH TO JUNE 12TH 2016 MINISTER SAYS \$58BN POWER SECTOR INVESTMENT LINED UP Dawn, June 10th, 2016

#### Khaleeq Kiani

ISLAMABAD: The government claimed on Thursday to have lined up \$58 billion investment in the troubling power sector till 2022, but aired uncertainty over implementation of the Iran-Pakistan gas pipeline project.

This was the gist of a briefing the Prime Minister Office had arranged for Islamabad-based foreign diplomats, civil society members, academics and media persons on the eve of completion of three years of the Pakistan Muslim League-Nawaz government with focus on power projects, oil and gas and connectivity limited to roads.

At the outset, Minister for Petroleum and Natural Resources Shahid Khaqan Abbasi said the Iran-Pakistan gas pipeline project was still facing two major issues to take off. Explaining, he said international sanctions against Iran had eased but "dollar transactions are still not allowed", making it difficult to have normal business transactions with Tehran. Secondly, the existence of snap-back clause in Iran's agreement with the West was a problem for international financing of the project.

Responding to a question why such restrictions did not work against the European Union, Mr Abbasi said the EU had only a one-off transaction with Iran while the Iran-Pakistan pipeline project was a long-term arrangement for 20 years which could be affected in case of application of snap-back clause.

He said the discussions with Iran were in progress on these issues and hopefully the project would go through and be completed by June 2018. The project could start with 250mmcfd of gas flows in June 2018 and then gradually go up to 750mmcfd.

In reply to a question on the Turkmenistan-Afghanistan-Pakistan-India (Tapi) gas pipeline project, the minister said Turkmenistan had taken upon itself to deal with security of the pipeline in Afghanistan and the project envisaging 1,325mmcfd of gas to Pakistan could materialise in January 2020.

He said even if both the IP and Tapi projects materialised, Pakistan's energy needs would not be overcome because domestic gas supplies were about 4,000mmcfd against a demand of about 8,000mmcfd.

Therefore, import of liquefied natural gas was "the only short- to medium-term solution of Pakistan's energy crisis as it was sustainable, flexible and scalable". He said the government had a target to inject 2,000mmcfd of LNG in the system by mid-2018 to "wipe out loadshedding".

A total of 4,000MW of LNG-based power plants would become operational by mid-2017 while \$2bn had been invested in LNG terminals and pipelines. Currently, 400mmcfd of LNG was being supplied to the system which would increase to 1200mmcfd in June next year.

By 2018, Pakistan will have surplus gas in the system and all consumers including power plants, fertilisers, industry, CNG, captive power plants and housing colonies would have gas available without any problem. To meet this challenge, Rs850bn worth of gas pipeline network and four LNG terminals at a cost of Rs120bn were in different stages of implementation, the minister said.

He said the country needed investments in oil storages, oil pipelines and deep conversion refining capacity in coastal areas. The "biggest need" is to have deep conversion 250,000-400,000 barrels per day of petrochemical complex worth \$5bn in the coastal area.

Minister for Water and Power Khwaja Asif said \$58bn worth of investment in the power sector was expected for generation of 30,948MW by 2022 and the power crisis would completely wipe out in 2018 but declined to give a deadline.

Asked what gave him the confidence that \$58bn investment would materialise, Mr Asif said the government had already lined up \$36bn investment and added that agreements for 11,000MW had already been signed. Many projects were now achieving financial close, others were already in advanced stage with equity investment.

Power Secretary Younas Dagha said under the 10,400MW portfolio of the China-Pakistan Economic Corridor 8,630MW were currently under execution phases and promised zero loadshedding in 2018. He said the loadshedding to industry had been wiped out except for Ramazan when its one shift had been taken out for domestic consumers

Responding to a question on conservation, the minister said wastage of energy was a serious issue in Pakistan and the federal government was "getting absolutely no support from the provinces including from Punjab for energy conservation and closure of markets at sunset".

He regretted that Pakistan was blessed with a lot of sunshine, but the nation was doing business in electric lights. "This is sad," he said.

Chairman of the National Highway Authority Shahid Ashraf Tarrar said his agency was currently implementing Rs850bn worth of road projects which would be completed in three years. He said work on various segments of the western route of the CPEC was in progress.

#### http://www.dawn.com/news/1263880

PAKISTAN'S INCLUSION IN SCO TO BRING FUNDS FOR ENERGY PROJECTS The Express Tribune, June 10th, 2016.

#### Zafar Bhutta

ISLAMABAD: The Shanghai Cooperation Organisation (SCO) is scheduled to hold a summit on June 23 and 24 in Tashkent, Uzbekistan that will pave way for opening new avenues for Pakistan to secure funds for energy and other infrastructure projects.

"SCO membership remains a trump card for Pakistan that should do its best to timely meet obligations and adopt all required procedures in order to join the regional body during the upcoming summit or in the near future," a senior government official said.

"Pakistan's future activities should also be within the framework of the organisation that will open new avenues for investment inflow."

The process of granting Pakistan the full membership of SCO got under way in July 2015 during Prime Minister Nawaz Sharif's visit to Ufa, Russia for a summit.

It outlined the organisation's status as an important and effective multilateral forum that discusses actual problems of international policy, economy, regional stability and security. These four elements have been very important in stimulating investment.

SCO was founded in Shanghai on June 15, 2001 by six countries including China, Russia, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. Afghanistan, India, Iran, Mongolia and Pakistan have been accorded observer status.

Heads of member states will attend the upcoming meeting in Tashkent. Prime Minister Nawaz Sharif has also been invited, but he may not attend it due to medical treatment in London. However, Indian Prime Minister Narendra Modi is expected to participate in the summit.

According to officials, the summit holds great significance as it will further develop relations between Pakistan, Russia, China and the central Asian states.

A full SCO membership will help Pakistan strengthen its role in regional and global politics, economies and infrastructure by promoting regional connectivity through the One Belt One Road and Eurasian Economic Union projects, they say.

With plans under way to connect the Silk Road Economic Belt with the Eurasian Economic Union, the role of Pakistan in regional economy and infrastructure projects will definitely increase because of the China-Pakistan Economic Corridor (CPEC), which is part of the Silk Road belt.

Pakistan has already suffered a lot because of the US influence in the region. The Iran-Pakistan gas pipeline was the most viable option to resolve the energy crisis, but Washington pushed Islamabad to opt for the Tapi pipeline that was insecure as it would pass through war-torn Afghanistan.

According to the officials, Pakistan, after becoming part of the SCO, could easily make up for the political and economic loss caused by recent tensions in relations with the US and Gulf states and the forum will also help resolve the energy crisis.

SCO has set up an energy club aimed at providing financial support to energy projects in different countries including Pakistan.

Moreover, Pakistan will be able to develop fruitful relations with neighbouring countries including Iran.

This will provide the country an opportunity to play its cards strongly with conventional development partners like the US, World Bank, International Monetary Fund and Asian Development Bank. There is a common perception that the US uses these multilateral forums for political gains globally.

http://tribune.com.pk/story/1119722/regional-club-pakistans-inclusion-sco-bring-funds-energy-projects/

COAL-FIRED PROJECT: CONSORTIUM GETS LETTER OF INTEREST Dawn, June 12th, 2016

GUJRAT: The Punjab government has awarded letter of interest for a 220 megawatt coal-fired project, to be executed in Sara-i-Alamgir tehsil of the district, to a consortium comprising a local firm, Masood Impex Private Limited and a Chinese company, Shandong Ruyi.

The representatives of the consortium, along with local authorities inspected the proposed project site on Saturday.

Sara-i-Alamgir Assistant Commissioner Shoaib Nissoana told Dawn a chunk of land measuring at least 100 acres in Kasba Kariali village of Sara-i-Alamgir, located along the left bank of the Upper Jhelum Canal had already been identified for the site. The case had been sent to Punjab Board of Revenue (BoR) for approval under Section 4 of the Land Acquisition Act 1912, he added.

He said the price of the proposed land was estimated at Rs0.7 to Rs0.8 million per acre which had also been recommended to the BoR. After the BoR approval the district collector would be asked to notify Section 4 for acquiring the proposed land.

The coal-fired electricity generation project was expected to be complete within 24 months of the date when the work would start.

He said the selected site meets the provincial government criteria as it was located close to the main Lahore-Rawalpindi railway track.

However, some citizens having environmental concerns, apprehend that the coal-fired power plant would pollute natural environment of the area along the upper Jhelum canal.

http://www.dawn.com/news/1264318

ENERGY-RELATED PROJECTS TO GET RS22 BN Dawn, June 12th, 2016

Shahab Nafees

KARACHI: Sindh has earmarked Rs6.335 billion for energy projects for the next fiscal year, apart from Rs15.365bn set aside for development schemes in Thar.

Of the energy allocation, which would help the province increase its power output through both renewable and non-renewable energy sources, Rs1.7bn has been set aside for two ongoing schemes while a sum of Rs4.635 would be spent on four new schemes.

"Sindh is playing its due role by attracting new investments through a variety of fiscal and monetary incentives," Finance Minister Syed Murad Ali Shah said while presenting the budget 2016-17 on Saturday.

Building infrastructure in Thar, where various projects on coal mines and power generation are under way, will remain the focus of the provincial government. It has inducted a separate sector, namely Thar-Coal Infrastructure Development, and has earmarked Rs15.365bn under the head, of which Rs3.09bn has been set aside for 10 new schemes and Rs12.27bn for 17 ongoing schemes.

"One of the greatest news of the current financial year is the achievement of financial close for Sindh Engro Coal Mining Company (SECMC)," Mr Shah said.

The SECMC — a joint venture company of the Government of Sindh, Engro Powergen and others — is working on Block-II of Thar.

The Sindh government holds 54 per cent share in this company and has committed Rs11bn as its equity share. Besides, the provincial government gave primary obligation to the federal government for sovereign guarantee of \$700 million for the mining project in the block and has committed Rs70bn to build required infrastructure, he added.

In the initial phase, the mining project would extract 3.8m tonnes of coal a year to generate 660 megawatts of power through a mine-mouth power plant. The project will come on line 2018. Later on, the annual mining capacity will be increased to 7.4m tonnes to generate 1,320MW.

"This is a landmark achievement and will pave the way for energy security of this country. The project is part of the China-Pakistan economic Corridor," Mr Shah said.

He said that the Sindh power policy was aimed at attracting private sector investment. "Only strategic projects will be developed in the public sector in case of no interest and initiative from the private sector."

He told the assembly that the provincial government has so far completed six wind power projects, with a cumulative capacity of 309.2MW. Moreover, nine projects are under construction with a total installed capacity of 475.9MW, and

46 more wind projects with a capacity of 3,550MW are at various stages of project development. Total investment on the wind power projects was around \$5.37bn.

The government has also planned 24 solar power projects, which will add 1,450MW to the national grid. Total investment on these projects would be \$2.9bn.

Mr Shah said the provincial government has issued letter of interest to a private firm for the construction of 9MW and 15MW power generation facilities at Rohri Canal and Nara Canal downstream. These projects are expected to start generating power by 2017.

Two special purpose companies namely Sindh Nooriabad Power Company (Pvt) Limited Phase-I and Sindh Nooriabad Power Company (Pvt) Limited Phase-II have been established in public-private partnership mode to generate 100MW through gas.

Apart from that, Rs25bn has been allocated for the clearance of outstanding liabilities of electricity dues of various government departments pertaining to power distribution companies such as K-Electric, Hyderabad Electric Supply Company and Sukkur Electric Power Company. "It shows commitment of the Government of Sindh to pay the outstanding liabilities," Shah said.

http://www.dawn.com/news/1264286/energy-related-projects-to-get-rs22bn

NEWS COVERAGE PERIOD FROM MAY 30TH TO JUNE 5TH 2016 ENDING LOAD SHEDDING: SOLID STEPS BEING TAKEN TO SOLVE ENERGY CRISIS, SAYS CM The Express Tribune, May 30th, 2016.

LAHORE: Work is being carried out expeditiously to overcome the energy crisis, Chief Minister Shahbaz Sharif said on Sunday.

He was talking to various delegations. Later, the CM left for London to inquire after Prime Minister Nawaz Sharif. MNA Hamza Shahbaz also accompanied him. Talking to reporters at the airport, the CM said that the whole nation was praying for early recovery of Prime Minister Nawaz Sharif.

"Energy projects are being completed throughout the country. \$34 billion has been allocated for energy projects under the China Pakistan Economic Corridor," he said.

The CM said that government was serious about controlling the energy crisis. "All steps are being taken for this purpose. Thousands of megawatts of electricity will be generated after the completion of energy projects during next two years," he said. Shahbaz Sharif said that work was underway to produce electricity through coal, hydel, solar, wind and gas.

"The process of steering the country out of darkness will be completed at every cost. With the completion of energy projects, surplus electricity will be available for agriculture, industry and other sectors," he said.

The chief minister said that solar energy projects were being set up in Bahawalpur. "The government has already completed a 100 megawatts solar power project in Quaid-i-Azam Solar Park Bahawalpur from its own resources," he said.

Shahbaz Sharif said that work was underway on gas-based power projects which would produce 3,600MWs of electricity upon completion. "The federal and Punjab governments have saved billions of rupees in projects," he said.

The CM said the government would be successful in its efforts to rid the country of load-shedding and energy shortage.

"The dream of a peaceful, prosperous and enlightened Pakistan will be realised," he said. The CM said that the government would fulfill the promises it had made to the people.

"Those involved in negative politics are not concerned about difficulties and problems of the people. A handful of political elements are creating obstacles in the development process," he said

http://tribune.com.pk/story/1112646/ending-load-shedding-solid-steps-taken-solve-energy-crisis-says-cm/

### **July 2016**

#### NEWS COVERAGE PERIOD FROM JULY 25TH TO JULY 31ST 2016

#### IF CLEAN ENERGY IS INTERMITTENT, THINK AGAIN

Dawn, Business & Finance weekly, July 25th, 2016

Khurram Lallani

NAYSAYERS have always argued that clean energy is expensive. The argument, however, is losing its salience due to improved technological efficiencies and market forces.

As per the new United Nations Global Trends in Renewable Energy Investment 2016 report, for the first time in 2015, clean energy accounted for a majority of new electricity-generating capacity added around the world. More importantly, half the \$286b investments in wind, solar and other renewables have occurred in developing markets like China, India and Brazil.

In terms of electric hours produced, excluding large hydroelectric plants, clean energy also produced roughly 11pc of all electricity generated globally in 2015; approximately double the amount in 2007, no small feat by all standards.

Even with these stellar numbers, clean energy is overlooked in Pakistan. A common argument is that clean energy is intermittent and does not produce electricity 24/7 whereas thermals (coal, furnace oil, natural gas) can produce electricity when required. Though technically true, the argument requires greater examination.

There are two types of intermittency mainly technical intermittency and financial intermittency. Technical intermittency is defined as an intermittency where an energy resource is not continuously available due to an outside factor — typical to clean energy technologies such as hydel energy (when water is not available), wind energy (when wind does not blow) or solar energy (when sun does not shine). Clean energy intermittency needs to be managed through well thought out power systems planning or mitigated through additional back up generation or battery storage.

There is another type of intermittency that no one typically talks about: financial intermittency. Financial intermittency can be defined as intermittency triggered by lack of financial and economic resources to run the system. This can happen when fuel/energy cannot be procured or capacity charges cannot be paid to sustain operations.

Financial iIntermittency is more typical of thermal power plants in Pakistan where time and again, power sector managers have run out of cash to pay for the sustained fuel supplies or operations of power producers. From the fuel supplies fiasco in 2015 where the country ran out of petroleum products because the power sector defaulted to PSO on its payments, to several IPP threatening PEPCO to call off sovereign guarantees in case of continued short payments; are all examples of financial intermittency.

To understand the context better, Pakistan is mainly reliant on thermal energy and produces 70pc yearly on average from natural gas, HSD and furnace oil, which is an expensive fuel, contributes to 40pc of total electricity generation at

a cost of Rs.12-14/unit, whereas average domestic tariff is roughly 70pc on discount to our FO generation. HSD is even higher with a generation cost of Rs.16-18/unit.

This implies that the more FO and HSD we use, the more we pile up 'circular debt' which accumulates in the system when we are unable to pay for the cost of power supplies. The result; our average utilisation capacity (11,000MW) is far below our total generation capacity (23,000MW)- a truly intermittent solution which then translates in 6-8 hour blackouts in urban areas and more than 12 hours in rural areas.

Perhaps the people of this country have been sensitised to these blackouts which they now accept as a part of their daily lives. Yet, ironically, we feel clean energy is truly intermittent. Had we realised half of the hydel potential that we have, we would have been generating hydro electricity at a maximum price of Rs.2.5/unit, still far below what we produce from FO and HSD, even after the current oil price decline.

With a sudden push towards RLNG, coal and natural gas power plants, both under federal government and CPEC, we will soon see a common scenario. Higher generation resulting in higher guaranteed payables to power producers (with guaranteed IRR of 17-20pc in case of coal); stagnated or downward consumer tariffs, resulting in either higher governmental subsidies or higher consumer surcharges/taxes and with poor operational efficiencies; a creeping circular debt, only to be bailed out later through additional bond flotations, supplementary commercial financings and incremental interest payments.

A better financial and socio-environmental alternative is clean energy which does not go off when planners don't pay nature for the sunshine they have used or the wind and water they have utilised.

It is time to rethink clean energy credentials in Pakistan. Costs are falling, technology is improving and new and better jobs are being created. We can stick to the old bandwagon where we live with bail outs, black outs and burn outs as part of our daily lives; or we can hop on to the new one which characterises hope, confidence, self-reliance and energy independence. The choice is entirely ours.

#### http://www.dawn.com/news/1272983

## BRAZIL OFFERS RENEWABLE ENERGY EXPERTISE Dawn, July 26th, 2016

LAHORE: Brazil meets more than 42 per cent of its energy needs through renewable sources and is ready to share knowledge with Pakistan, said Brazil Ambassador Claudio Lins on Monday.

Speaking at the Lahore Chamber of Commerce and Industry on Monday, he said that Brazil was ready to extend cooperation to Pakistan in the renewable energy sector.

Brazil has also had success in improving per hectare yield through modern technology and double cropping and is also one of the largest exporters of poultry meat.

Lins encouraged Pakistani businessmen to benefit from Brazilian expertise in these sectors. Brazil is now the ninth biggest economy of the world with a GDP of \$1.7 trillion. He said that despite having various commonalities and good diplomatic relations, trade volume between Brazil and Pakistan is meagre.

He said that mutual trade volume in 2015 was hardly \$369 million, which is way below the potential that exists.

"Brazil is looking for new trade partners in Asia while Pakistani products are of good quality and can easily make their way into the Brazilian market", added the Brazilian envoy.

LCCI Senior Vice-President Almas Hyder said that Brazil-Pakistan relations are friendly and cooperative. Although trade figures do not match the actual potential of trade, they are following an upward trend; the two way trade has surged from \$227m in 2013 to \$316m in 2015.

However, Pakistani exports have fallen in terms of value from \$87m to \$56m in the given period.

Almas Hyder said that the private sector of Pakistan can definitely take advantage of exporting various types of consumer goods like ready-made garments, fabrics, knitwear, towels, leather and leather products, pharmaceutical, surgical instruments etc to Brazil.

He highlighted the huge potential that the country offers for the exports of high quality footballs made in Pakistan.

"We can also supply agro products including rice, pulses, fruits and vegetables etc. For this, we need to work closely with your office to find the right partners." said the LCCI Vice-President.

http://www.dawn.com/news/1273159

### BIOMASS POWER PLANT SET UP WITH CHINESE HELP The Express Tribune, July 26th, 2016.

Imran Rana

FAISALABAD: Pakistan is producing huge quantities of biomass and crop residue every year that could be converted into electricity to help lessen the energy shortfall in the country, said University of Agriculture Faisalabad (UAF) Vice Chancellor Professor Dr Iqrar Ahmad Khan.

Inaugurating an energy plant established at the Punjab Bio Energy Institute, Postgraduate Research Station UAF, in collaboration with China, he said the UAF had installed the 100-kilowatt (KW) biomass gasification power plant meant for the promotion of alternative energy to overcome power shortfall touching 5,000 megawatts.

He called the project a solution to the electricity needs, especially at the village level. It was an initiative of the Punjab chief minister who invited China to set up the biomass plant to promote the technology and for which the UAF was selected.

"The plant converts agricultural waste into power via the gasification process. Although it is a 100KW plant, we can provide power to at least 50 households from it," he said.

He stressed the need for adopting the model in every village and added the combination of biogas, biomass and solar energy would help the country become self-sufficient in the energy sector.

Chinese expert Dr Hai Bin Li from Guangzhou Institute of Energy Conversion said China was producing 650 million tons of agricultural waste, of which 50% was being used for the production of energy.

"Over 40 million rural household biogas digesters are built in China, producing 15.4 billion m3 rural biogas annually."

Hai further said out of the 270 million tons of forest waste produced in China, 30% was used for energy purposes and this way they were meeting 10% of the country's power demand from bioenergy.

UAF Agri Engineering faculty Dean Dr Allah Buksh said fossil fuel reserves could end after half a century, therefore, there was an urgent need to find alternative ways to generate energy.

"The university has launched a programme of energy system engineering that will help fight such challenges with the help of trained manpower."

http://tribune.com.pk/story/1149208/alternative-energy-biomass-power-plant-set-chinese-help/

#### GOVT TO IMPORT GAS EXCLUSIVELY FOR POWER PLANTS

The Express Tribune, July 27th, 2016.

Salman Siddiqui

KARACHI: In a landmark achievement, the government, trapped in a power crisis, has decided to import gas exclusively for the power sector ahead of commissioning of three liquefied natural gas (LNG)-based plants of 3,600 megawatts in Punjab next year, a federal minister toldThe Express Tribune on Tuesday.

"Three LNG-based power plants of 3,600 megawatts will come online in Punjab by June 2017," said Petroleum and Natural Resources Minister Shahid Khaqan Abbasi.

For this purpose, various government-run institutions involved in importing and selling re-gasified LNG have resolved all their contentious issues and reached a tripartite agreement to supply 600 million cubic feet of gas per day.

Sui Northern Gas Pipelines Limited (SNGPL) reported to the Pakistan Stock Exchange (PSX) on Tuesday that "the Tripartite Agreement 2, Gas Sales Agreement (GSA), Re-imbursement Agreement (RA) and Gas Transportation Agreement (GTA) have now been signed by all the parties ie Pakistan State Oil (PSO), SNGPL, Sui Southern Gas Company (SSGC) and Central Power Purchasing Agency (CPPA) for the supply of 600 mmcfd of re-gasified liquefied natural gas (RLNG)."

"The addition of 500-600 megawatts to the national grid station would reduce power outages by half an hour across the country, while the addition of 3,600 megawatts would cut electricity load-shedding by three to four hours a day," said Abbasi.

The minister, who claimed these power plants to be the most efficient, said they would consume half the quantity of gas compared to what the gas-based plants consumed at Jamshoro and Muzaffargarh. Accordingly, they would produce power at a much cheaper rate.

Two out of the three plants of 1,200MW each were being constructed by the federal government while the third will be built by the provincial government.

The plants will be set up by Chinese contractors at Haveli Bahadur Jang, Balloki and Bhakki near Shahdara, Lahore, using US technology.

According to a source, under the Tripartite Agreement 2, the government would also increase the supply of imported gas to the industrial sector including compressed natural gas (CNG) fuelling stations, fertiliser manufacturers, textile manufacturers and a few other power plants.

"The increased supply of gas to the industries might take some time, as the government has to ensure that there is no corruption involved in the entire process," he added.

He said the country had so far brought some 30-35 ships of RLNG. "The first ship was brought privately by the Arif Habib Group carrying 147,000 cubic feet of LNG on March 26, 2015. The ships anchored at Port Qasim carrying gas volumes of 147,000 cubic feet to 175,000 cubic feet."

RLNG (on an average) cost \$1.5 per million British thermal units (mmbtu), he added.

The government last year signed an agreement with Qatargas for import of LNG for the next 15 years at 13.35% of Brent crude oil price.

"The tripartite agreement was signed days before the Eid holidays," said another source.

"SNGPL was the only party which raised questions before signing the agreement. Other signatories were eager to execute it as soon as possible," he added.

http://tribune.com.pk/story/1150077/energy-solutions-govt-import-gas-exclusively-power-plants/

### GOVT PLANS TO PRIVATISE LNG-BASED POWER PLANTS The Express Tribune, July 28th, 2016.

Zafar Bhutta

ISLAMABAD: The government has decided to privatise liquefied natural gas (LNG) based power plants of 3,600 megawatts that are being set up in Punjab to cope with the persistent electricity shortfall in the country.

In a meeting of the Economic Coordination Committee (ECC) held on June 28, the Ministry of Water and Power said three power plants with a cumulative capacity of approximately 3,600MW were being developed in the public sector at Bhikki, Balloki and Haveli Bahadur Shah in Punjab. They will consume imported LNG as fuel for power generation and help ease the shortfall.

The Bhikki plant is being constructed by Quaid-e-Azam Thermal Power Private Limited, a company wholly owned and controlled by the government of Punjab.

The remaining two projects at Balloki and Haveli Bahadur Shah are being implemented by National Power Park Management Company Limited, which is wholly owned and controlled by the federal government and is being financed through the Public Sector Development Programme.

"In case of privatisation of Haveli Bahadur Shah and Balloki projects, the Privatisation Commission before discharging the responsibility under applicable laws and in case of privatisation of Bhikki project, the ECC will review and adjust the risk allocation under the implementation agreement," the ECC said.

The implementation agreement "is meant exclusively for the above public sector projects in the light of the then prevailing policy for the independent power producers (IPPs)," it said.

The ECC also decided to allow LNG-based plants to operate outside of the merit order – which entails gas supply to the cheaper power plants first – in accordance with the concept of take-or-pay liability and the gas sales agreement with the LNG supplier Qatar.

A long-term supply contract between Qatar and Pakistan State Oil (PSO) also contained the take-or-pay provision and hence all enterprises within the supply chain including PSO, Sui gas companies, IPPs and the Central Power Purchasing Agency would take their part of risk for failing to consume the ordered gas.

During the meeting, the Ministry of Water and Power revealed that according to the gas ordering mechanism, a firm order had to be placed for every calendar year months before the start of the year and then the entire volume should be consumed, otherwise losses would have to be paid.

"This means that the power purchaser will not like to make capacity payments to the producer with the utilisation of gas," the ministry said. "Although the LNG plants are amongst the most efficient, there is a remote possibility they do not come on top in the merit order."

http://tribune.com.pk/story/1150768/shifting-responsibility-govt-plans-privatise-lng-based-power-plants/

### DISTRIBUTION COMPANIES ASKED TO REFUND RS2.8 PER UNIT TO CONSUMERS Dawn, July 29th, 2016

Khaleeq Kiani

ISLAMABAD: The National Electric Power Regulatory Authority (Nepra) on Thursday ordered the distribution companies to refund Rs2.80 per unit to consumers to pass on the impact of lower than anticipated generation cost in the month of June.

At a public hearing presided over by Nepra Chairman retired Brig Tariq Sadozai, the regulator concluded that the distribution companies had overcharged consumers by more than 41 per cent in June which should be returned in the billing month of September.

The Nepra chief expressed concern over utilisation of expensive power plants despite availability of cheaper plants on the economic order which caused a loss of Rs4.46 billion to consumers in June.

The regulator held that actual fuel cost of power generation in June was around Rs4.02 per unit against a predetermined reference tariff of Rs6.82. As such, the distribution companies had overcharged consumers by Rs21 billion which should be refunded to consumers at a rate of Rs2.80 per unit.

The regulator rejected the actual fuel cost claimed by the Central Power Purchase Agency (CPPA) for June at Rs4.49 per unit and disallowed some cost factors, including unauthorised charges for the Nandipur power project.

A team of the CPPA and National Transmission Dispatch Company reported to the regulator that the Nandipur plant was running at a capacity of about 230MW against its actual capacity of 425MW.

The reduced rates will not be applicable to all agricultural and domestic consumers using less than 300 units per month under a decision of the Pakistan Muslim League-Nawaz government that this was already a subsidised segment of population. Likewise, consumers of K-Electric will also not benefit from this relief.

The CPPA reported that furnace oil-based power generation cost stood at Rs6.83 per unit, compared to gas-based average cost of Rs5.12. The fuel cost of RLNG-based plants was reported at Rs5.53 per unit and Rs11.50 for diesel-based plants, no fuel cost for hydropower plants and Rs1.15 per unit of nuclear plants. The fuel cost of electricity imported from Iran stood at Rs10.6 per unit.

The CPPA reported that a total of 10.47 billion units of electricity were supplied to distribution companies in June at a cost of Rs47bn, having an average actual fuel cost of Rs4.49 per unit.

It said hydropower generation contributed the biggest share of about 35 per cent, while furnace oil-based plants generated about 32pc energy. Gas-based plants generated 18pc and RLNG-based plants produced about 7pc electricity for the national grid, followed by 4pc by nuclear and 2pc by diesel plants.

http://www.dawn.com/news/1273948/distribution-companies-asked-to-refund-rs28-per-unit-to-consumers

STRANDED IN SAUDI ARABIA: FO UNDER FIRE FOR 'NEGLECTING' OVERSEAS WORKERS The Express Tribune, July 29th, 2016.

Riazul Haq

ISLAMABAD: The Foreign Office on Thursday came under fire in a parliamentary panel for its inability to resolve the matter of 8,000 Pakistani workers stranded in Saudi Arabia for the past two months without receiving their salaries or other dues.

Briefing the National Assembly Standing Committee on Overseas Pakistanis and Human Resource Development on Thursday, Ministry of Foreign Affairs Additional Secretary Tasawar Khan said that around 8,000 Pakistani workers in Saudi Arabia have not been paid their dues and salaries, some for nearly six months, while work permits of many others have not been renewed.

The official added that two teams from the Pakistani embassy had met with the management of the companies where the workers are contracted and requested them to settle all issues relating to dues and permits.

But when he was asked what the outcome was, Khan replied they "hope that the issue will be resolved".

This failed to satisfy members of the committee. The panel, which was chaired by Aamir Ali Magsi, accused the FO and the Embassy in Riyadh of mishandling the issue since it took the government over a month to raise the matter with the kingdom.

Khan said that the stranded workers have been offered an agreement under which they can either return to Pakistan returning to Saudi Arabia when they are paid or they can stay in Saudi Arabia till they are paid.

According to documents shared with members of the panel, work permits of nearly 8,000 Pakistanis working in eight different regions of Saudi Arabia have not been renewed in addition to their pending dues.

The problems these workers were facing compounded when their company stopped providing food.

After Pakistani officials visited the workers, the food supply was restored in some regions including Jeddah and Riyadh, but around 1,600 workers have had to fend for themselves.

An agitated Shagufta Jumani of the Pakistan Peoples Party asked why the government had dragged the issue and what guarantee had the officials secured for timely payment to the stranded workers.

Khan responded that they were constantly building pressure on Saudi officials to resolve the crisis.

"If the government and its embassy cannot help them then they should close their embassy and consulates in that country," Jumani said curtly while responding to PML-N lawmaker Rana Afzal Khan's comment that the stranded workers had travelled to Saudi Arabia through private arrangements.

http://tribune.com.pk/story/1151525/stranded-saudi-arabia-fo-fire-neglecting-overseas-workers/

RUSSIAN TEAM WILL VISIT PAKISTAN NEXT WEEK TO START TALKS ON COMMERCIAL CONTRACT OF \$2B LNG PIPELINE

The Express Tribune, July 29th, 2016.

Zafar Bhutta

ISLAMABAD: Pakistan and Russia are set to start negotiations on a commercial contract for laying a \$2-billion liquefied natural gas (LNG) pipeline next week following the go-ahead given by the Ministry of Law for the project despite US sanctions against the Russian firm selected to execute the scheme.

A Russian team will reach Islamabad next week to negotiate the commercial deal. Earlier, talks on the project reached a deadlock after the US imposed sanctions on the Russian company – RT Global – working on the project.

The pipeline will be laid on the build, operate and transfer model. The Russian company will hand over its control to Pakistan after 25 years.

Under an agreement, Pakistan will provide 15% of equity while the remaining 85% financing will be contributed by Russia. First phase of the project is expected to conclude by December 2017.

Pakistan has also awarded a contract to a Chinese firm for laying another LNG pipeline on the same model from Gwadar. It has got a lower cost estimate from the Chinese company, China Petroleum Pipeline Bureau, which agreed to revise the pipeline-building cost to \$1.3 billion from the earlier \$1.5 billion.

Separately, Pakistan's gas companies are spending around \$1.1 billion to enhance the capacity of their pipeline networks in order to transport 1.2 billion cubic feet of LNG per day. This cost amounts to \$34 per inch metre but the cost of the deal negotiated with China is \$32 per inch metre.

The Russian government signed an agreement with Pakistan in October 2015 for building the \$2-billion North-South pipeline between Karachi and Lahore to transport the imported LNG.

Russian President Vladimir Putin was due to arrive in Pakistan to perform the ground-breaking of the project, but the planned commercial contract between RT Global and Interstate Gas Systems was delayed due to the US sanctions.

Moscow has agreed to lend Islamabad \$2 billion for the project. In return, Pakistan will award the contract of laying the pipeline to RT Global Resources without inviting any bids.

The Ministry of Petroleum and Natural Resources had tabled a proposed plan for implementing the LNG pipeline project in a meeting of the Economic Coordination Committee (ECC) in April this year. However before taking a decision, the ECC referred the matter to the Law Division for its opinion on whether the US sanctions could cause problems for the project.

The Russian company will lay a 1,100km-long pipeline with a capacity to carry 12.4 billion cubic metres per annum and connect the LNG infrastructure in Karachi and Lahore.

Russia is the second-largest producer of natural gas in the world and is seeking to diversify its export markets after a spat over the Ukrainian crisis with the European Union, its main gas buyer. It has also offered Pakistan export of LNG.

http://tribune.com.pk/story/1151470/2b-lng-pipeline-russian-team-coming-start-talks-commercial-contract/

NEWS COVERAGE PERIOD FROM JULY 18TH TO JULY 24TH 2016 GOVT'S PLAN TO END LOAD SHEDDING BY 2018 GETS FIRST JOLT Dawn, July 19th, 2016

Ahmad Fraz Khan

LAHORE: The Pakistan Muslim League-Nawaz government's plan to end, or substantially reduce, loadshedding by 2018 has suffered its first jolt as the project management of the 1,410MW Tarbela extension acceleration plan now terms it "no longer physically possible" and has asked the Water and Power Development Authority (Wapda) to develop a post-abortion (acceleration plan) risks management strategy.

The impending failure on the extension acceleration plan, which was supposed to bring 1,410MW online by June 2017, is likely to rob the government of political mileage that it wanted to draw by containing the menace of loadshedding and the nation of the benefit of low-cost hydel generation next summer.

In a letter to all concerned, project manager Fidencio Mendez said: "The acceleration is no longer physically possible given the current circumstances surrounding the project, including that no agreement (how to implement the acceleration plan) was reached either with the electro-mechanical contractor or the civil works contractor."

Now the failure to contractually bind the contractor despite promising to pay it over Rs5 billion more (as cost of acceleration) has come back to haunt the authority and the country.

"This (my) opinion also aligns with the remarks included in our weekly and fortnightly progress reports. Please note that this is an independent opinion based on the risks previously identified and conveyed to the client (Wapda) through correspondence and should not be interpreted as instruction or determination.

In case the client decides to abort the acceleration, then, as previously advised, a strategy for managing the postabortion risks needs to be developed to get an agreed schedule and avoid 'time at large' scenario by having an agreed memorandum of understanding," wrote the project manager.

In another letter, the manager maintained that as "Wapda is still considering different options, including formal abortion of the acceleration plan, the engineer is bound to verify the contractor's claims (and continue paying hefty amounts) unless Wapda 'formally aborts' the acceleration plan'.

The two letters were written in the last week of June and Wapda referred the case to its central contract cell (CCC) for its further opinion.

The CCC replied: "The decision on abortion of the acceleration plan should be taken on a top priority basis and since huge contractual issues are likely to arise, the contract section of the project needs to be strengthened."

Further explaining, the CCC said: "It is apparent that substantial delay in achievement of the targets amounts to non-completion of units (project) by due dates. In such case, the engineer's certification of milestones is not understandable and has placed the employer (Wapda) in an awkward position."

When the CCC's comments were referred to the member (Water), who is technically in charge of the project, he remarked: "Considering the above started situation, decision regarding the acceleration programme is urgently required to avoid further complications. The project authorities have been instructed to finalise their analysis and recommendations at the earliest for the consideration of the authority."

"This is a criminal act, to say the least," said a former head of the CCC. He said Wapda had conceived the plan of pulling back completion date by eight months — from February 2018 to June 2017 — and agreed to pay the contractor \$50 million (or over Rs5bn) for acceleration. All this was done without bringing it all in writing. To add further to national misfortune, it had already paid Rs2.5bn and has now concluded that acceleration plan is no more possible.

The CCC's former head said the authority needed to answer some basic questions: Who was verifying the contractor's claims against which Rs2.5bn has been paid? What is the mechanism for recovering this amount? Why everything was not brought in written form? All these issues should be part of an inquiry that should be conducted to see how this stupendous failure had been achieved, he added.

When Wapda was asked about the fate of the project and its future handling, it said: "The questions asked based on the issue about which any comment at this stage by Wapda may compromise its position later on and result in financial implications.

"Wapda has a policy of taking the public into confidence on its projects by issuing press releases from time to time. If any development happens on the issue, it will be discussed in the authority's meeting and the decision will be communicated to media as per policy."

http://www.dawn.com/news/1271710

KARAK OIL REFINERY TO BE SET UP IN AREA NEAR KOHAT The Express Tribune, July 23rd, 2016.

#### Sohail Khattak

PESHAWAR: Karak Oil Refinery, a project with an estimated cost of Rs62 billion would have the capacity to generate 40,000 barrels of oil per day, said government officials. However, the K-P government decided to award the project, along with four hydropower projects, to the Frontier Works Organization (FWO).

An official close to the development told The Express Tribune the oil refinery would be constructed in Krapa, an area situated in Karak but also close to Kohat. The chief Minister decided to construct the refinery in Krapa so that the tug of war between lawmakers of both the districts could be brought to an end.

For the project, the government would get 2,000 kanals of land and mode of the project would be finalised on July 30.

The official was optimistic about the completion of the project by the end of March of 2018. "The products of the oil refinery would have international standards with octane ratings above 92," he added.

Octane is a chemical substance in petrol of gas, used as a way of measuring its quality.

The oil refinery construction has remained a disputed subject between the politicians of Kohat and Karak as they have tried it to be constructed in their district.

"The dispute ate our two years and we could not reach a decision," the official said, adding

The official said the government turned towards FWO after it got cast down by the performance of the structural changes brought in the Pakhtunkhwa Energy Development Organization (PEDO) and Khyber Pakhtunkhwa Oil and Gas Company Limited (KPOGCL).

"Both the entities have been shaped on the pattern of the corporate sector, but they could not bring investments," he said. "The government had only one way for the project and it was to make government to government contract for which FWO was the best option."

The official said the contract with FWO would not only save time for them, but would also be more cost-effective than that of a private contractor. "We would not have to go for the lengthy process of bidding, in FWO's option. Bidding takes a year or two in such projects," he said, explaining the time that would be saved.

"The terms and conditions would be according to international standards and as per the K-P government's own will," he said, adding the government would most probably not need to hire a project management unit and thus it will save cost that would have gone in having such a unit. He maintained the government will also not have to spend money on floating tenders, it will not have to pay in advance and there will be no cost escalation.

About the FWO having no expertise in oil refinery the official said, "You need not have expertise in oil refinery because you could place your order to an Italian or Chinese company and they will prepare everything over there." He added, "You [only] have to fix them here."

The official was of the opinion the oil refinery would create 100,000 direct and indirect jobs opportunities.

About the hydropower projects the official said four projects, including those for Balakot hydropower with an estimated capacity of 300 megawatts and estimated cost of \$330million, Boonizait hydropower project of 300 megawatts and estimated cost of \$254 million, are decided to be awarded to FWO.

Moreover, Gharit Swir Lasht project having 377-megawatt capacity and estimated cost of \$1,117 million and 260-megawatt Jamshail Mori Lasht project expected to cost \$561 million have also been decided to be given to FWO. The last three projects are in Chitral and the first one is in Balakot.

http://tribune.com.pk/story/1147325/karak-oil-refinery-set-area-near-kohat/

CLEAN ENERGY: GOVT ASKED NOT TO IGNORE HYDROELECTRIC POWER The Express Tribune, July 23rd, 2016.

ISLAMABAD: The government should not ignore hydroelectric power which is the cheapest source of electricity generation, the Islamabad Chamber of Small Traders (ICST) said on Friday.

"Hydroelectric power is fuelled by water, so it is a clean fuel source, which means it won't pollute the air like power plants that burn fossil fuels, such as coal or natural gas," it said.

"Hydroelectric power is a domestic source of energy, allowing every country and province to produce its own energy without being reliant on international fuel sources, which are costly and unpredictable," said ICST Patron Shahid Rasheed Butt in a statement.

He said energy generated through hydroelectric power relied on the water cycle, which was driven by the sun, making it a renewable power source, hence it was a more reliable and affordable source than fossil fuels that were rapidly depleting.

"Hydroelectric power needs reservoirs that offer a variety of recreational opportunities, notably fishing, swimming and boating," Butt said.

Most power installations are required to provide some public access to the reservoir to allow the public to take advantage of these opportunities, he added.

The ICST patron, building a case for hydel power, said some hydroelectric power facilities could quickly go from zero to maximum output, which was not the case in the electricity generated through fossil fuel.

"Hydroelectric power plants can supply electricity to the grid immediately; they provide essential back-up power during major outages or disruptions."

Hydroelectric power provides a number of benefits, such as flood control, irrigation and water supply, he added.

http://tribune.com.pk/story/1147386/clean-energy-govt-asked-not-ignore-hydroelectric-power

NEWS COVERAGE PERIOD FROM JULY 11TH TO JULY 17TH 2016 WITH ZERO ALLOCATION, THAR PROJECT CLOSE TO BEING LEFT HIGH AND DRY The Express Tribune, July 15th, 2016.

Z Ali

HYDERABAD: With a sharp reduction in funds in fiscal year 2015-16 and zero allocation this budgetary year, government's much touted Thar underground coal gasification (UGC) project has been left high and dry.

While its promising power generation capability remains far from being harnessed, the employees after having worked for several years confront the outlook of either continuing their jobs without pay or being laid-off.

"We are left with hardly enough funds to manage salary payment for two months," Dr Muhammad Shabbir, managing director of the project, toldThe Express Tribune.

The federal budget for 2016-17 did not allocate funds for the project, which is headed by nuclear scientist Dr Samar Mubarakmand. In the previous financial year [2015-16] only Rs300 million, from Rs1.2 billion earmarked for the project, were released, according to the MD.

Mubarakmand clarified that the government had not formally conveyed that the project is being shelved.

The pilot power production of 8 megawatts began in May, 2015. But the project's commercial production of 100MW, as per the original plan, is yet to obtain the government's nod of approval.

Another employee, who requested anonymity because he is not allowed to speak to the media, said that the administration has tacitly conveyed that they will not be able to pay us beyond September. "We have come to know through sources that a Rs40 million tender for a rig has been stopped so that salaries for one or two more months after September can be paid from this amount," he told The Express Tribune.

Around 250 people are employed in the project and a majority of them live in the project's colony in Islamkot taluka of Tharparkar district. A sum of up to Rs17 million is spent on the salaries, in addition to expenses on running the generation plants, residential colony and meeting other expenditures.

The UGC project was approved in 2010 with a funding of Rs8.8 billion to produce 100 MW of electricity. It soon hit a snag and the funds as well as the generation target were drastically slashed.

But, the UGC team slogged through the financial bottlenecks and after years of striving got approval in 2014 for the pilot power generation of 8MW, the production of 5MW began in May, 2015. Presently, the UGC is producing around 1.5MW to meet the project's electricity requirements.

In the last six years only around Rs3 billion have been released while the project cost has increased due to the delay.

The underground coal gasification refers to the process of turning the coal into synthetic gas or syngas without open pit mining of the resource.

According to the MD, the electricity will cost between Rs6 to Rs7 per unit at the current cost of production. "It's much cheaper than the cost of power generation from open pit mining."

http://tribune.com.pk/story/1142071/underground-coal-gasification-zero-allocation-thar-project-close-left-high-dry/

GAS CONSUMERS LIKELY TO BEAR HIGHER MARK-UP COST AS PAKISTAN ATTEMPTS TO EXECUTE GWADAR LNG PIPELINE

The Express Tribune, July 15th, 2016.

Zafar Bhutta

ISLAMABAD: The consumers of gas in Pakistan will suffer as the Economic Affairs Division (EAD) is expected to further lend the money borrowed from China at a higher mark-up in an attempt to execute the Gwadar liquefied natural gas (LNG) pipeline project, officials say.

The Gwadar pipeline has been planned as an alternative to the Iran-Pakistan (IP) gas pipeline that faced international sanctions. The former could be connected to the IP pipeline after the lifting of restrictions.

China Petroleum Pipeline Bureau has been designated by the Chinese government to work on the Gwadar project and arrange 85% of financing. According to the officials, Chinese banks have offered financing at Libor plus 2.25%.

Pakistan has clinched the pipeline deal at a lower price as following negotiations China Petroleum revised the cost downwards to \$1.3 billion compared to \$1.5 billion quoted in the financial bid given to Inter-state Gas Systems (ISGS). The two sides have already initialed an agreement.

An official revealed that the EAD would further lend the financing acquired from China to ISGS at 15% mark-up for laying the LNG pipeline.

"Gas consumers will bear the cost of mark-up that will be included in gas prices," he said, adding the Pakistan Atomic Energy Commission had also been facing a similar problem but it arranged a direct loan from China for setting up nuclear power plants in the country.

However, the officials pointed out, the Ministry of Finance has barred the Ministry of Petroleum from acquiring loans directly from Exim Bank of China and asked to process the loans through the EAD.

As a result, Pakistani consumers will not only pay the cost of loan repayment including mark-up to the Chinese bank but will also pay mark-up to the EAD.

According to the officials, the EAD is giving the loan at a higher mark-up because of fluctuations in currency rates.

The revised cost of the Gwadar pipeline is even lower than the expenses being incurred by the gas utilities – Sui Northern Gas Pipelines and Sui Southern Gas Company – on extending their pipeline networks to enhance the transmission capacity to 1.2 billion cubic feet per day.

The gas utilities are spending \$1.1 billion on expanding the pipeline networks that amounts to \$34 per inch metre. The cost of building the Gwadar LNG pipeline stands at \$32 per inch metre.

The Chinese company will also construct an LNG terminal at Gwadar Port on the build-and-operate model and it will be able to handle 600 million cubic feet of LNG per day.

"The government will negotiate with the Chinese company a tolling fee keeping in view the fee for the other two LNG terminals," the official said.

Elengy Terminal Pakistan Limited, a subsidiary of Engro Corporation, is running the first LNG terminal at Port Qasim with a fee of 66 cents per million British thermal units (mmbtu).

For the second LNG terminal at the port, the contract has been awarded to Pakistan GasPort Limited at a tolling fee of 41.77 cents per mmbtu.

The previous Pakistan Peoples Party-led government had imposed gas infrastructure development cess on the consumers for laying gas pipelines and so far Rs183 billion has been collected.

However, the current PML-N government has spent the entire collection on metro bus schemes and nothing is left for implementing gas import projects.

http://tribune.com.pk/story/1142072/loan-lng-pipeline-gas-consumers-likely-bear-higher-mark-cost/

### CNG SECTOR GEARS UP TO PRIVATELY IMPORT LNG

The Express Tribune, July 17th, 2016.

Salman Siddiqui

KARACHI: The Compressed Natural Gas (CNG) sector is all set to start the import of Liquefied Natural Gas (LNG) 'privately' in the next two-three months.

This will enable CNG stations to remain open 24 hours a day and seven days a week nationwide, industry officials told The Express Tribune on Saturday.

"We have completed almost 95% work on this front [importing LNG]," said Ghiyas Abdullah Paracha, chief executive officer of Universal Gas Distribution Company (UGDC).

UGDC (Private) Limited is a special vehicle firm set up with the aim to import LNG, market and sell it to CNG fuel stations nationwide that have been troubled with gas shortage.

The Oil and Gas Regulatory Authority (Ogra) awarded it the licence on February 22, 2016. Earlier, Economic Coordination Committee of the Cabinet and the Ministry of Petroleum and Natural Resources had also given their approvals.

The company has met the basic requirements of importing the gas in the private sector. These requirements include, "acquiring the licence and signing of the agreements with SSGC (Sui Southern Gas Company Limited) and SNGPL (Sui Northern Gas Pipelines Limited)," he said.

Agreements with two state-owned gas utility firms were a must as without availability of their infrastructure, the dispatch of gas to CNG pumps was impossible.

Paracha said if no change in government policies takes place in the next one month and working on import front goes smooth then "we will be ready to start the import of gas in the next one month".

Meanwhile, an official said that no agreement has yet been signed between CNG people and Elengy Terminal for the imports, he said.

Pakistan government last year signed an agreement with Qatar Gas to import LNG for the next 15 years at the rate of 13.35% of Brent crude oil. However, it would not be necessary for a private importer to import it from Qatar Gas. It may import it from anywhere in the world via any firm, he said.

Paracha, who is also former chairman of All Pakistan CNG Association, said they are aiming to import 100mmcfd to end the shortfall at CNG pumps. The Elengy Terminal at Port Qasim is the only one terminal in the country where LNG is imported. It has the capacity to import a maximum of 400mmcfd in a day.

He said if all the 2,000 CNG pumps in the country remain open for 24 hours and seven days a week then they would initially need 220 to 230mmcfd. Later on, the requirement may decrease to 350mmcfd per day.

At present, around 800 CNG pumps remain open 24/7 in Punjab with the availability of 40-45mmcfd imported LNG on SNGPL infrastructure.

He said around 1,300 pumps were ready to do their part in importing and selling the gas. "A ship carrying 2,900mmcfd gas can be imported at a cost of Rs2-2.25 billion," he said.

The cost for import is being arranged with the availability of advances and equity from CNG pumps and bank loans.

http://tribune.com.pk/story/1143346/cng-sector-gears-privately-import-lng/

NEWS COVERAGE PERIOD FROM JULY 3RD TO JULY 10TH 2016 CANADA TO SET UP SOLAR PLANTS IN BALOCHISTAN Dawn, July 3rd, 2016 QUETTA: The governments of Canada and Balochistan have signed an agreement to set up solar plants of 1,000MW in different parts of the province.

Using its constitutional powers devolved to it under the 18th Amendment, the provincial government held direct talks with the Canadian government for investment in the energy sector.

According to official sources, Chief Secretary Saifullah Chattah signed the agreement with the Canadian officials a few days back in Islamabad.

Under the agreement, a Canadian firm would establish 50MW plant each in different areas of the province to meet the electricity requirement.

"Twenty locations would be chosen for setting up the plants," official sources said.

The locations would be selected after consultation with parliamentary parties having representation in the Balochistan Assembly.

Sources said that soon a team of Canadian experts would visit Quetta to finalise the plan for setting up the plants.

Chief Minister Nawab Sanaullah Khan Zehri, while directing the authorities concerned for proper planning, had also asked the Balochistan Investment Board to play its due role for bringing in more investment to the province.

#### http://www.dawn.com/news/1268797

DEVELOPMENT ACTIVITIES: K-P TO DIVERT SURPLUS GAS TO POWER PRODUCTION The Express Tribune, July 5th, 2016.

Peshawar: Khyber-Pakhtunkhwa (K-P) Chief Minister Pervez Khattak has put his weight behind the provincial government and asserted that his administration has the capacity to lead the province towards economic growth.

As part of the K-P government's initiative, Khattak said special attention had been paid to making the province more economically viable where multi-faceted avenues were available for employment, growth, industrialisation and economic development.

According to the minister, the province has surplus natural gas that is planned to be provided for power generation.

He was presiding over a meeting on special initiatives and fast-track execution of projects, especially economic zones, industrialisation, infrastructure development and social sector at the CM Secretariat on Monday. It was decided to encourage Chinese investment in circular railway in Peshawar and establish K-P Insurance Company and K-P Holding Company.

"We have a lot of avenues for hydroelectric power generation and at the same time we have extra natural gas that the government has decided to divert to the industrial sector," Khattak said.

Initially, the government has identified Karak, Kohat and Rashkai for industrialisation where natural gas will be used.

"We will generate power from natural gas to run industrial units in the province," he said. "Keeping in view our past experiences with Wapda, we have managed to formulate an independent strategy."

The chief minister said his government was going to make all-out efforts for self-sufficiency in almost all sectors to reduce dependence on others.

Commenting on the industrialisation process, he said there would be one-window operation that would put the province on a fast track of economic development.

Khattak expressed the hope that public servants would make efforts to execute projects that were people friendly and would benefit the entire province.

http://tribune.com.pk/story/1136468/development-activities-k-p-divert-surplus-gas-power-production/

## IMF SEES ENERGY SITUATION IN PAKISTAN IMPROVING Dawn, July 6th, 2016

WASHINGTON: The International Monetary Fund (IMF) has predicted that the energy situation in Pakistan will continue to improve if the government maintained the current pace of reforms.

In a report released on Tuesday, IMF also gave details of the negotiations its staff held with the authorities in Pakistan before endorsing the 11th review of a three-year, \$6.4 billion Extended Fund Facility (EFF) signed in September 2013.

The review not only approved the next tranche of about \$500 million but noted that the country's short-term economic vulnerabilities had reduced and macroeconomic stability had improved.

The 85-page report also included a separate chapter on Pakistan's energy sector, pointing out that Pakistan authorities remained committed to further move ahead with the energy sector reform.

Since the start of the IMF programme, "power blackouts reduced, distribution losses were curtailed, payment collection rates increased, energy subsidies were reduced, electricity tariffs were increased, surcharges were introduced to allow for cost recovery, and the regulatory framework was strengthened," the report added.

The IMF noted that Pakistan was making additional efforts to continue strengthening the performance and monitoring of power distribution companies (DISCOs). The report pointed out that the outstanding stock of power sector arrears remains to be addressed, "new arrears are accumulating at a significantly reduced pace".

The IMF acknowledged that despite some delays, the process for notification of the FY 2015/16 electricity tariffs and for setting up multi-year tariff frameworks for DISCOs had been advancing.

It regretted that due to political opposition and social tensions, Pakistani authorities revisited their plans for privatising DISCOs and decided to move ahead with an Initial Public Offering for a minority share in Faisalabad Electric Supply Company (FESCO), to be followed by other DISCOs.

The IMF also noted that improved performance of distribution companies and favourable oil prices had helped contain the accumulation of power sector arrears. The end-March 2016 indicative targets on the accumulation of power sector arrears was met with a large margin, owing to the positive impact of low oil prices, significant strengthening in collection rates, and further loss reduction.

Half of the DISCOs met their quarterly performance targets at end-March 2016, and the authorities were taking disciplinary actions against non-compliant DISCOs as appropriate, the report added.

The IMF acknowledged that Pakistani authorities' are committed to strengthen DISCOs' performance by reducing distribution losses, increasing payment collections, and improving revenue-based load shedding and customer service.

During the review process, the IMF staff commended the strengthening of DISCOs' monitoring by the submission of their quarterly performance reports for the review and approval of the Economic Coordination Committee (ECC) of the cabinet and making them available to the public.

The IMF believed that setting up a multi-year tariff framework for DISCOs is expected to help strengthen the regulatory framework and attract investors. It endorsed the government's claim that the multi-year tariffs for FESCO, Islamabad Electric Supply Corporation (IESCO) and Lahore Electric Supply Corporation (LESCO), aimed at reducing uncertainty for investors and preparing DISCOs for private sector participation.

The multi-tariff bills would be notified with a delay by July 15, 2016 due to DISCOs' review petitions to the regulator to revise benchmark distribution losses used for FY 2015/16 tariff determination.

The authorities in Pakistan were advancing in setting a multi-year tariff framework for the remaining DISCOs, of which three have prepared multi-year tariff petitions for FY 2016/17.

The IMF also noted that Pakistani authorities were updating the power sector arrears reduction plan. The authorities' 2015 plan to limit the accumulation of new arrears and clear the outstanding stock rested in part on the planned privatisation of DISCOs.

Changes to the privatisation strategy have prompted the authorities to update the plan, in consultation with development partners, by July 15, 2016. The IMF staff supported the authorities' proposal to further tighten the indicative targets on arrears accumulation for end-June 2016, which is additional to the previous tightening in the context of the tenth review.

The report further noted that regulatory process for gas tariff determination had resumed and growing Liquefied Natural Gas (LNG) imports were strengthening supply to the domestic market. The authorities were resuming semi-annual notification of gas tariffs, key to ensure cost recovery and strengthen the regulatory framework.

They were increasing imports of LNG to tackle domestic gas shortages, with the price of imported LNG continuing to be fully passed through to consumers. The IMF staff welcomed the authorities' commitment to further reduce distribution losses, including by strengthening infrastructure and tackling gas theft.

http://www.dawn.com/news/1269350

#### **ENERGY SECTOR WOES**

The Express Tribune, July 6th, 2016.

Finance Minister Ishaq Dar recently told the Ministry of Water and Power to expedite work on ongoing energy projects as the PML-N makes a desperate attempt to keep its election promise of ending power outages by the end of its tenure.

Despite clearing billions in circular debt as soon as it came into power, the amount owed has gone up again. Power outages are still persistent and present a grim picture in rural areas, while ongoing energy projects are sometimes stalled or face cost escalations.

The import of LNG would mitigate some of the crisis, but the far-fetched promise of ending power outages is a long way off. Mr Dar conveyed the prime minister's desire for an update on the progress of the projects and gave the directive to expedite work and the power ministry gave a much-expected response — work is on track, sir.

However, in three years of the PML-N rule, very little work has been done on reforming the power sector. Most of the talk has revolved around adding megawatts to the national grid and signing new energy agreements.

While the slightly improved security situation has helped in getting foreign investors on board, the distribution and transmission networks remain obsolete. Experts claim that Pakistan doesn't have the capacity to bear additions to its electricity network because of its obsolete transmission set-up. Chunks of rural areas continue to remain off-grid and those that are connected suffer through prolonged power outages.

Cities also continue to face breakdowns. Power companies function the same way they have in the past — proving helpless and inefficient in resolving any crisis. Tariffs continue to rise to compensate for any losses that occur in any other sector of the economy, and subsidies have been rolled back.

We hope that work on ongoing energy projects is completed in the given time frame — it will take some doing — but the evidence in the past three years indicates that is an unlikely outcome.

http://tribune.com.pk/story/1137169/energy-sector-woes/

## August 2016

#### NEWS COVERAGE PERIOD FROM AUGUST 29TH TO SEPTEMBER 4TH 2016

#### AD MORE GAS ON SLIPPERY GROUND

The Express Tribune, August 29th, 2016.

Zafar Bhutta

ISLAMABAD: Admore Gas (Private) Limited – an oil marketing company – is in a sorry state as it has paid millions of rupees in penalty to the regulatory authority for failure to build critical storages in the country. The company is currently operating following a stay order from court.

Admore won in 2003 an oil marketing licence, which was confirmed after it met all the criteria. At that time, Anwer Masud Zaidi was the major sponsor of the company with 70% shareholding. He later sold 51% of shares to Aamir Waliuddin Chishti, who runs Darul Shifa hospital at Gulistan-e-Johar.

The company was required to develop oil storage facilities that could keep stocks for 20 days. Not only Admore, all oil marketing companies need to build storage tanks to meet domestic demand and stave off any threat of shortage.

However, after more than a decade, storages were nowhere to be seen, leading to suspension of Admore's marketing licence on a number of occasions.

The regulator – Oil and Gas Regulatory Authority (Ogra) – suspended the company's marketing licence in September 2011 for delay in putting in place the required infrastructure in Sindh, Khyber-Pakhtunkhwa and Balochistan to feed the retail outlets.

The regulator also slapped a penalty of Rs3 million for gross violation of terms and conditions of the licence. It told the company to ensure the development of infrastructure according to government's directives before resuming marketing activities.

Later, Ogra set aside its directives and permitted Admore to re-start marketing activities in the three provinces with orders that the company would ensure construction of storage facilities, especially in Sindh and Khyber-Pakhtunkhwa, by June 30, 2014.

It also asked the company to prepare and submit quarterly progress reports for assessing its performance.

The regulator again swung into action in October 2015 after realising that Admore had not been able to meet the commitment. Ogra stopped the company from marketing oil and running petrol filling stations in Sindh and Balochistan.

It gave clear directives, saying efforts for building the storage facilities should be stepped up to avoid any further action.

Consequently, Admore filed an appeal and gave assurances to the regulator that the company would complete work on the Daulatpur depot in Sindh by the end of December 2015.

It said the company had begun construction of the storage tank and work would pick up pace from October 19, 2015. It also agreed to pay the penalty. Thereafter, the regulator allowed Admore to resume operations and directed that the storage facility in Sindh should be developed by May 31, 2016.

However, Admore again failed to meet the deadline, prompting the regulator to suspend the company's marketing activities in the province in July 2016. It noted that Admore could not widen the storage infrastructure according to terms and conditions of its licence.

This time Admore managed to get a stay order from court against the suspension and is now operating under that order. Admore retails refined petroleum products and lubricants with more than 350 outlets across the country.

http://tribune.com.pk/story/1171498/failure-build-storages-admore-gas-slippery-ground/

#### PACE OF PROGRESS ON SAHIWAL COAL PROJECT DISCUSSED

Business Recorder, August 29, 2016

President Huwanging Shendong Power Generation Company working on Sahiwal Coal Power Plant, Wang Wenzong met Punjab Chief Minister Muhammad Shahbaz Sharif, here Sunday. Pace of progress on 1320-megawatt Sahiwal Coal Power project was discussed in the meeting. They expressed satisfaction over the pace of progress and agreed to further speed up the project.

Speaking on the occasion, the Chief Minister said that Sahiwal Coal Power project is a milestone in the friendship of Pakistan and China and this project is being completed expeditiously, which is unprecedented in the world.

He said that this project will be completed far early from its stipulated period and it is hoped that its first turbine will start generating electricity in April 2017. He said that work is being carried out in an unprecedented manner on this energy project.

Shahbaz Sharif said that this project is being forwarded speedily and project of 1320 megawatts production capacity has not been completed in such a short period in the world including China.

He appreciated the hard work of engineers and other staff of Chinese company and said that the professional capabilities and speed of Chinese company to advance the project is exemplary. He expressed the hope that this project will start generation of electricity with full capacity in the middle of next year.

President of Chinese company working on the project, Wang Wenzong said that this project will start power generation in the middle of next year. He said that under the vision of Chief Minister Shahbaz Sharif, no effort will be spared in running first turbine in April 2017.

He said that Chief Minister Shahbaz Sharif has extended all out facilities and cooperation, upon which, he is thankful to him. The Chief Minister played an important role in forwarding this project through hard work and determination, he added.

Chinese delegation included Company Vice President Liu Jie, Managing Director Sahiwal Project Liu Chao and other officials. Provincial Minister for Finance Ayesha Ghaus Pasha, Chairman Planning & Development, Inspector General Police, Secretary Home, Secretary Energy and concerned authorities were present on the occasion.

 $\frac{http://www.brecorder.com/fuel-a-energy/193:pakistan/80104:pace-of-progress-on-sahiwal-coal-project-discussed/?date=2016-08-29$ 

GOVT TURNING THE TIDE AGAINST POWER OUTAGES, SAYS PM NAWAZ The Express Tribune, August 31st, 2016.

Islamabad: Pakistan is on course to making giant strides in its battle against load-shedding by adding significant power to the national grid through a string of power projects, Prime Minister Nawaz Sharif said on Tuesday.

"Never in the country's history has such huge investment been made in the energy sector. The government is not only working to meet the power shortfall but is also catering for the future energy needs of Pakistan," PM Nawaz said on Tuesday, while chairing a meeting of the Cabinet Committee on Energy.

The premier said increased power generation will also contribute towards economic growth, employment generation, increased industrial activity and foreign investment.

"I will personally monitor the progress on the ongoing power projects across the country and will also perform onsite visits of all power projects to ensure their timely completion," he said, according to a press release issued by the PM House.

Earlier, Water and Power Secretary Younus Dagha gave a detailed briefing on the timeline for completion of the ongoing power projects in Pakistan. The premier was briefed that the power projects will be completed before March 2018.

The projects that will be completed between the given timeline include three LNG power plants – Bhikki, Haveli-Bahadur, Baloki – of 3,600MW, Chashma 3 & 4 Nuclear of 340MW each, Guddu Gas of plus 400MW, Nandipur Gas of plus 100MW and Sahiwal Coal of 1,320MW.

The projects slated to complete by March 2018 also include various wind and bagasse plants of 350MW, Patrind HPP Hydel of 147MW, Faisalabad Gas of 250MW, Neelum Jhelum of 969MW, Tarbella 4 Extension of 1,410MW and Port Qasim Power Plant of 1,320MW.

The meeting was assured that a total of 11,131MW will be made available to the national grid by the March of 2018. The participants were told that all transmission line projects are on track to evacuate ongoing power projects, and billions of rupees have been invested in the existing distribution network to bear the load of additionally generated power through completion of ongoing power projects.

The meeting was attended by Punjab Chief Minister Shahbaz Sharif, Finance Minister Ishaq Dar, Petroleum Minister Shahid Khaqan, Water and Power Minister Khawaja Asif and other senior officials.

http://tribune.com.pk/story/1173184/cabinet-committee-energy-govt-turning-tide-power-outages-says-pm-nawaz/

THAR BLOCK-II: SINDH CM REVIEWS PROGRESS ON COAL POWER PROJECT The Express Tribune, September 3rd, 2016.

KARACHI: Sindh Engro Coal Mining Company (SECMC) CEO Shamsuddin Shaikh has said that they have managed to complete basic engineering work on two coal-fired power plants of 330 megawatts each and procurement activities are ahead of schedule with the placement of orders for a boiler, steam turbine and turbine auxiliaries.

He revealed this on Friday at a meeting chaired by Sindh Chief Minister Syed Murad Ali Shah, which was held to review progress on the mining operation started by SECMC in Thar coal block-II for developing a power project, which would generate 660MW by 2019.

Briefing the chief minister, Shaikh said mining operation had started on a war footing as 6% progress had so far been achieved against the planned 5.3%.

"We have reached mining depth of 31 metres, big mining equipment will reach next month and drilling of de-watering wells and other infrastructure is in progress," he said.

Chief Minister Shah urged the CEO to provide jobs to as many locals as possible and also create employment opportunities for women. At present, out of the 2,028 employees working on the project, 647 are Chinese, 997 belong to Thar and 384 from other areas.

The chief minister approved the setting up of a school over two acres of land near Thar Lodges, Islamkot so that local residents could receive proper education.

He also directed the inspector general of police to provide more security at the Thar coal field block-II for the Chinese engineers.

Home Secretary Riaz Memon informed the meeting participants that 35 Rangers personnel had been deployed for the security of foreigners working at the project site. In addition to these, 134 policemen have also been stationed there.

More police force would be deployed until the creation of a special force of 2,000 ex-army men for CPEC projects, Memon added.

http://tribune.com.pk/story/1175058/thar-block-ii-sindh-cm-reviews-progress-coal-power-project/

BILATERAL TIES: TURKISH INVESTORS ASKED TO EXPLORE ENERGY SECTOR The Express Tribune, September 3rd, 2016.

ISLAMABAD: Prime Minister Muhammad Nawaz Sharif on Friday invited Turkish investors to explore Pakistan's infrastructure and energy sectors for pouring investment into these projects.

Talking to Foreign Economic Relations Board Turkey (DEIK) Chairman Omer Cihad Vardan, who was in Pakistan to attend the Pakistan-Turkey Business Roundtable being held as a follow-up to the recent visit of Punjab Chief Minister Shahbaz Sharif to Turkey, the premier said Pakistan and Turkey had always lent support to each other through the most difficult times.

"Pakistan and Turkey are brotherly countries with a common history and they should make it a priority to strengthen their relations in every aspect," he added.

http://tribune.com.pk/story/1175105/bilateral-ties-turkish-investors-asked-explore-energy-sector/

THAR COAL FIRM CLAIMS GOVT PRESSURING IT TO START POWER GENERATION BEFORE 2018 POLLS

Dawn September 4th, 2016

HYDERABAD: The Sindh Engro Coal Mining Company — a joint venture of the Sindh government and M/s Engro Powergen Limited (EPL) — has said that it has undertaken the launch of the first of six 660-megawatt power generation unit at Thar by June 3, 2019 but has been under immense pressure from the federal and Sindh governments to ensure contribution to the national grid before the 2018 general elections.

Chief Executive of the company Shamsuddin Sheikh, giving a detailed presentation on the status of the Thar coal project's block-II in a local hotel on Saturday, said: "There is immense pressure of federal and Sindh governments for early production of energy but I cannot say whether it will be ready ahead of the 2018 general elections." Citing the agreement between his company and the authorities concerned, he said that if power generation did not start by June 3, 2019, the National Transmission Dispatch Company (NTDC) could penalise the EPL and impose a fine of \$1.5 million per month.

He claimed that the progress rate at the project was six per cent as against the target of 5.3 per cent, thus satisfactory. The project, he said, was part of the China Pakistan Economic Corridor (CPEC) and also the largest one in the private sector with \$2 billion (over 50 per cent share) investment having been put in by the Sindh government.

Mr Sheikh said that the project envisaged six coal-powered generation plants of 660MW capacity each. By June 3, 2019, one of them would start contributing to the national grid. He said that open-pit mining was in full swing at the moment and three aquifers were to be de-watered by extracting groundwater at two different sites. Otherwise coal available at a depth of 180 metres could not be extracted.

Regarding the expected start of coal-power generation at the block -II, he said: "The first 330MW unit [of the 660MW plant] will become operational by the end of 2018 and the second one by early 2019."

The local population would obviously be affected but the company would ensure that the effect could have an overall positive impact.

"Thar Foundation is in the making to deal with the health, education, livelihood support, infrastructure development and social preservation issues. The forum emerge within this month to make required interventions," he said,

Speaking about the manpower involved in the project, he said that out of the total 2,028 people, 1,000 were Tharis, 384 non-Tharis and 650 Chinese. Eventually, the strength would go up to 5,000, around 50 per cent of them skilled ones. "We need mining engineers but there is only one university — the Mehran University of Engineering and Technology — that offers the mining discipline.

We have sponsored one pre-engineering student's education who is from Ghotki district. We will select 20 more top pre-engineering students whose education expenses will be borne by us with a view to hire them for the project," he said. He held out the assurance that the unskilled labour requirement would be met totally from Tharparkar.

Mr Sheikh informed the audience that 18,000 acres of land for the block-II was being acquired and the Sindh Engro Coal Mining Company had already paid Rs770 million (80-90 per cent of the total cost of 6,000 acres).

He conceded that procedural delays affected 15 per cent of landowners. He pledged that displaced families would be resettled and basic amenities and essential infrastructure would be provided to them keeping in view the peculiar nature of social and culture dynamics of the area. "Displaced people of two villages, Sehnri Dars and Thariyo Halepoto, are to be resettled and their lands along with grazing fields," he said.

The EPL chief observed that the environmental quality standards (EQS) of World Bank which were stricter than the national EQS were being adhered to at the project sites. "Planning for vulture conservation is also under way," he added.

In reply to a question, Mr Sheikh categorically stated that there was no wildlife sanctuary [falling with in the project sites] in Thar.

Regarding hazards relating to the land (about 1,400 acres) where groundwater is to be stored, he said the land would be affected until water was used in power plant. He said two sites — Gorano and Dukhar Chhao — were identified and cleared under the Environmental Impact Assessment (EIA).

#### http://www.dawn.com/news/1281822

NEWS COVERAGE PERIOD FROM AUGUST 22ND TO AUGUST 28TH 2016 PAKISTAN MUST LOOK FOR MULTIPLE CHOICES TO SECURE ENERGY SUPPLIES The Express Tribune, August 22nd, 2016.

Zafar Bhutta

ISLAMABAD: The United States is following such policies around the world, particularly in this strategic region, that can serve its economic and political interests and Pakistan has largely failed to escape that influence.

Energy security means national security and the question remains whether Pakistan should compromise on it.

Most American initiatives to forge economic cooperation with Pakistan are accompanied by preconditions that go against Pakistan's national interests. The US is persistently trying to have its say in Pakistan's energy matters as it is opposed to the laying of Iran-Pakistan (IP) gas pipeline and Russia-sponsored North-South liquefied natural gas (LNG) pipeline.

Just before the end of Pakistan Peoples Party's (PPP) government in the first half of 2013, the two countries inaugurated the IP project but later it was put on the backburner due to mounting US pressure. Though sanctions against Iran have been lifted, Pakistan is still unable to push ahead with the project.

Speaking at the 6th Pakistan Energy Forum 2014, former petroleum secretary Dr Gulfraz, who had been part of negotiations on two gas pipelines in 1997, revealed that Afghan warlords had given assurances to Pakistan that they would ensure security of the Turkmenistan-Afghanistan-Pakistan-India (Tapi) pipeline during its construction and later gas flow through the pipeline.

However, he said, consortium leader Unicol pulled out of the project following directives from the US State Department, leaving Pakistan in a critical situation.

Though Pakistan had secured gas supply from Turkmenistan at a cheaper rate with the signing of a pricing framework, the project was delayed due to the change in US stance, he said.

Similarly, Pakistan was close to clinching the IP pipeline deal at that time, but the US offered civil nuclear technology to India, which was part of the IP pipeline earlier, and that led to Delhi's withdrawal from the project, which disrupted the overall gas import plan.

Now, two gas pipeline projects are strategically important for Pakistan. Of these, the IP scheme seems to be the most viable as sanctions are gone.

Not only gas, Iran has huge reserves of oil as well. At present, Pakistan meets most of its oil needs through imports from Gulf Arab partners – Saudi Arabia, the United Arab Emirates and Kuwait.

However, it makes sense for Pakistan to forge energy ties with Iran as it sits very close to the Iranian oil and gas deposits. But these ties run against US interests.

Over the years, the US has undertaken two initiatives to keep Pakistan away from energy cooperation with Iran. First, it gave civil nuclear technology to India and then it encouraged Pakistan to sign an LNG deal with Qatar, a strategic partner of the US in energy supplies.

Qatar has huge gas reserves where US and European companies are major stakeholders in LNG trade. This prompted the US to push Pakistan to ink the LNG deal with Qatar and abandon the IP project.

In recent years, the US has been actively promoting the Tapi pipeline in an effort to drive Pakistan away from the IP project. Experts feel Pakistan is facing the same situation that it experienced in 1997 while working on the Tapi project because of the change in US priorities.

However, they fear after the withdrawal of all US forces from Afghanistan, Washington will again be opposing the Tapi pipeline.

Pakistan and the US have also been engaged in direct energy cooperation. In a meeting on energy cooperation held in 2014, the US offered to conduct another study to assess the shale oil and gas resources in Pakistan.

The first study was conducted by the US Agency for International Development (USAID), but some areas of Balochistan, Sindh and Khyber-Pakhtunkhwa were not covered.

In this assessment, the risked technically recoverable reserves were estimated at 95 trillion cubic feet of shale gas and 14 billion barrels of shale oil.

Now, Pakistan has agreed to the offer of second study, which will also be undertaken by USAID.

Though the technology is available in advanced economies for tapping the shale reserves, environmental concerns, requirement of a huge quantity of water and high cost of drilling are the real challenges.

Moreover, the time is not ripe for shale oil and gas exploration due to low prices. Even several US companies have put off work on their projects. In Pakistan, the exploration companies need a higher price of \$12 per million British thermal units to tap the shale deposits.

Again, the question is why the US is pushing Pakistan to explore the shale gas reserves.

Background interviews with officials reveal that the US in this case too wants to drive attention away from Iran, though several EU and US companies are going to win projects in the Gulf country.

Pakistan and the US have also launched a clean energy programme under which the former is setting up solar and wind-based projects.

It is time for Pakistan to reshape its policy and focus on the energy security programme, which will also lead to national security. The country has suffered a lot due to the tilt towards Washington and it should now pursue multiple options to secure future energy supplies.

http://tribune.com.pk/story/1167165/time-take-decision-pakistan-must-look-multiple-choices-secure-energy-supplies/

POWER GENERATION LICENCE SOUGHT FOR 700MW PLANT IN KARACHI The Express Tribune, August 24th, 2016.

Salman Siddiqui

KARACHI: The power industry regulator has accepted an application of K-Electric and two Chinese companies that are seeking power generation licence for an imported coal-based project of 700 megawatts being set up in Karachi.

K-Electric, China Datang Overseas Investment Company and China Machinery Engineering Corporation (CMEC) are sponsors of a special purpose vehicle – Datang Pakistan Karachi Power Generation (Private) Limited, which has submitted the application for the grant of licence from the National Electric Power Regulatory Authority (Nepra).

"Datang Pakistan intends to supply electric power generated from its plant to K-Electric," said Nepra in a notification. The electricity will be sold for a period of 30 years from the commercial operations date.

According to the application, 51% of equity stake in the project is owned by China Datang Overseas Investment Company, 25% by CMEC and the remaining 24% by K-Electric.

The sponsors are developing two plants of 350-megawatt each based on imported coal under an upfront tariff regime prescribed by the regulator. The cost of the project is estimated at \$967.23 million comprising 30% equity and 70% debt. The project will be developed in the vicinity of Port Qasim, Karachi and is expected to start production by December 2020.

Datang Pakistan has engaged both foreign and local banks for project financing. China Development Bank has already issued a term sheet of around \$750 million to the sponsors. Sinosure has also given its preliminary letter of intent to the sponsors to financially support the project.

For local financing, Habib Bank, National Bank of Pakistan, Bank Alfalah, Meezan Bank and Faysal Bank have expressed a strong interest in acting as a consortium of local currency lead arrangers.

In order to transmit power from the project, the electricity purchaser – K-Electric – has undertaken a \$400 million transmission project called TP-1,000, say application documents. Financing for the transmission line has been finalised and construction has begun.

The three sponsors of the power project have agreed to take coal supply from mines owned by the majority stakeholder – China Datang Overseas Investment Company.

"China Datang has strategic coal-mining interests in Indonesia and is already supplying coal to most of its plants across the region and in China," the documents said.

Besides Indonesia, the company also has the choice to import coal from South Africa. It may consume domestically produced coal in the beginning. Light diesel oil is the secondary and back-up fuel for the thermal power project. This option could be utilised only in emergency cases and start-up stages.

http://tribune.com.pk/story/1168767/nepra-accepts-request-power-generation-licence-sought-700mw-plant/

## APPLE BECOMES A GREEN ENERGY SUPPLIER, WITH ITSELF AS CUSTOMER Diane Cardwell

International New York Times, Aug. 23, 2016

PALO ALTO, Calif. — The words are stenciled on the front of the Apple Store, a glass box sandwiched between a nondescript Thai restaurant and a CVS pharmacy in downtown Palo Alto: "This store runs on 100 percent renewable energy."

If Apple's plans play out, it will be able to make that claim not only for its operations throughout California but also beyond, as the company aims to meet its growing needs for electricity with green sources like solar, wind and hydroelectric power.

Like other big companies before it, including Walmart and Google, Apple recently received a federal designation for its energy subsidiary that allows it to become a wholesale seller of electricity from coast to coast. In effect, Apple is creating its own green utility company, although the main customer is itself.

The motives may be economic as much as they are environmental. As a wholesaler, Apple could reduce the cost of its electricity load, which reached 831 million kilowatt-hours in the last fiscal year — enough to power about 76,000 homes for a year. But like a growing number of corporations, Apple is intent on reducing carbon dioxide emissions from electricity production — one of the biggest sources of greenhouse gases that contribute to global warming.

In one ambitious venture, Apple has contracted with First Solar to begin buying a little less than half of the power later this year from California Flats, a solar energy farm now under construction. Under the terms of the deal, Apple will pay \$848 million for the electricity over 25 years and receive the farm's total output by the end of the agreement. It is one of largest commercial clean energy contracts yet.

Lisa Jackson, the former administrator of the Environmental Protection Agency who is now the Apple executive overseeing environmental policy, social initiatives and worldwide government affairs, said she hoped Apple could serve as a model for the many other big corporate power users that are now embracing clean energy.

"This is just another sort of innovative way to get that power onto the grid so we don't have to take the California grid-mix default, which still includes fossil fuel," Ms. Jackson said.

Although much of Apple's manufacturing is done offshore, it still has extensive needs for electric power in the United States — and not only for the sprawling new corporate campus it is building at its headquarters in Cupertino, Calif., and its 270 retail stores around the country.

One of Apple's biggest demands for electricity comes from operating the computing cloud through which it sells apps, music and videos to users of its iPhones, iPads and Mac computers.

Apple's move comes as prices for renewable energy continue to plummet. And signing long-term contracts allows businesses to shield themselves from potentially higher, more volatile charges from a power company. Apple would not say how much it was paying for California Flats's energy, but Ms. Jackson said last year at a Wall Street Journal conference that it was less than what it paid for commercial power.

She said she expected the company to save hundreds of millions of dollars over the life of the contract. Google, which received its federal energy wholesale designation from the Federal Energy Regulatory Commission in 2010, is a big proponent of the approach Apple is now taking.

"Running any kind of business, having predictability in terms of your operating costs can be very important," said Gary Demasi, director of operations for data center energy and location strategy at Google, which has been a leading investor in and user of clean energy. "Renewable energy, from a cost perspective, is now competitive with other forms of energy, much more so than it was a few years ago."

In the United States, the generating capacity of corporate clean energy projects has more than doubled each year since 2013, according to the Business Renewables Center at the Rocky Mountain Institute, which tracks publicly announced deals. In 2015, 11 companies signed up for 3.23 gigawatts' worth of projects, roughly the equivalent of five coal plants and up from 1.18 gigawatts the year before.

Executives face greater pressure from shareholders and customers to show that they are doing their part to fight climate change. At the same time, corporate energy use has exploded, driven in many cases by the ravenous demands of the data cloud.

"We are all becoming very large energy players, and this is a shift," said BrianJanous, director of energy strategy at Microsoft. "Energy is not something that Microsoft or Amazon or Google really ever had to think much about prior to the advent of the cloud."

Helping drive that shift are environmental groups like the World Resources Institute. In May, it helped create the Renewable Energy Buyers Alliance, a coalition of nonprofits that has more than 60 corporations in its network, including McDonald's and General Motors, as well as Google and Walmart

Electric utilities have begun to respond by creating products and services to meet the corporate demand for clean energy, said Letha Tawney, the World Resources Institute's director of utility innovation.

One such product is a green tariff. It was pioneered in North Carolina by Duke Energy and is now under consideration in about a dozen states. It allows companies to designate that they are paying for a renewable energy supply.

Another is a synthetic or virtual power purchase agreement, under which companies contract to buy the output of a clean power plant, as Apple is doing with California Flats.

Although the companies say these arrangements mean they are running their businesses on renewable energy, in reality the clean power often does not flow directly to their facilities. They typically buy the renewable energy in amounts to match what they draw from the grid — a system of swaps that Ms. Jackson of Apple likened to using an A.T.M.

"The dollar you deposit in the bank might not be the exact same bill that you get out," she said.

Robert F. Shapiro, a partner at the law firm Chadbourne & Parke who focuses on project finance and energy, describes it as meaningful symbolism.

"They're actually getting power from their local utility, which may be coal," Mr. Shapiro said. "But they're deemed to have put into the world carbon-neutral energy, which they are deemed to have used for their load."

To keep track of the clean energy credits, power generators work with registries to issue numbered certificates.

"The power flows into the grid. The electrons go where they go," Ms. Tawney said. "But because there's a renewable-energy certificate, no one else can claim the same zero-carbon benefit."

Such complexities are necessary, executives and clean energy advocates say, because it is not often feasible to install enough renewable-power generators at corporate sites to meet companies' full energy needs.

Walmart, despite having installed solar panels, wind turbines and fuel cells at stores and distribution centers, can nonetheless meet only about a third of those operations' energy needs. So it also buys renewable energy from generators and utilities, said David Ozment, director of energy at Walmart stores.

Procter & Gamble, another member of the energy buyers' alliance, has arranged to purchase all of the steam from a biomass generator under construction at a plant in Georgia where it makes Charmin toilet paper and Bounty paper towels, said Jack McAneny, the company's director of sustainability.

But that was possible, he said, only because of the plant's location near a source of waste wood and pulp for fuel and the cooperation of P&G's partners. Among those partners are the local utility, Georgia Power, which will buy the electricity from the generator for its customers from Constellation, the company that developed and will own and operate the generator.

At Apple, where the purchase or production of renewable energy has more than tripled since 2012, the company would prefer to not have to go to great lengths to ensure a clean energy supply, Ms. Jackson said. But the public energy grid is simply still too dependent on carbon-based fuels to make that possible.

"If we had our preference, we'd just be able to say, 'We want 100 percent green power everywhere we use power," Ms. Jackson said. "The best would be if we could run every one of our stores, every one of our data centers, every office complex, every building we have, on 100 percent renewable — and if we didn't have to spend a whole bunch of our time and energy figuring out how to get that done."

http://www.nytimes.com/2016/08/24/business/energy-environment/as-energy-use-rises-corporations-turn-to-their-own-green-utility-sources.html

THAR COAL PROJECT: 'RESERVOIR BEING BUILT WITHOUT OFFICIAL APPROVAL' The Express Tribune, August 26th, 2016.

HYDERABAD: The Sindh Engro Coal Mining Company's (SECMC's) drainage reservoir, a part of its \$2billion coal mining and electricity generation project in Tharparkar, is being built without official approval. This was disclosed on Wednesday during the hearing of a petition filed by residents of the project site area in the Sindh High Court (SHC).

"No project shall be initiated before completion of the formalities and sanction or approval of the competent authorities," reads the written response submitted by the Sindh Coal Authority (SCA) in the SHC. Any construction of the pond at alleged Ghorano village shall be illegal and without jurisdiction, according to SCA's written response

The project, Effluent Disposal Scheme (EDS), includes a 37.5-kilometre-long pipeline of 50 cusecs and two reservoirs at Dukkur Cho and Ghorano sites in Thar coal and mining block II. The pipeline will carry brackish subsoil water, pumped out from the coalfields to enable the coal mining, to the reservoirs referred to as 'dams' by the petitioners.

The petitioners, Lakho Bheel and others, who belong to Ghorano, maintained that they are small growers with land in Islamkot's villages, Shiv Jo Tar, Ghorano, Ahsan Shah Jo Tar and Suleman Haja. They added that the project has been initiated without obtaining Environmental Impact Assessment (EIA) and will adversely affect 15 villages with a population of around 15,000 people and 20,000 livestock animals.

They also cited the project as a pollution threat to a wildlife sanctuary in Rann of Kutch and, consequently, a violation of the Sindh Wildlife Protection Ordinance 1972.

The SECMC, in its earlier reply in the SHC, asserted that approval from the Sindh Environment Protection Agency (SEPA) was duly obtained on February 10, 2016, for construction of the pipeline and two reservoirs. The company claimed that the petitioners did not raise objections against the project during the environmental hearing that was held prior to SEPA's approval.

According to SECMC, the use of Ghorano reservoir will reduce after the power plant becomes operational by 2018. Up to 75% of the extracted water will be used to meet requirements of the power plant instead of being disposed in the reservoirs. "Ghorano reservoir will no longer be required for storage and containment purposes once the power plant is operational," SECMC had submitted in the SHC.

However, SCA clarified that only one site at Dukkur Cho has been approved by SEPA for the reservoir project. The authority informed the court that 18 kilometres of the 37.5-kilometre-long pipeline have been laid, while the remaining work cannot continue due to opposition by the local villages.

The date for the next hearing of the case will be decided in the SHC's registrar office, even though the petitioner's lawyer, Advocate Ayatullah Khwaja, requested the court to fix the next date in early September.

http://tribune.com.pk/story/1169968/thar-coal-project-reservoir-built-without-official-approval/

#### N-POWER PLANTS IN KARACHI

Business Recorder, August 28, 2016

After having failed to create premonitions and misgivings in recent past about construction of two coastal nuclear power stations near Karachi, namely Kanupp-2 and Kanupp-3, the anti-nuclear lobby has once again launched a tirade against the project, which has already suffered significant delays due to strong vested interests trying to giving it a controversial twist.

The fact is that the Pakistan Nuclear Regulatory Authority (PNRA), an independent body which follows best practices and international standards, has approved the Preliminary Safety Analysis Report (PSAR) related to the project, after conducting a painstaking exercise spanning over a period of more than eighteen months, following national and

international parameters taking into consideration all consequences and public health safety considerations, and fully associating the International Atomic Energy Agency (IAEA).

Promoting nuclear power generation is imperative to overcoming energy crisis, besides its being critically important from a strategic point of view. Nuclear power is globally recognised as a key energy source since enormous supply of electricity is gained from a small quantity of uranium.

It is safe, cost-effective, reliable, sustainable, continuous base-load power, more economical and efficient and has no emission of greenhouse gases. After a short pause since Fukushima-Daiichi plant disaster in 2011, Japan is returning to nuclear power generation. As a policy, Sendai nuclear power plant located in southern Japan has restarted its operations under new safety rules, while approval to restart another four reactors in Japan, in the first phase, has also been given.

The Japanese government has plans to bring share of nuclear power generation in total energy mix to about 22% by 2030.

Pakistan plans to establish progressively cumulative nuclear power generation capacity up to 8,800 MWe by 2030, whereas Pakistan Vision 2050 has set the target of adding 40,000 MWe nuclear power to total energy mix. On the other hand, there are 21 reactors in operation in India with an installed capacity of 5,302 MWe, while another 4,300 MWe nuclear power generation capacity would be added to the system this year.

India also plans to construct additional 35 reactors by 2024 countrywide with a total capacity of about 40,000 MWe. Intriguingly, most of these installations or projects are not covered under the IAEA safeguards. As nuclear radiation/contamination knows no borders, population in Pakistan also remains at risk in case a nuclear accident occurs in India. Nonetheless, nothing is said in Pakistan about the possible danger!

Writers have ignored the fact that country has an impeccable record of safety and security in operating nuclear power plants since 1972, under safeguards of the IAEA that has repeatedly shown satisfaction over safety measures adopted, whereas Pakistan is party to the Convention on Nuclear Safety and to two international conventions for early notification and assistance.

Currently, Pakistan is ranked 22nd out of 25 countries on the Nuclear Materials Safety Index in terms of safety and security, and is placed above India, which is also manifested in the fact that Kanupp-1, which was commissioned in 1972, has been safely operating beyond its initial design life.

Nuclear safety record the world over is impressive, and three accidents occurred during a long history of more than six decades of operating nuclear power plants. Comparatively, there have been more disasters in coal mining, oil and gas explorations and dam failures. In fact, nuclear is the safest means of power generation.

China has the world's largest expanding nuclear industry, with 33 operating reactors of 29,577 MWe net cumulative capacity, while 21 reactors are under construction and another 42 are planned. China, now the eighth nuclear power plant exporter in the world, had entered into export market with the construction of Chasnupp-1 in turnkey mode.

Likewise, the under-construction Kanupp-2 would be the first Chinese 1,100 MWe reactor overseas, which is known as "Hualong One". It has a series of barriers to keep radiation inside the plant such as a combination of active and passive systems, a single stack layout, and 177 nuclear fuel assemblies.

Plant design has double containment structure with enhanced value of 0.3g (unit of shaking or acceleration), which could roughly be considered equivalent to over 8 Richter magnitude scale of earthquake.

The containment can withstand crash of a large commercial aircraft, an earthquake right under the building and other natural disasters. Pakistan Atomic Energy Commission (PAEC) has ruled out any threat to the proposed facilities from

tsunami since the plants are being constructed at 12 meters above the sea level and maximum waves by tsunami are 7 meters above the sea level.

The Chinese nuclear industry has been developing and improving nuclear reactor technology over decades, resulting in advanced reactors featuring simpler design, more fuel efficient, better safety, and low capital cost. The next-generation pressurized light water reactor (PWR) "Hualong One", basically an 1150 MWe gross and 1092 MWe net capacity export model, is an integration of China's well-proven ACPR 1000 (of CGN) and ACP 1000 (of CNNC) reactors into one standardised design. The IAEA Generic Reactor Safety Review (GRSR) of the "Hualong One", the first Chinese reactor design to undertake such a process, was completed in December 2014.

Construction of the first "Hualong One" was started in China in May 2015 at Fuqing (Fujian province) nuclear power plant Unit-5, followed by another at Unit-6. The first phase of Fangchenggang nuclear power plant, Units-3 & 4, in Guangxi Zhuang autonomous region having "Hualong One" reactors had commenced in December 2015.

EDF Energy, the French state-owned company, has placed an order in October 2015 for "Hualong One" for its planned nuclear power plant in England at Bradwell, Essex. Likewise, China and Argentina have signed an agreement in November 2015 for the construction of "Hualong One" reactors. Construction of the first unit will commence in Argentina in early 2017, whereas other is scheduled in 2019.

Opponents to Pakistan's nuclear energy program having repeated discourses on its possible negative impact on environment simply ignore the fact that waste produced by coal-based power plants is more radioactive than that generated by nuclear power plants.

A series of studies recently conducted by Oak Ridge National Laboratory, USA (ORNL), a multi-program science & technology laboratory managed by the US Department of Energy, have concluded that estimated radiation doses ingested and inhaled by people living around coal-fired power plant were higher than doses for people living in the vicinity of nuclear power plant producing same amount of energy.

In the words of Dr Dana Christensen of ORNL: "you are talking about one chance in a billion for nuclear power plants. And it is one in ten million to one in a hundred million for coal-based power plants". Fly-ash radiant in individual's bones was estimated by the scientists at about 18 millirem (Rem is unit of absorbed radiation dose) a year, whereas doses from nuclear power plants by contrast ranged from 3 to 6 millirem for the same period.

Loss in life expectancy from one millirem dose is about 1.2 minutes, while one millirem of radiation dose is a one in 8 million risk of dying of cancer. Radiation doses monitored in food crops harvested near coal-fired power plant were 50%-200% higher than those to nuclear power plant.

The nation keenly looks forward to the completion of Kanupp-2 and Kanupp-3, in the wake of massive and prolonged electricity load-shedding countrywide, and the ever-increasing cost of energy.

The generation cost of these nuclear power plants, which have 60-years life cycle, is projected to Rs 9.59/kWh levelised for supply to the National Transmission and Despatch Company (NTDC). Apparently, the vested interests would like to deprive the nation of affordable and sustained electricity.

Currently, average generation cost of the Chashma units for supply to the NTDC is Rs 6.35/kWh, whereas capacity factor is up to 90% and availability factor 90%.

http://www.brecorder.com/articles-a-letters/187/79899

NEWS COVERAGE PERIOD FROM AUGUST 15TH TO AUGUST 21ST 2016 PAKISTAN'S OVER-RELIANCE ON THERMAL POWER PLANTS The Express Tribune, August 15th, 2016

Salman Siddiqui

KARACHI: Pakistan, which has been a power deficit country for decades, is currently making serious efforts in overcoming the shortfall.

The efforts, however, remain questionable since the government has given approval to run the newly set up power plants to also run on imported fuel, which will require huge foreign exchange and cause the current account deficit to further widen.

The country had the other option to address the chronic power crisis by focusing instead on hydro-power projects, which run on water from dams and carry zero-fuel charges for power production.

According to a National Electric Power Regulatory Authority's (Nepra) State of Industry Report 2015, "Pakistan has potential of around 40,000 megawatts (MW) hydropower."

Despite that, the installed capacity to generate hydel-power in the country stands at 7,116MW in the fiscal year 2014-15.

The ratio of hydel to thermal installed generation capacity in the country was about 67% to 33% in 1985. With the passage of time, due to various reasons, there was an increase in thermal generation and thereby reduction in the share of hydel generation.

At present, this hydel to thermal installed generation capacity ratio is about 30% to 65%.

As on June 30, 2015, the total installed capacity of the country was 24,823 MW; of which the share of thermal power plants was 16,814 MW (67.74%) followed by hydel power plants 7,116 MW (28.67%), nuclear power plants 787 MW (3.17%) and wind power plant 106 MW (0.43%).

"It is a drawback of the country that its power production is dominated by thermal power plants running on oil and gas. Pakistan is a country which is heavily dependent on import of oil for its domestic energy requirement," NEPRA said. During 2014-15, the total energy generated in the country was 109,059 GWh of which the share of thermal electricity generation was 69,988 GWh (64.17%), hydel power plants were 32,979 GWh (30.24%), nuclear power plants were 5,349 GWh (4.90%) and wind power plant was 300 GWh (0.27%).

"The increasing share of thermal electricity generation increased the utilities financial burden particularly in foreign exchange. It is a strong need of the hour to increase hydel generation by adding new hydropower plants," the regulator said.

http://tribune.com.pk/story/1162488/pakistans-reliance-thermal-power-plants/

RENEWABLE ENERGY: MINISTRY PROPOSES CUT IN SOLAR, WIND POWER TARIFFS The Express Tribune, August 16th, 2016.

Zafar Bhutta

ISLAMABAD: The Ministry of Water and Power has proposed that the regulator should make a further cut in tariffs for solar and wind power projects in line with the fall in international market in order to provide relief to the consumers.

The tariffs and costs associated with the solar photovoltaic (PV) and wind power projects were on the higher side which were not only adversely affecting the basket price but were also hampering market competition among bona fide investors in renewable energy resources.

In a letter sent to the National Electric Power Regulatory Authority (Nepra), the Ministry of Water and Power pointed out that anomalies like higher engineering, procurement and construction (EPC) cost, high insurance rates, lower plant factors, absence of benefit of technologies, etc had led to abnormally high tariffs.

It strongly proposed a reduction in tariffs as comparative tariffs were now much lower internationally.

In the case of wind power tariff, the ministry noted that the regulator conducted its own investigation into the cost and competitive tariff and announced a tariff that could enable the investor to recover the cost and get an attractive return.

In many developing countries, however, this type of tariff has been determined through auction.

"Since the wind power market is much more stabilised now, the proposal to determine a benchmark levellised tariff for competitive bidding should be supported," the ministry said.

Given the decline in solar PV costs and the time taken for project development, the ministry believes that project companies will be able to install advanced technologies with higher capital expenditure within the same cost parameters.

While energy production based on high-end technology will vary significantly depending on site location, land availability and selected technology, at least a 10% increase in the plant factor (actual output) is generally expected.

As such, the ministry said, the assumed benchmark plant factor of 18% for the southern region of the country could be increased to 20% and tariff should be reduced accordingly. Given the state of advanced technology in Pakistan, a project may retain full benefit in case a higher plant factor is achieved.

"It is in the interest of consumers to assume a higher plant factor upfront, thereby reducing the tariff, rather than assuming a low plant factor and higher tariff with sharing," the ministry suggested.

Nepra assumed an annual increase of maximum 1% of the EPC cost to be adjusted subsequently each year, but "rather than retaining this cost-plus adjustment, which keeps the tariff higher, Nepra should assume a lower insurance premium from the onset," the ministry said.

Given the declining trend in solar PV costs and as the insurance premium depends on the replacement value of the plant, the assumed insurance cost may be reduced to 0.5% of the EPC cost.

Nepra has increased the debt tenure from 10 years with one-year grace period to 13 years with one-year grace period and reduced the spread over London Inter-bank Offered Rate (Libor) from 4.5% to 4%. The ministry supported the change as it would bring down the tariff.

"There should no longer be any sharing in case the project-specific debt tenure or spread is different from Nepra's assumptions," it said.

The ministry suggested that project companies should be free to opt for shorter loan tenures (7 to 10 years) and make higher debt repayments at the cost of their equity returns. The removal of sharing will also provide the flexibility to the project companies to subsequently refinance their debt.

This will ultimately benefit the end-consumers as Nepra can assume longer debt tenures and lower spread on Libor/Kibor in future tariffs.

http://tribune.com.pk/story/1163105/renewable-energy-ministry-proposes-cut-solar-wind-power-tariffs/

PAKISTAN'S OVER-RELIANCE ON THERMAL POWER PLANTS The Express Tribune, August 15th, 2016.

#### Salman Siddiqui

Most of the installed hydel power capacity of the country is owned by the public sector (Water and Power Development Authority) and only 214-megawatts installed hydel power capacity is in private sector.

Moreover, unfortunately, rain water worth billions of dollars is wasted every year in Pakistan into the sea because of lack of water reservoirs and dams.

The incumbent government, though in power for the past three years, has failed to develop a consensus for the construction of new dams. Production from hydel power may decline in the time to come with fall in the water storage capacity of dams which are accumulating silt.

Pakistan Metrological Department has reported recently that the storage capacity has dropped by 35% due to the silting element and absence of any new dams.

The per capita water availability has already dropped to scarcity benchmark level of 1,000 cubic metres from 5,300 cubic metres in 1950s, it has been reported.

The Pakistan Bureau of Statistics reported that the country imported fuel worth of \$7.60 billion in the fiscal year ended June 30, 2016. This was 17% of the total import bills of \$44.76 billion in the year.

Most of the oil imports were made to meet the growing demand for power generation.

The share of fuel import in the total import bill stood at 25% (\$11.79 billion) in the previous fiscal year 2015. The decline in fuel import bills was the result of decreased oil prices in the world markets. nt

http://tribune.com.pk/story/1162488/pakistans-reliance-thermal-power-plants/

LPG QUOTA SYSTEM ABOLISHED BUT FOR TWO FIRMS, PAC TOLD Dawn, August 18th, 2016

Malik Asad

ISLAMABAD: Except for two private companies, the quota for liquefied petroleum gas has been abolished by the Oil and Gas Development Company (OGDCL) for all entities over the past few years, the Public Accounts Committee (PAC) learnt on Wednesday.

One of the two companies is Capgas, a subsidiary of the Pakistan Oil Fields Ltd, and the other — WAK Gas — is being run by some former PPP senators and Inter-Services Intelligence's ex-chief Gen Ahmed Shuja Pasha.

OGDCL managing director Zahid Mir informed a PAC meeting that in accordance with a policy made by the government in August 2007, his company started abolishing the quota system in a gradual manner.

Mr Mir was responding to an audit objection to the distribution of LPG under a quota system instead of selling it through open competition.

He said the OGDCL had been distributing 360 metric tonnes (MT) of LPG by quota until 2007 when it started the allocation through open bidding.

He said the quota system had almost been revoked as 330MT of LPG is now being sold through open bidding, adding that since WAK Gas and Capgas went into litigation and obtained a stay order in their favour they continued to get the

LPG under the old system because the court had directed the authorities concerned to preserve their quota till further orders.

According to the OGDCL's record, the lion's share of Adhi field — the only LPG reservoir managed by the OGDCL — was allocated to WAK Gas.

The company owned by former senators Gulzar Ahmed Khan, Waqar Ahmed Khan and Ammar Ahmed Khan was given 50 per cent of the LPG quota in 1988. After his retirement in 2012, Gen Pasha joined WAK Gas as its group chief adviser. The company's website provides a brief introduction of Gen Pasha on its management page.

The remaining 50pc quota from the Adhi filed was equally divided between Capgas and Sun Gas.

The OGDCL record shows that the LPG quota was allocated to WAK Gas during the PPP government in 1988 when Jehangir Badar was the minister for petroleum and natural resources. After the term of the quota had expired, these companies obtained a stay order from a high court.

Mr Mir told the meeting that an extraction plant of OGDCL would become operational in a few days to enable it to supply the LPG to the Sui Southern Gas Company Limited (SSGCL).

The SSGCL has been procuring the LPG from the JJVL, but last month the former issued a notice to the JJVL for termination of the contract. The JJVL approached the Sindh High Court and obtained a stay order against the contract termination notice.

About the LPG price, Mr Mir said that the OGDCL could fix the producer price but determination of the consumer price was not its prerogative.

The PAC asked Arshad Mirza, the secretary of petroleum and natural resources, to keep a check on the pricing of LPG in the market. Mr Mirza said that the ministry had drafted an LPG policy and asked the Oil and Gas Regulatory Authority (Ogra) to fix the price for consumers.

The audit authorities had pointed out that although the producer price in June was Rs50 per kilogram, it was being sold at Rs95 per kg.

The secretary assured the PAC that the matter would be taken up with Ogra.

The meeting was informed that the government had in 1999 issued licences for oil exploration in 40 blocks but the companies involved did not launch any such activity.

According to the audit report, "the monitoring authority i.e. director general, petroleum concession, neither investigated the matter nor cancelled their licences. This resulted in non-granting of licences to some other willing exploration companies to overcome energy crisis".

In response, the secretary said that when the ministry had initiated the process to revoke the licences, the companies challenged its action in courts and obtained a stay order.

He said that the petroleum ministry was pursuing the matter in the courts.

http://www.dawn.com/news/1278285

NANDIPUR PLANT PRODUCES EXPENSIVE ELECTRICITY, PAC TOLD Dawn, August 19th, 2016

Islamabad: The Ministry of Water and Power informed the Public Accounts Committee (PAC) on Thursday that the Nandipur power project was producing electricity at a higher cost of Rs7.25 per unit, but the cost would come down when the plant was reverted to gas by the end of this year.

Water and Power Secretary Younus Dagha told a meeting of the PAC that the dual-fuel power plant was not efficient on oil but would give better results on gas.

"The plant is giving variable electricity production cost; last month it stood at Rs7.25 per unit," he said, adding that the plant was producing 250MW, but could generate 425MW if run on full capacity.

Mr Dagha said a gas pipeline was being laid to make the power plant more efficient, adding that the plant would be run on liquefied natural gas (LNG) in future. "It is expected that international prices of LNG will sustain and may further reduce over a longer period as dependence of developing countries on shale gas is increasing," he added.

PAC member Shafqat Mahmood pointed out that power distributing companies (Discos) were passing on the cost of electricity pilferage to consumers in their bills, which was unjust.

Mr Dagha admitted this and said a new system of billing — mobile meter reading — had been introduced across the country which had helped minimise the incidents of pilferage.

In reply to a question, he said Lesco consumers were asking for an amnesty scheme but the power ministry had turned down their request.

PAC chairman Syed Khurshid Ahmed Shah said receivables of the power sector had reached Rs365 billion, including cost of electricity pilferage.

The receivables should not be added to the billing of those consumers who are paying their bills regularly.

Audit officials informed the meeting that as per the audit report for 2013-14, Wapda's receivables against Discos stood at Rs278bn and called for their recovery.

The committee also examined the audit report of the Ministry of National Health Services, Regulations and Coordination for the year 2013-14.

The PAC directed its secretariat to write a letter to the Ministry of Interior for taking appropriate action against an official of the Federal Investigation Agency who had closed a case of the National Council for Homoeopathy (NCH).

The NCH purchased a 27-marla office building for Rs56 million on the Airport Link Road, Rawalpindi, in September 2010.

The audit officials pointed out that the market price of the building was Rs20m, but it had been purchased for Rs56m, causing a loss of Rs36m to the national exchequer.

http://www.dawn.com/news/1278508

PAKISTAN TO BUY POWER FROM RUSSIA, TURKMENISTAN The Express Tribune, August 20th, 2016.

Zafar Bhutta

ISLAMABAD: Pakistan has accepted the offers of Russia and Turkmenistan that are eager to join the Central Asia-South Asia (Casa) 1,000 power supply project designed to connect the two regions through an energy corridor.

Earlier, Russia and Turkmenistan had approached Pakistan, showing interest in exporting electricity to energy-starved Pakistan through the transmission line of Casa-1,000 project in winter when other sources would not be supplying electricity, a senior government official said.

Casa-1,000 is a pilot project that will not only help ease outages in Pakistan by bringing clean energy from Tajikistan and Kyrgyzstan, but will also pave the way for other nations to export their surplus electricity.

Under the project, Tajikistan and Kyrgyzstan will supply 1,000 to 1,300 megawatts to Afghanistan and Pakistan. Islamabad will consume a major chunk whereas Kabul will receive around 300MW.

Tajikistan's energy sector has been showing sustainable growth for the last 15 years. Apart from big plants, there are 20 medium and 40 small hydroelectric power stations in the remote mountainous areas, with capacity ranging from 5 to 1,500 kilowatts.

Hydroelectric power accounts for 76% of the total energy output in Tajikistan.

The Casa-1,000 project envisions supply of surplus electricity available in summer months (May 1 to September 30) from Tajikistan and Kyrgyzstan to Afghanistan and Pakistan. To utilise the full capacity, an open access regime has been adopted which allows other countries to join in and inject energy into the Casa transmission line.

"Pakistan is keen to utilise idle capacity of the transmission line from October to April with the import of electricity from Russia and Turkmenistan," the official said.

"Apart from ensuring power supply throughout the year, this will also bring down transmission charges. Pakistan has conveyed its willingness to the two countries for power purchase from them."

Russia is rich in hydroelectric power and gas-based electricity whereas Turkmenistan produces a significant volume of gas-based power. However, how much electricity they are willing to provide is not yet known.

Though electricity demand dropped in winter in Pakistan, it would follow the merit order, shut down expensive plants and give preference to imports from Russia and Turkmenistan to meet domestic needs, the official said.

The creation of Casa electricity market includes a phased development of infrastructure to utilise Central Asia's power resources to meet the growing demand and address shortages in South Asia.

The energy linkages also offer an opportunity to contribute to stability and growth in Afghanistan and boost interdependent prosperity in all relevant countries.

A revised plan includes the setting up of two converter stations in Tajikistan with a separate high voltage direct current (HVDC) back-to-back connection in Afghanistan on an existing 220-kilovolt line.

The National Electric Power Regulatory Authority (Nepra) has approved a tariff of 9.41 cents per unit (kilowatt-hour) for electricity import from Central Asia including energy cost at 5.15 cents, transmission charges at 2.91 cents, Afghan transit fee at 1.25 cents and wheeling charges for Tajikistan at 0.10 cent.

According to officials, Pakistan is currently importing 73MW from Iran to meet the needs of Gwadar. The cost of electricity import from Iran is 6.25 cents per unit, which is higher than 5.15 cents to be paid to Tajikistan.

The cost is higher because of oil and gas-based power generation in Iran while Tajikistan will bank on cheaper hydroelectric power.

The total cost of electricity purchase from Iran amounts to 10.60 cents per unit, according to data collected by Nepra for May 2016.

http://tribune.com.pk/story/1166148/pakistan-buy-power-russia-turkmenistan/

# NEWS COVERAGE PERIOD FROM AUGUST 8TH TO AUGUST 14TH 2016 POWER SECTOR DUES JUMP BY RS 250 BN IN THREE YEARS Dawn, August 8th, 2016

Khawar Ghumman

ISLAMABAD: Despite the government's claims of reining in the energy crisis and ensuring the recovery of outstanding dues from the public and private sectors, a staggering amount of Rs253.69 billion has been added to the power sector's outstanding dues between June 2013 and June 2016.

Documents laid before the National Assembly recently revealed that when the Pakistan Muslim League-Nawaz (PML-N) took the reins in June 2013, the total outstanding dues of the power sector stood at Rs384.109bn, which had nearly doubled to Rs637.769bn by June of this year.

According to statistics laid before the house by the ministry of water and power, in response to a question asked by PML-N MNA Waseem Akhtar Shaikh, the main culprit is the private sector, which owes around Rs468bn, while the government sector, including provincial governments, has to pay back around Rs169bn.

But according to the written reply, the ministry claims that recoveries have increased from 89.58 per cent in 2013 to 94.45pc in 2016, and refuses to accept the impression that the government has failed to make substantial headway in the recovery of its outstanding dues.

The Khawaja Asif-led ministry also argued that large amounts were outstanding against provincial governments and held the poor law and order situation in Sindh and Balochistan as the main cause of arrears. It said that the provision of administrative support to recovery teams in Sindh and Balochistan could improve the situation. The ministry insisted that efforts were being made for recovery of these receivables.

"At present, an amount of Rs99.6bn is outstanding against provincial governments, out of which Rs73bn relates to Sindh and Rs19bn to Khyber Pakhtunkhwa," the ministry's written response said. Moreover, pending receivables from agricultural tubewells in Balochistan stand at Rs127bn, while Azad Jammu and Kashmir, the K-Electric and Fata owe Rs65bn, Rs46bn and Rs21bn, respectively.

The ministry said it had taken certain measures to enhance recoveries, including physical checks on the premises of permanently-defaulting consumers to ensure they weren't using electricity from any other sources.

Other measures included following up on court cases or settlement of billing disputes; timely delivery of bills to consumers; and the activation of circle review and regional review committees to take up disputed cases.

The reply noted that provincial finance secretaries were being asked to take up the recovery of outstanding dues with major defaulting departments, while the distribution companies concerned had been tasked to reconcile outstanding amounts with their respective departments.

An official from the ministry of water and power, speaking to Dawn on condition of anonymity, contended that the issue of receivables wasn't as simple as it seemed "from the outside" and required certain policy decisions, which had not been taken by successive governments.

For example, he said, though the issue of tariffs had been settled with the AJK and KP governments at a certain level, their dues continued to add up because the funds had not yet been transferred to the ministry.

Soon after coming to power, the government paid off around Rs330bn in circular debt to the independent power producers (IPPs) without a mandatory pre-audit. Now, questions are being raised that if the government can pay its bills to IPPs, how can it go soft against its debtors.

For the ministry official, there were certain consumers in the private sector who had long defaulted on their outstanding amounts, but the books continued to show those amounts as receivables. Once a consumer defaults, this means he has declared that he is unable to pay back the designated amount. In such cases, it is up to the government to make arrangements whereby a portion of the amount may be recovered or any other suitable settlement reached. "These are issues that any government would have to deal with," the official said.

http://www.dawn.com/news/1276111/power-sector-dues-jump-by-rs250bn-in-three-years

## SINDH CONSUMERS TO GET CNG IN KILOGRAMS AFTER OGRA BAN Dawn, August 10th, 2016

ISLAMABAD: The Oil and Gas Regulatory Authority (Ogra) on Tuesday declared the sale of CNG in litres as illegal in Sindh and directed all fuel stations in the province to sell the gas in kilograms.

In a statement, the Ogra spokesperson said in Sindh the sale of indigenous gas/CNG in litres is illegal and only imported RLNG gas can be sold in litres.

As opposed to Punjab, CNG stations in Sindh are not using imported gas so far.

The Ogra official said selling CNG in litres is permitted in Punjab because it has been termed as 'deregulated' in the province.

"The CNG sector in Punjab is operating at imported Regasified Liquified Natural Gas (RLNG) and its rates vary at every consignment while the the CNG in Sindh is operating at locally produced gas and its rates are regulated by Ogra," the spokesman added.

Ogra has communicated to All Pakistan CNG Association that the maximum sale prices of CNG notified by it on August 31, 2015 at Rs75.82 per kg for Khyber Pakhtunkhwa, Balochistan and Potohar region (Rawalpindi, Islamabad and Gujar Khan) and Rs67.50 per kg for Sindh and Punjab are legally prevalent for all indigenous gas based CNG stations.

"Any CNG station charging other than the Ogra notified rates is illegal and action shall be taken against violators as per law," the statement said.

The authority further said the notification was issued under the relevant law and in pursuance of the decisions of Economic Coordination Committee of the Cabinet.

CNG sector denies wrong doing: Meanwhile, the CNG sector denied any wrongdoings and claimed written permission to convert the sale to litres was granted by Petroleum Minister, Shahid Khaqan Abbassi.

"We had a meeting with the minister in the presence of relevant officers of the Petroleum Ministry last week on August 3," said Malik Khuda Bakhsh, president of the CNG Station Owners Association of Pakistan.

"The recognised formula was used to determine the price of CNG in litres and we assumed that the formalities have been completed," he added.

The recognised formula for conversion of CNG to litres is dividing the kilogram rates by 1.4.

"CNG is being sold at Rs67.50 per kilogram in Sindh after conversion — that is dividing it by 1.4, per litre rate comes to be Rs48.20," he added, "This has been done only to make the rates more attractive for the buyers as the per kilogram rates are very close — actually higher than that of per litre petrol."

In response to the notification, the CNG sector is scheduled to have a meeting with Ogra officials today (Wednesday) in Karachi.

#### http://www.dawn.com/news/1276478

## ELECTRICITY, WATER ISSUES UNRESOLVED AS RAINWATER HAMPERS EFFORTS Dawn, August 10th, 2016

HYDERABAD: Residents of various low-lying areas have been facing problems because of standing rainwater and an acute shortage of drinking water in Hyderabad, Mirpurkhas, Badin, Sanghar and Thatta districts since Saturday. In Hyderabad, the Water and Sanitation Agency (Wasa) failed to supply potable water drain out rainwater standing in many areas of the city.

People keep complaining against poor facilities of Wasa and the district administration. There is still rainwater in the areas of Qasimabad, Latifabad, Hyderabad.

Despite many warnings and forecasts by Met office, Wasa and the district administration have failed to make proper arrangements for rainy days.

After passage of almost four days, the areas of Naseem Nagar, Anwar and Faraz villas, Sehrish Nagar, Sheedi Goth, Latifabad units 7,8,10 & 11, and site areas, old city localities, Railway colony, Pathan colony and Liaquut colony are still inundated.

People have to tolerate foul smell of mud and heaps of garbage from where rainwater has been disposed of. Keeping the situation in view, some diseases could break out in Hyderabad.

"Thought of rain is like a nightmare as people of my areas are confined to first floor of their houses due to accumulated rainwater," Abdul Majeed, a resident of Phulelli, says. There are more complaints against lack of potable water these days in Latifabad units 8,9,10,11 & 12, Hussainabad, Kotri road, Affendi Town, Paretabad, Phulelli, Sarfaraz Colony, Pak Colony, Hali road and other areas.

WASA managing director Masood Jumani admits the poor situation of Hyderabad and pleads for overhauling and revamping the entire system of Wasa which is in a state of dilapidation. He urged the government to restore subsidy to Wasa like that in the past.

Defending Wasa, he claimed Wasa would be able in getting rid of water till night.

He also admitted that potable water supply had been stopped deliberately to some areas where sewage had been mixed with drinking water. "First of all, we have to remove sewage and then supply potable water as without this exercise, supply of drinking water to these areas will be futile and consumers will get contaminated water," he admits it. Hyderabad Municipal Corporation (HMC)administrator Barkatullah Memon said that because of stagnant rainwater, sanitary staff have problems to lift garbage from areas.

According to a handout on Tuesday, Hyderabad Deputy Commissioner Motasim Abbasi said 90 per cent of rainwater had been drained out from rain-hit areas so far while standing water was being disposed of by machines in low-lying localities.

He said this while monitoring works of draining out rainwater in parts of Qasimabad, old city areas and Latifabad. BADIN: Despite repeated protests by people, functionaries in Tando Bago town failed to drain out rainwater from their localities, including the main boys primary school, offices of the taluka education officer and irrigation office.

Rainwater accumulated in many localities of Ward No 1, 2, 3, 8 and 9 of the town has made the lives of residents miserable.

Talking to Dawn, affected people deplored that the town officer, despite their repeated appeals, had failed to redress their grievances.

According to reports reaching here from various villages, no efforts are made to drain out water gushing from the breached points of various canals.

However, Badin DC Mohammad Raffique Quraishi told this reporter that he himself was supervising the process of draining out water from the localities of different towns.

He said the breaches which had occurred to irrigation minors and drains had already been plugged.

http://www.dawn.com/news/1276531

#### NANDIPUR ADDING TO CIRCULAR DEBT WOES Business Recorder, 10, August 2016

Mushtaq Ghumman

ISLAMABAD: The Nandipur power project, a 425MW most troublesome plant, is reportedly adding to the gigantic circular debt and heading towards bankruptcy as Nepra has not approved actual capital cost of the project which is around Rs 22 billion, well informed sources told Business Recorder.

"Nepra is not allowing tariff of the power plant on open cycle after CoD despite the fact it is a normal phenomenon as steam turbines at various plants do have to be shut for annual maintenance or under some faults. No open cycle tariff means that in such an eventuality whole plant complex will be shut down. Plant operation on open cycle is essential keeping in view the power crisis/ demand in the country from time to time," the sources added.

Nepra, as a regulator must know that plant machines are to go on an annual overhaul as contractual requirement and it was included in the contract that first inspection of machines will be the responsibility of the EPC contractor, sources stated.

Giving the background, the sources said Northern Power Generation Company Limited (NPCGL) submitted a petition for determination of generation tariff for Combined Cycle Power Plant (CCPP), Nandipur to Nepra on May 20, 2014. Nepra determined the tariff and intimated the government for notification in the official gazette.

Aggrieved of the original determination, NPGCL submitted motion for leave to review under Rule 16(6) of the Nepra Tariff (standards and procedures) Rules, 1998 within 15 days of the intimation of original determination, the sources continued.

The Registrar Nepra, on January 27, 2016 communicated the determination of Nepra Authority on the motion for leave to review filed by the NPGCL.

On March 21, 2016, the Ministry of Water and Power submitted reconsideration request under section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (Nepra Act) with regard to determinations of Nepra. The public hearing on reconsideration request has been held in Nepra on May 24, 2016.

According to sources, the reasons for submission of tariff reconsideration request were as follows: (i) project cost- the project costs submitted in tariff petition are based on the revised PC-1 of the Nandipur power project approved by Executive Committee of the National Economic Council (ECNEC) in July 2013. However, Nepra has disallowed huge portion of such approved project costs; and (ii) Nepra has determined efficiency of the plant as 45 per cent on RFO and 49 per cent on gas. The claimed efficiency by company respectively was 44 per cent and 48 per cent.

"This approach of Nepra needs to be revised because the efficiency of the plant is affected by various reasons including the weather conditions, attitude, site and configuration etc. Another crucial factor is the recommended efficiency of EPC contractor which in this case is 44.3%," the sources said, adding that NPGCL has asked for determination of efficiency at 44% which is quite realistic.

The sources said, fixing of efficiency on a higher side creates a huge effect on the fuel cost. Under the 2 part tariff mechanism, the fuel cost is a pass through item. If the efficiency is fixed on the higher side, there shall be loss on operation of plant. Thereby, it is apprehended that at such efficiency (on higher side) the project will become "unviable".

If the plant cannot operate due to less payment of fuel cost component, the large investment on the installation and other project cost will be wasted.

The sources further stated that Nepra did not allow the tariff of the power plant on high speed diesel (HSD). The 'startup' and 'stop' fuel of the Nandipur power plant is HSD. On every start/ stop and till synchronization and shifting of fuel from HSD to furnace oil, certain quantity of HSD is consumed. The operation of the plant on HSD may also be required in emergency situations and as such HSD tariff is essentially required.

Nepra has also not allowed the cost recovery of fuel during pre CoD operations. This again is a normal phenomenon that this cost is allowed to plants. Nandipur however has been treated differently and resultantly around Rs 4.5 billion have not been recovered. CPPA has time and again submitted tariff adjustment on this account but every time this has been disallowed, the sources maintained

"Provision for open cycle operations in the tariff on requirement/ demand of system as well as HSD operations from time to time is a must along with other capital cost adjustments and re-fixation of efficiency," the sources agued.

In the case of IPPs Nepra has even allowed lower efficiencies as compared to actual plant efficiencies. This gives the IPPs cushion to make huge profits.

Water and Power Ministry maintains that the reference values for pre COD period may be reworked and actual cost borne by company should be allowed to be passed on.

http://epaper.brecorder.com/2016/08/10/1-page/784497-news.html

MEETING JAPANESE ENVOY: PAKISTAN OFFERS POWER PROJECTS FOR INVESTMENT The Express Tribune, August 12th, 2016.

ISLAMABAD: Pakistan offered Japan to invest in power transmission projects after it turned down an earlier offer by Tokyo for financing a new 650-megawatt supercritical coal-fired power plant at Lakhra, Sindh.

Finance Minister Ishaq Dar extended the offer during a meeting with Ambassador of Japan to Pakistan Takashi Kurai, who called on him to discuss the Japanese investment in the power sector.

"During the meeting, the ambassador was briefed on projects, which are in the pipeline and can be considered for mutual cooperation and Japanese economic assistance," according to a hand-out issued by the Finance Ministry after the meeting. However, the Finance Ministry did not disclose the names of the projects that had been offered to Japan for investment.

Secretary Economic Affairs Division Tariq Bajwa and Secretary Water and Power Younus Dagha attended the meeting.

The officials said that Japanese ambassador asked Dar to give his proposals in writing.

Earlier, Japan was keen to provide a loan of \$1.7 billion for construction of a new power plant at Lakhra. The loan had been linked with the purchase of machinery and plant from Japanese vendors. Japan International Cooperation Agency (JICA) had done a feasibility study for installation of the plant.

However, Pakistan refused to take Japanese investment due to opposition by the respective ministries. Pakistan Railways, EAD and Ministry of Water and Power did not support the proposal to set up a supercritical coal-fired power plant.

Officials of the Ministry of Railways did not give a firm commitment for logistical support for transporting coal to the site. Pakistan Railways was preoccupied with the CPEC projects and sparing freight wagons for coal supply to yet another power project was not possible.

Another reason for opposing the project was the expected high cost of power generation when compared with the Asian Development Bank (ADB)-funded Jamshoro coal-fired power plant, said the officials.

The location of the project, which was less than 40 kilometres from the Jamshoro power plant, was another reason for opposing the new project. The existing Lakhra power plant has a generation capacity of 150MW but the output was low due to the out-dated technology and high cost of generation. The project was also on the active list of privatisation.

The government's decision to refuse Japanese investment led to wastage of money and resources that JICA had invested in the Lakhara project. The officials said that Japan wanted a firm commitment from Pakistani side this time.

http://tribune.com.pk/story/1160511/meeting-japanese-envoy-pakistan-offers-power-projects-investment/

NORTH-SOUTH PIPELINE: RUSSIA SEEKS TO CHARGE \$1.25 PER UNIT FOR LNG TRANSPORT The Express Tribune, August 14th, 2016.

Zafar Bhutta

ISLAMABAD: Russia has sought a tolling fee of \$1.25 per unit for transmitting the imported liquefied natural gas (LNG) through the North-South Gas Pipeline, which its company will build from Karachi to Lahore at a cost of \$2 billion.

The fee was proposed during negotiations between the two countries in Islamabad, say officials aware of the development.

The pipeline will be laid on the model of build, operate and transfer and its control will be handed over to Pakistan after 25 years.

Under an agreement signed between the two countries in October 2015, Pakistan will make available 15% of equity for the project while the remaining 85% of funds will be provided by a designated Russian company. First phase of the project is expected to be completed by December 2017.

Officials said Russia was seeking to charge a certain fee on its investment in the LNG pipeline, which would transport gas from Pakistan's south to the north.

The Ministry of Law has already given the go-ahead for the award of pipeline contract to energy firm RT Global Resources, which has been designated by Russia, though it is facing US sanctions.

However, a commercial contract between RT Global and Inter State Gas Systems (ISGS) has been delayed because of the US restrictions.

According to the officials, the Russian government had proposed that a special purpose vehicle (SPV) should be set up to execute the project and avoid the threat of sanctions.

The Ministry of Law also agreed that the Russian plan was workable and would help implement the project. "There is no legal bar on awarding the commercial contract to a Russian firm that will set up a SPV in Pakistan," it said.

The SPV will also be listed on the Pakistan stock market by floating its shares in order to generate funds for the project.

RT Global Resources – a Russian state corporation – will lay a 1,100km-long pipeline with a handling capacity of 12.4 billion cubic metres per annum and connecting LNG terminals in Karachi and Lahore.

Russia is the second-largest natural gas producer in the world and is seeking to diversify its export markets after a spat with its major buyer the European Union over the Ukrainian crisis. It has also offered LNG export to Pakistan.

Pakistan has worked on a similar model with China under which a Chinese company will lay an LNG pipeline from Gwadar to Nawabshah and build an LNG terminal at the deep-sea port.

http://tribune.com.pk/story/1161903/north-south-pipeline-russia-seeks-charge-1-25-per-unit-lng-transport

NEWS COVERAGE PERIOD FROM AUGUST 1ST TO AUGUST 7TH 2016 OIL INDUSTRY, OGRA TALKS ON FEE STRUCTURE HIT SNAG Dawn, August 3rd, 2016

ISLAMABAD: The crucial talks between the Oil and Gas Regulatory Authority (Ogra) and the oil industry over the new fee structure could not make any progress on Tuesday owing to oil companies' refusal to withdraw from ongoing litigation.

However, the two sides agreed to constitute a six-member committee, three each from both sides to continue with talks on the issue, informed sources told Dawn. The Ogra team led by its newly appointed chairperson Uzma Adil Khan also asked a delegation of the Oil Companies Advisory Committee (OCAC) to submit its recommendations in writing to move forward.

The sources said Ogra's team comprised three executive directors while the OCAC delegation comprised its chairman Jawad Chaudhry and managing directors of Pakistan State Oil (PSO), Attock Oil and OCAC.

According to sources, Ogra requested the Islamabad High Court to vacate a stay order issued on a petition of OCAC challenging the legality of the new fee structure under the 'Pakistan Oil (Refining, Blending, Transportation, Storage and Marketing) Rules 2016'. The court rejected the application while the oil industry also declined to withdraw its case on Tuesday.

The two sides are at loggerheads over the 'exorbitant fees' on downstream oil sector imposed under the rules notified early this year. The OCAC has expressed serious concerns and reservations over the fee structure saying if not rescinded would threaten the viability of the Downstream Oil Sector. These rules required all the oil refineries, marketing companies and oil pipeline companies to pay Rs2 million non-refundable fee for grant renewal, modification, extension, assignment, review, transfer, amendment, relocation or re-issuance of a licence.

Likewise, oil blending or reclamation or grease plants are to pay Rs50,000 fee while lubricant marketing companies are required to pay Rs1m fee. Oil storage and testing facilities are required to pay Rs100,000 and Rs500,000 fee respectively.

Moreover, all these entities are also required to pay 50 per cent of licence fee for modification, extension, transfer or review of their licences. On top of that, every refinery, OMC, lubricant marketing company and pipeline is also required to pay 0.005 per cent of gross sales. This 0.005pc fee of the gross sales in particular is being viewed by the oil industry as a 'sales tax' which it argued could only be imposed by the government and was outside the purview of the regulator.

The new rules also entailed maximum validity of a licence for 30 years for a refinery and renewal for a maximum of 15 years. The OCAC, however, contended that companies once having obtained a licence and operating successfully, contributing to the national kitty and the economy should not have to reapply for a new licence as no reasons had arose for a fresh one.

The OCAC is of the view that Ogra Ordinance of 2012 was the primary level and umbrella document under which rules should be issued and rules could not contradict Ogra Ordinance. The ordinance had already ratified the licenses of OMCs and refineries and to now asking these companies to "re-apply for fresh licences is in direct contravention of the ordinance", the OCAC maintained.

In addition the new rules have now imposed a fee on all the companies at the rate of 0.005pc of gross sales was a form of indirect taxation and given the regulated margin environment in which the downstream oil sector operated was unjustified and a form of double taxation "which the industry is not willing to pay". Moreover, the rules were notified without prior consultation with the industry.

Executive Director Ogra, Shahid Nauman Afzal on the other hand defended the rules saying these were issued under section 41 of the Ogra Ordinance and will not contradict, supersede or override the ordinance.

Mr Afzal noted in his communications to the industry that the rules were prepared in detailed consultation and deliberations of the industry and all stakeholders including OMCs and refineries through OCAC, Lube Oil Business Society of Pakistan and the ministries of petroleum and industries.

"Accordingly due consideration were given to the input of all the stakeholders and the rules were notified after vetting by the law and justice division," he said adding any anomalies or inconsistencies being felt now by the industry must have been conveyed when the rules were in discussion, instead of after their notification in the gazette of Pakistan by the competent authority.

The OCAC deplored that concerns raised by the industry had not been considered despite the magnitude and seriousness of the issue. Mr Afzal claimed that detailed discussions referred by the Ogra took place way back in 2005 (11 years ago).

However, OCAC argued that rules notified now are not in line with the consultations made 11 years ago while the nature of business and industry had changed significantly due to entry of many new players and overall environment changed.

http://www.dawn.com/news/1274945

SHAHBAZ REVIEWS PROGRESS ON SAHIWAL COAL-FIRED POWER PLANT Business Recorder, August 04, 2016

Punjab Chief Minister Shahbaz Sharif presided over a high-level meeting here on Wednesday which reviewed progress on Coal Power Plant Sahiwal and the steps taken for the supply of coal for the project.

Federal Minister for Water & Power Kh. Muhammad Asif, Federal Minister for Ports & Shipping Mir Hasil Khan Bizenjo, Federal Secretary Water & Power, Secretary to Prime Minister, Chairman Port Qasim Authority, Chairman Planning & Development, Chief Executive Officer Pakistan Railways, MD NTDC, MD Huang Group of China Wu Chun Sheng, Vice President Huang Sheng Dong Power Generation Company, Chief Executive Officer Huang Shen Dong Ruyai and concerned Federal and Provincial officials were present on the occasion.

Addressing the meeting, Shahbaz Sharif said that Sahiwal Coal Power Plant Project is being completed speedily and this 1320 megawatt project will be completed far before the stipulated period of December 2017. He said that there is no example of working with such speed on this project of such productive capacity in the history including China.

The speed and quality of the project is unprecedented, he added. He said that the work of supply of coal from Karachi will also be completed in fixed period and necessary infrastructure for this purpose will be timely completed. He said that this project will become great masterpiece of Pak-China friendship.

The Chief Minister said that all the affairs are being completed timely due to best co-ordination of concerned federal and provincial institutions. He said that speed of work on Sahiwal Coal Power Plant is unprecedented. Officials of Chinese companies assured completion of the project as early as possible.

Meanwhile, Punjab Chief Minister Muhammad Shahbaz Sharif presided over a high level meeting which reviewed progress on supply of gas for 3600 megawatt gas power projects being set up in Punjab and matters of construction of terminal.

Federal Minister for Water & Power Kh. Muhammad Asif, Federal Minister for Petroleum Shahid Khaqan Abbasi, Federal Minister for Ports & Shipping Mir Hasil Khan Bizenjo, Federal Secretary Water & Power, Secretary to Prime Minister, Chairman Port Qasim Authority, Chairman Planning & Development, Secretary Energy, Chief Executive officer National Power Parks Company, Chief Executive Officer Quaid-e-Azam Thermal Power Ltd and senior officials attended the meeting.

The Chief Minister said that Federal and Punjab government are jointly setting up 3600 megawatt gas power plants in Punjab. He said that concerned federal and provincial departments will have to work in a co-ordinated manner for completing gas power plant projects in stipulated period. These projects are of paramount importance for reducing energy crisis, he added.

 $\underline{http://www.brecorder.com/fuel-a-energy/193:pakistan/71837:shahbaz-reviews-progress-on-sahiwal-coal-fired-power-plant/?date=2016-08-04$ 

SHAH SEEKS FEDERAL HELP IN MEETING SINDH'S ENERGY NEEDS Dawn, August 6th, 2016

Syed Irfan Raza

ISLAMABAD: Sindh Chief Minister Murad Ali Shah said on Friday that he had sought the centre's help to augment the electricity and gas supplies in the province.

Speaking at a press conference after a meeting with Prime Minister Nawaz Sharif earlier in the day, Mr Shah said he had placed a number of proposals before the PM. Foremost among them were (i) the supply of 3,500MW of electricity to the province from coal-based power plants in Sindh; (ii) provision of 200MMCF gas to Sindh for setting up a 100MW power plant; and (iii) permission for import of LNG.

Other suggestions made to Mr Sharif pertain to withdrawal of taxes on electricity, representation of Sindh in federal organisations like the Karachi Port Trust, K-Electric, Port Qasim Authority, Pakistan State Oil and Sui Southern Gas Company, reimbursement of Rs5 billion out of Rs17bn spent on the Karachi operation, centre's help for carrying out

repair of the Sukkur Barrage, inclusion of Keti Bunder project in the China-Pakistan Economic Corridor and restoration of stations demolished by the railways department.

The prime minister, Mr Shah added, had assured him of his cooperation to resolve the problems being faced by Sindh. In reply to a question about the deployment of Rangers, Mr Shah said the matter had been resolved.

"We have sorted out the issue of deployment of Rangers under which the paramilitary force will have policing powers only in Karachi under the Anti-Terrorism Act while they will enjoy powers under Article 147 of the Constitution to maintain law and order in other parts of Sindh," he said.

"[The] PM was quite cordial and desired better communication and cooperation between Sindh and the centre," he said.

The chief minister told the premier that the Economic Affairs Division had created hurdles in foreign-funded projects because of which these projects had been delayed.

During the meeting with the prime minister, Secretary Water and Power was ordered by the premier to clear all reservations of the chief minister.

http://www.dawn.com/news/1275746/shah-seeks-federal-help-in-meeting-sindhs-energy-needs

PAKISTAN SEEKS KOREAN EXPERTISE FOR ELECTRICITY GENERATION The Express Tribune, August 7th, 2016.

LAHORE: Korean expertise in generating its own electricity for SME units can help Pakistan bridge the gap between energy demand and supply, said Lahore Chamber of Commerce and Industry (LCCI) Vice President Nasir Saeed while talking to the Pakistan Korea Business Association (Korea Chapter) Chairman Kawang Rip.

He said at present the government is focusing on all possible means of generating electricity, which include thermal, hydel, atomic, solar and wind sources.

The government is encouraging the use of renewable energy solutions to reduce the cost of energy generation, said Saeed, adding that alternatives like waste-to-energy and bio fuels were also under serious consideration.

"Pakistan needs cost effective solutions, which are possible through transfer of technology. We expect that Korea can cooperate with us in this regard."

The LCCI official said that the success of Korean companies in Pakistan shows that soon the country will outrun others in terms of foreign direct investment.

Saeed urged the Korean experts to prepare a plan and share with LCCI so it could be sent to potential members or companies.

The Ambassador of Korea has already declared Pakistan as a priority destination for investment and business in recent meetings with business community.

Chairman Kawang Rip said that growing countries like Pakistan would have to shift their focus on modern ways of generating their own electricity particularly for SME Units.

http://tribune.com.pk/story/1157200/electricity-generation-pakistan-seeks-korean-expertise/

CASA-1,000 PROJECT: CENTRAL, SOUTH ASIA TO FINALISE CONTRACT FOR CONVERTER STATIONS The Express Tribune, August 7th, 2016.

#### Zafar Bhutta

ISLAMABAD: Energy ministers of Pakistan, Afghanistan, Tajikistan and Kyrgyzstan are set to meet in Paris this month to finalise the award of a contract for setting up converter stations to transmit electricity under the Casa-1,000 project which will link Central and South Asia through an energy corridor.

The creation of Central Asia South Asia (Casa) regional electricity market includes phased development of institutional arrangements and infrastructure to utilise Central Asia's power resources to meet growing demand and shortages in South Asia, say officials of the Ministry of Water and Power.

The energy linkages offer an opportunity to address the power crisis, contribute to stability and growth in Afghanistan and boost inter-dependent prosperity in all the relevant countries, they say.

Under the project, Kyrgyzstan and Tajikistan will export 1,000 to 1,300 megawatts of electricity to Pakistan and Afghanistan. Pakistan will consume a major chunk whereas Afghanistan will receive around 300MW.

Three well-reputed European companies – Switzerland-based ABB, Siemens of Germany and Alstom of France – have shown interest and submitted bids for establishing the converter stations.

"These companies as well as representatives of other big companies from Japan, South Korea and China will participate in the Paris huddle to agree on the procedure for kicking off construction work on the Casa project," a senior government official said while talking to The Express Tribune.

Earlier, the Joint Working Group and Intergovernmental Council of the Casa project, which met in Almaty in April 2016, evaluated the bid received for three converter stations.

Since the sole bid received was very high and technical capability of the bidder raised concern among the four countries, the working group considered making changes to the original plan for three converter stations and agreed to go for two stations. They also decided to float a fresh tender in the next two months.

The revised plan includes two converter stations in Tajikistan, which will bring down cost of the project, with a separate high voltage direct current (HVDC) back-to-back connection in Afghanistan on an existing 220-kilovolt line.

In response to the fresh tender, ABB, Siemens and Alstom submitted bids for setting up two converter stations. "Offers of these companies are being evaluated," a water and power ministry official said, adding no decision on the award of contract had been taken so far.

The National Electric Power Regulatory Authority (Nepra) has approved a tariff of 9.41 cents per unit (kilowatt-hour) for electricity import from Central Asia including energy cost at 5.15 cents, transmission charges at 2.91 cents, Afghan transit fee at 1.25 cents and wheeling charges for Tajikistan at 0.10 cent.

According to officials, Pakistan is currently importing 73MW from Iran to meet the needs of Gwadar, Balochistan. The cost of electricity import from Iran is 6.25 cents per unit, which is higher than 5.15 cents to be paid to Tajikistan.

The cost is higher due to oil and gas-based power generation in Iran while Tajikistan will bank on cheaper hydroelectric power.

The total cost of electricity purchase from Iran amounts to 10.60 cents per unit, according to data collected by Nepra for May 2016.

Casa-1,000 is a pilot project that will link Central and South Asian regions and will not only help minimise load-shedding by providing clean energy, but will also pave the way for other countries to export electricity to Pakistan.

Different countries such as Russia, Turkmenistan and Azerbaijan have already offered electricity supply to Pakistan.

http://tribune.com.pk/story/1157211/casa-1000-project-central-south-asia-finalise-contract-converter-stations/

## September 2016

#### NEWS COVERAGE PERIOD FROM SEPTEMBER 26TH TO OCTOBER 2ND 2016

### 50MW WIND POWER PROJECT ACHIEVES COMMERCIAL OPERATIONS

Business Recorder, 1 October, 2016

LAHORE: Metro Power Company Limited ("Project") a 50MW wind power generation plant, located in Jhimpir, Thatta, Sindh has achieved its Commercial Operations Date on September 16, 2016. Since then the project is dispatching electricity to Central Power Purchaser Agency (CPPA) as an Independent Power Producer.

Wind power is an indigenous resource in the province of Sindh, electricity generated through this technology reduces the impact of variable transportation cost and imported fuel costs such as LNG & HFO on electricity tariffs for longer periods.

Project aims at providing a sustainable tariff at a fixed price for a 20+ years. It is noteworthy, that the private sector has come forth to tackle the challenges currently being faced in the energy sector due to electricity shortage throughout the country.

Danish Iqbal, CEO also thanked the AEDB, Government of Sindh and Central Power Purchasing Authority in providing full support to allow project to reach this major milestone.

The project has been sponsored by leading Pakistani business family Iqbal Ali Mohamed & Family, Infraco Asia Development Pte Ltd out of Singapore and International Finance Corporation (IFC). The Project has installed state of the art twenty 2.5 MWs Wind turbine made in Germany and European made Balance of Plant.—PR

http://epaper.brecorder.com/2016/09/28/12-page/797743-news.html

'THAR COAL PROJECT AHEAD OF SCHEDULE' Dawn September 29th, 2016

KARACHI: Thar coal project is progressing five months ahead of schedule and will add 660 megawatts of electricity to the national grid by 2019, Sindh Engro Coal Mining Company (SECMC) CEO Shamsuddin Ahmed Shaikh said.

"The first phase of the project based on two plants of 330MW each will cost \$1.1 billion. It has 75 per cent foreign and 25pc local financing," he explained.

Mr Shaikh pointed out that SECMC's production schedule is 38 months.

"We are five months ahead of schedule. Of total 112m cubic metres excavation, we have done 7m cubic metres," he added.

The two power plants and mining in Block 2 of Thar coal would cost \$3.2bn, he added.

Thanking the federal and provincial governments for facilitating the project, he said: "The Sindh government has constructed high standard roads network in Tharparkar district linking coal deposit areas to highways and cities. The federal government is setting up international airport there. A big dam and an effluent treatment plant were being constructed near the coal mines."

The federal government is also working on a transmission line to link power generation plants from Thar coal with the national grid, he added.

Sharing details of manpower employed at the project site, he said of the total 2,028 workers, 997 were natives of Thar district, 647 were Chinese and 384 belonged to different parts of the country.

For maximum participation of Tharis in Thar coal and other affiliated projects, SECMC along with other organisations has launched different training programmes.

As a part of resettlement action plan, modern residential colonies are being constructed for the local people who would be displaced from Block-II area of Thar Coal deposits.

The CEO informed that dislocation of around six and a half thousand population from two main villages — Senhri Dars and Tharyo Halepoto — and ten other small settlements is on the cards for mining purpose.

http://www.dawn.com/news/1286734/thar-coal-project-ahead-of-schedule

## RS203BN GWADAR-NAWABSHAH LNG PIPELINE PROJECT APPROVED Dawn, October 1st, 2016

Khaleeq Kiani

ISLAMABAD: The Executive Committee of the National Economic Council (Ecnec) on Friday approved six development projects worth Rs281 billion, including import of 58 locomotives, Gwadar-Nawabshah gas pipeline and a terminal at Gwadar for handling imported liquefied natural gas (LNG).

All these projects will have combined foreign financing of about Rs164bn.

In a meeting presided over by Finance Minister Ishaq Dar, the country's highest development project approval authority approved Gwadar-Nawabshah LNG terminal and pipeline project at a cost of Rs203.314bn including foreign exchange Chinese loan of Rs135.128bn. The project was previously approved by the Economic Coordination Committee (ECC) of the Cabinet in 2014 for completion in November 2015. But it has now been delayed until 2018 due to internal issues of the petroleum ministry and the agencies concerned.

"The project is expected to complete in two years (2016-18)," confirmed a statement issued by the finance ministry. The project aims to overcome the shortage of natural gas supply by importing LNG at Gwadar and then transmit it to Nawabshah through a 700-kilomtere pipeline having a diameter of 42 inches.

The government has already decided to award the contract for the project to a Chinese firm — China Petroleum Pipeline Bureau — on a build-own-and-operate basis for which Export-Import Bank of China would provide a commercial loan of about \$1.35bn.

The pipeline would also facilitate Iran-Pakistan pipeline project. The terminal will have the capacity to handle up to 600 million cubic feet per day (mmcfd) of gas.

Ecnec also allowed the Ministry of Railways to procure 58 diesel electric locomotives at a revised cost of Rs16.3bn, including a foreign loan of Rs11.755bn. The procurement will be completed by December. The proposed locos will replace 50 over-aged locomotives and will be used to haul freight and passenger services along with high-capacity wagons fitted with air brakes and roller bearing. The capacity of Pakistan Railways is expected to improve after the project's completion.

The meeting also approved package-III of Balochistan's irrigation department project for construction of 20 small dams in different districts of the province at a cost of Rs7.83bn.

The project is targeted for completion in three years to help the province harness flood flows and supply about 175,500 acre-feet of conserved flood water for direct irrigation and drinking purposes. It is expected to benefit about 58,500 acres of fertile cultivable land and save the land from flood damages and create jobs.

Ecnec directed the Planning Commission to set up a monitoring committee to make sure that the project was completed in three years. This committee will also have a member from the Ministry of Water and Power to look after the implementation.

The meeting also approved Southern Punjab Poverty Alleviation Project ) at a total cost of Rs4.658bn, including Rs4.14bn international soft loan from the International Fund for Agricultural Development (IFAD). It will help improve the standard of life in four less-developed districts of Punjab, ie Bahawalpur, Bahawalnagar, Muzaffargarh and Rajanpur.

The IFAD has helped in the financing of the project through a soft loan of \$40.13m. The project will help reduce poverty in the areas of Southern Punjab by generating more income, increasing agricultural productivity, improving livelihood opportunities, providing vocational training, especially to women, and building physical infrastructure to improve the quality of life. The project is expected to complete in 2017.

The meeting also cleared the 106-megawatt Golan Gol Hydropower project in Chitral, Khyber Pakhtunkhwa, at a cost of Rs29.077bn, including foreign exchange component of Rs10.68bn. The project would generate an annual energy of about 436 gigawatt hours. The project will be connected with the national grid with a 198km transmission line from Golan Gol to Timurgarha passing over Lowari pass and then reaching Chakdara.

Ecnec also approved a project of Peshawar Electric Supply Company to construct 7th secondary transmission line and grid stations at a cost of Rs20bn, including foreign loan of Rs1.92bn. The project will be completed in five years.

http://www.dawn.com/news/1287172/rs203bn-gwadar-nawabshah-lng-pipeline-project-approved

NEWS COVERAGE PERIOD FROM SEPTEMBER 19TH TO SEPTEMBER 25TH 2016 SOLAR SCALE-UP IN PAKISTAN HITS ROADBLOCK AFTER PAYMENTS CUT Dawn September 20th, 2016

BAHAWALPUR: An effort to boost large-scale solar energy production in Pakistan has hit a roadblock after the government slashed the rate it pays for solar electricity, frustrating investors.

The Punjab government set up the 100-megawatt Quaid-i-Azam Solar Park in the Cholistan desert in March 2015 as a pilot project to lure foreign investment for an additional 900MW of power.

Zonergy Limited, a Chinese-owned firm, then agreed to invest \$1.5 billion to produce the power, with a promise to complete the work by June 2016.

But last December, the National Electric Power Regulatory Authority (Nepra) reduced the amount the country pays to buy solar electricity from 14.5 cents to 9.25 cents per kilowatt-hour, citing falling costs for solar panels and other equipment.

The cut has prompted a lawsuit by Zonergy officials, who last month brought online just 200MW of the promised 900MW of power in Punjab's Bahawalpur district, said Muhammad Amjad, chief executive officer of the solar park, in an interview with the Thomson Reuters Foundation.

"Zonergy has gone into litigation over the reduction of the tariff and this is delaying completion of the project," he said. "We are trying to resolve it as soon as possible." Zonergy officials in Pakistan could not be reached for comment.

MrAmjad said the tariff reduction was justified as the price of solar panels and other accessories needed to produce the power had declined significantly in the international market in the last year and a half.

Even after the reduction, Pakistan still offers one of the world's most generous payments for solar power fed into a national grid, he said.

6,500 ACRES OF PANELS: The solar park has been promoted as one of the largest in the world, spread over 6,500 acres in the Cholistan desert in east-central Pakistan. It is located about 20 kilometres from the city of Bahawalpur, and a special security unit has been established for protection of its workers, along with a 22.5km security wall around the facility.

Muhammad Hassan Askari, the park's operations manager, said the solar panels feed into the national grid for around 8-10 hours each day. There is no battery system to store energy for night-time distribution.

The original 100MW plant, installed by the Punjab government from its own budget, produces about 150 gigawatt hours a year, he said, enough to light about 100,000 homes in the country.

"The Cholistan desert is one of the best locations in Pakistan for solar energy production," he said, calling the project "financially viable".

MrAskari said that over one million solar panels have been installed so far to produce the combined 300MW of power, and they should help avoid about 280,000 tonnes of carbon dioxide each year.

Dust and sand are the greatest technical challenges to deal with at the solar plant, he said, with a permanent team of about 100 labourers hired to wash the panels each week.

"The solar park is offering green jobs to around 2,000 workers as they have been trained to install the solar panels and do other related work," MrAskari said.

POWER SHORTAGES: Pakistan faces a year-round electricity shortfall that hits around 7,000MW in the summer, the period of peak demand. The country's rural areas often suffer blackouts of more than 14 hours a day while urban areas can experience up to 10 hours a day without power.

Syed ZahirSalahuddin, a Karachi-based electrical energy expert, said that Pakistan's electricity demand is increasing at 8-10 per cent each year, and can be met only through a sustainable energy mix including solar power.

"Pakistan should introduce a uniform tariff policy instead of considering it on a case-to-case basis, to encourage competition for private investment in renewable energy," he said. Without private sector investment, solar energy projects will not take off in the country, he warned.

He called solar energy a viable power solution for off-grid areas of Pakistan as well as grid-connected ones, as it does not require the government to spend large amounts of money to install transmission lines.

About 44pc of households in Pakistan are not connected to the grid. More than 80pc of those are in rural areas, according to the World Bank.

MrSalahuddin suggested the government map all potential sites for solar power plants in the country and then seek investors, offering government financial support for things like transmission lines and land purchases.

MrAskari said he hoped differences between the government and investors over the Cholistan desert project could be resolved in order to drive further investment into solar energy in Pakistan.

#### PPL DISCOVERS GAS DEPOSITS AT BASHAR X-I ST

The Express Tribune, September 24th, 2016

KARACHI: Pakistan Petroleum Limited (PPL) has discovered new gas deposits from Lower Goru Formation in district Matiari, Sindh, according to a bourse filing Friday.

The company has discovered hydrocarbon from its exploratory well Bashar X-I ST. "During testing, gas flowed at a rate of 8.7 million standard cubic feet per day...," PPL Company Secretary Shahana Ahmed Ali said in a notification to the Pakistan Stock Exchange.

PPL is the operator of Hala Exploration License with 65% working interest. Mari Petroleum Company Limited is the joint venture partner and holds remaining 35% working interest. The dissemination of the discovery information, however, failed to motivate investors to buy the company's shares. The share price dropped Rs0.84 or 0.52%, and closed at Rs159.03 with a volume of 295,400 shares.

The decline in share price may be attributed to widespread selling pressure at the exchange, particularly in the oil and gas exploration and production companies.

Earlier, the state-owned exploration and production company found "tight gas" reserves in District Sanghar, Sindh in July 2016. The reserves were discovered from its exploration well Hadi X-1A. They were flowing at a rate of 0.85 million standard cubic feet per day.

Likewise, it announced in August 2016 to have started production from the second gas processing facility located in Sindh, which will produce significant amount of crude oil, pipelined gas and liquefied petroleum gas.

The net profit of the company, however, fell 48% to Rs15.85 billion in the nine-month ended March 31 from Rs30.45 billion in the same period last year. The decline was recorded due to slowdown in sales and decrease in other income.

http://tribune.com.pk/story/1187272/ppl-discovers-gas-deposits-bashar-x-st/

### CONSUMERS TO BEAR SECURITY COST OF POWER PROJECTS

Dawn, September 24th, 2016

Khaleeq Kiani

ISLAMABAD: The government on Friday decided to recover the cost of security required for upcoming power projects from consumers through monthly bills for entire 25-30 years life of the projects.

The decision was taken at a meeting of the Economic Coordination Committee (ECC) of the cabinet presided over by Finance Minister Ishaq Dar.

The meeting also decided to float the Islamic Sukuk bond in the international market. Depending on market response and pricing, the size of the bond will range between \$500 million and \$1 billion, although the government has set a target of \$750m in the budget for Sukuk.

Documents seen by Dawn suggest that the government will direct the National Electric Power Regulatory Authority (Nepra) to allow one per cent increase in capital cost of all upcoming power projects, mostly under the China-Pakistan Economic Corridor (CPEC), for recovery from consumers.

"The ECC approved a summary of the Ministry of Water and Power for issuance of a policy directive to Nepra to allow 1pc of the capital cost net of aforementioned \$150,000 amount on account of security to be distributed annually starting from the construction period till the term of the Power Purchase Agreement," said an official statement.

The government is already charging at least four special surcharges of about Rs3.50 per unit in consumer tariff to cover low recoveries, high losses, special debt servicing, tariff equalisation across various distribution companies and so on.

The documents suggest that the prime minister had originally allowed the Planning Commission to allow one per cent additional cost of all CPEC projects to meet the expenditure of a Special Security Division of the army being raised to protect CPEC. The government had allocated about Rs30bn in the budget to meet initial expenditure and then allow one per cent increase in capital cost of all projects under the Public Sector Development Programme.

According to sources, security concerns have been raised by relevant quarters following recent incidents of terrorist attacks, growing threats to power projects and the general security situation.

At a recent meeting, the prime minister is reported to have highlighted the importance of CPEC and termed it vital for future sustainability of the national economy. However, despite an early decision to include a security cost of 1pc at the time of regulatory approval of the CPEC projects, no arrangements have been made to make necessary adjustments in tariff.

As a result, a number of projects in power and communication sectors have gone into the implementation phase without actually having any solid arrangement for recovery of even recurrent expenditure of special security on these projects.

The prime minister was of the view that apart from provision of cost of establishment of separate forces, including the Special Security Division, the projects when completed would require expenditure on recurrent annual basis for maintaining these forces which would have a notable strain and impact on the federal budget.

Therefore, the prime minister directed the water and power ministry to ensure that the remaining sponsors of power projects where the financial close had not yet been achieved must add 1pc of the actual capital cost on account of security to the projects. This should also include the early harvest projects where the financial close is still pending, as well as new additions to the projects already under implementation.

The prime minister is also reported to have ordered that for the projects which are already under implementation, the ministries of water and power and finance "will immediately carry out an exercise" for an increase in tariff through Nepra to cover for recurring security of the projects for their entire period of operation.

The ECC also approved another summary of the water and power ministry to allow the National Transmission and Despatch Company to approach Nepra for approval of extension of tariff from Jan 1 to Dec 31, 2016, for a contract with TAVANIR of Iran for purchase of 74MW.

According to the statement, this is an existing arrangement for payment of electricity dues to Iran and is formally approved every year at a rate of about Rs10 per unit for enabling Nepra to make it part of the consumer tariff.

The ECC also approved a summary of the finance ministry to allow Habib Bank Limited to open its branch in Urumqi, China.

The meeting reviewed macroeconomic indicators and was informed that CPI inflation was 3.56pc in August this year, compared to 8.55pc in Aug 2013 and 11.56pc in Aug 2011.

http://www.dawn.com/news/1285777

# NEWS COVERAGE PERIOD FROM SEPTEMBER 11TH TO SEPTEMBER 18TH 2016 GAS FIRM SAYS NO CHECK ON THEFT IN THREE KP DISTRICTS

Dawn September 13th, 2016

#### Khalid Hasnain

LAHORE: The Sui Northern Gas Pipelines Limited (SNGPL) has literally lost its control over the gas infrastructure and fields in Khyber Pakhtunkhwa after people in the districts of Kohat, Karak and Hangu took over the system.

They continue to extract gas directly from the pipeline, fields or stations, claiming it to be their property since it is being produced in the areas they live in.

KP has been producing over 400MMCFD of gas daily from Chanda, Mela, Nashpa, Manzalai, Mamikhel, Maramzai, Makori and Makori fields since January 2013 in the three districts of the province.

"Actually a mafia in the districts of Kohat, Karak and Hangu... has surfaced. And they have taken over our systems and continue to use the gas by extracting it directly from the fields, pipelines, etc., without payment of bills to the company," SNGPL's MD Amjad Latif told Dawn.

When asked about the measures taken by the company to stop the mafia from doing so, he said the officials were doing a lot, but to no avail. The SNGPL also took up the issue with the KP chief minister, but he also put up his hands.

"The KP CM has literally told us that he couldn't do anything against the mafia," the MD quoted the CM as having said.

He said since there was no concept of paying bills in these areas, the people continued to extract and use the gas unlawfully. Even those paying bills earlier removed their meters and started stealing gas, he added.

He said keeping in view the situation, the SNGPL planned to regularise all illegal connections in KP by developing an infrastructure at a cost of Rs6.7 billion in the ongoing financial year.

The managing director pointed out that the SNGPL's total 9.14 per cent line losses during the financial year 2015-16 included 6.14pc in Punjab and 3pc in KP that caused a revenue loss ranging between Rs20bn and Rs22bn.

He said though the gas theft trend in Punjab was also a serious issue, it was entirely different from the trend and behaviour witnessed in KP.

"Whenever we cut off illegal connections in Punjab and get FIRs lodged, the people avoid doing illegal activity again. But in KP, we are helpless," he explained.

When asked about any errors in the production data as apprehended by some sources in the Khyber Pakhtunkhwa Oil and Gas Company that 50MMCFD of total gas in the province was not made part of the SNGPL's record, Mr Latif rejected the claim.

"The gas production in KP ranges between 400 and 450 MMCFD per day. And we are receiving this data through Sacada system that monitors and measures the production on a daily basis. So it is not possible at all to miss recording of even a single BTU of the gas," he clarified.

While comparing the line losses with other public utilities, the managing director said the SNGPL's line losses were on a lower side than those of the SSGC and Wapda. "The SSGC and Wapda's line losses were about 16 and 18pc, respectively, whereas we remained on the lower side with 9.14pc," he claimed.

He said Punjab and KP domestic gas demand was over 400MMCFD these days. And it ranges between 1,000 and 1,100MMCFD in winter. Similarly the demand for the industry in the two provinces is over 400MMCFD these days.

Adviser to the KP chief minister for information Mushtaq Ahmed Ghani rejected the SNGPL chief's allegations.

"Let the SNGPL produce evidence if they have any. Let them register FIRs against those stealing gas and we shall take action. We will extend every possible assistance to the SNGPL. They should identify those who are stealing gas," he said.

"The information that we have is that all the foreign companies are in cahoots with those stealing gas. They are involved. There is collusion," he alleged.

http://www.dawn.com/news/1283738

RATIONAL USE: POWER MINISTRY DEVISING ENERGY SAVING PLANS The Express Tribune, September 16th, 2016.

Maryam Usman

Islamabad: The Ministry of Water and Power is at the forefront of energy conservation activities, besides determining ways to improve the efficiency of energy utilization, officials told The Express Tribune.

The National Energy Conservation Centre (Enercon), under the administrative control of Ministry of Water and Power, is the focal federal agency mandated for initialising and coordination energy conservation activities in various sectors of economy.

In view of the increased importance attached to the subject of energy efficiency and conservation and also to give a proper mandate to carry out these activities, the National Energy Efficiency and Conservation Act 2016 has been recently passed by Parliament.

This Act shall provide a legal basis to enforce necessary measures for efficient use and conservation of energy in the country, in coordination with the relevant provincial departments.

In addition, the following measures were taken by the Ministry of Water and Power:

The government is following the policy of running the most efficient and economical plants on full time basis for generating electricity; the costlier ones are only operated during peak demand, resulting in fuel savings and lower cost of generation.

Guidelines regarding rational usage of electricity have been formulated and circulated by the Ministry of Water and Power for implementation in federal and provincial government offices.

The Ministry of Water and Power recently launched Pakistan's first energy labeling scheme in coordination with the Ministry of Science and Technology, donor agencies and manufacturers of different electrical appliances. As a result, nearly 100,000 energy-efficient fans with three-star Pakistan energy label will enter the marker this year.

The proposal prepared by the ministry for exemption of duties on import of LED bulbs/lights was approved in the Finance Act, 2016. In order to provide a level-playing field to LED bulb assembling companies and to compete with importers of LED bulbs, exemption/reduction of duties have also been made on imports of components used in LED bulbs in the Act. This measure will reduce the prices of LED lights.

Green public procurement is a policy adopted to ensure that all new buildings to be constructed in the public sector are energy-efficient. For this purpose, necessary amendments are being proposed in relevant provisions of PC-I and PC-II

forms in consultation with the Planning, Development and Reform Division keeping in view best practices relating to energy conservation.

Buildings codes were developed, notified and launched by Enercon, Pakistan Engineering Council (PEC) and Ministry of Housing and Works in 2014.

Energy audits of 26 industries and buildings are being launched during the current year, and they will be conducted by qualified consulting/energy auditing firms.

Awareness sessions for energy conservation are being carried out on a regular basis in various chambers of commerce and industries across Pakistan and in different universities and schools. The ministry also launched an effective campaign in the print and electronic media to highlight the importance of energy efficiency and conservation.

http://tribune.com.pk/story/1182412/rational-use-power-ministry-devising-energy-saving-plans/

RENEWABLE POTENTIAL: 'INVESTMENT IN CLEAN ENERGY TECHNOLOGIES NEEDED' The Express Tribune, September 17th, 2016.

ISLAMABAD: Despite fetching sizeable foreign investment towards low-carbon energy, the country still needs to invest in clean energy technologies.

The renewable energy sector of the country attracted foreign investment of over \$3 billion during the last one year due to robust potential, lucrative tariff structures and bankable security documents.

"The government took some pragmatic steps to harness the available renewable energy potential, diversify its energy mix, and ensure energy security and sustainable development and a detailed resource assessment of wind, solar and biomass was carried out through World Bank assistance," Dr Qamaruz Zaman Chaudhry, a research scientist and climate change expert, told The Express Tribune.

According to a government official, Alternative Energy Development Board (AEDB) issued over 25 letters of interest to various solar projects with cumulative capacity of 663MW. The Punjab government issued the same for 600MW projects, while financing for 300MW solar power project has already been done.

Quaid-e-Azam Solar Park already supplies 100MW electricity to the national grid, while 300MW more would be added to the system this year. The park would generate total 1,000MW by 2017. The AEDB was also pursuing 35 solar photovoltaic (PV) power projects of cumulative capacity of approximately 1,111.44MW. Some 250MW solar projects were also included in China-Pakistan Economic Corridor.

A new International Energy Association (IEA) report — World Energy Investment 2016 — released a couple of days back shows the electricity sector leading a broad reorientation of energy investment. However, it advised for more investment to meet climate targets and address energy security.

In a detailed analysis of investment across the global energy system, the IEA said that global energy investment fell by eight per cent in 2015, with a drop in oil and gas upstream spending outweighing continued robust investment in renewables, electricity networks and energy efficiency.

Total investment in the energy sector reached \$1.8 trillion in 2015, down from \$2.0 trillion in 2014.

The report says that with energy supply spending of \$315 billion, China was once again world's largest energy investor last year in its efforts in building up low carbon generation and electricity networks, as well as implementing energy efficiency policies.

The report further reveals that investment in the United States' energy supply declined to about \$280 billion in 2015, falling nearly \$75 billion, due to low oil prices and cost deflation, representing half of the total decline in global energy spending.

The Middle East and Russia emerged as the most resilient regions to spending cuts. Renewable energy investments of \$313 billion accounted for nearly a fifth of total energy spending last year, establishing renewables as the largest source of power investment.

While spending on renewable power capacity was flat between 2011 and 2015, electricity generation from the new capacity rose by one-third, reflecting the steep cost declines in wind turbines and solar PV. The investment in renewable power capacity in 2015 generates more than enough to cover global electricity demand growth.

Technology innovations boosted investment in smart grids and storage, which are expected to play a crucial role in integrating large shares of wind and solar. While grid-scale battery storage investment expanded tenfold since 2010, their value is predominantly to complement the grid, which continues to absorb much larger investment.

Global gas-fired power generation investment declined by nearly 40 per cent. Asian markets continued to favour investment in coal power. Investment activity in European gas power remained muted despite large retirements anticipated in the next decade.

With investment rising six percent, energy efficiency spending was robust in 2015 due to government policies such as minimum standards that cover a rising share of new buildings, appliances and motor vehicles.

In certain countries, lower oil prices slowed the trend towards more fuel efficient vehicles, most notably in the United States, where the rate of improvement in efficiency was two-third lower than that in recent years.

http://tribune.com.pk/story/1182851/renewable-potential-investment-clean-energy-technologies-needed/

NEWS COVERAGE PERIOD FROM SEPTEMBER 5TH TO SEPTEMBER 10TH 2016 NAWAZ'S ENERGY TARGETS SET TO MISS DEADLINES The Express Tribune, September 6th, 2016.

Sardar Sikander

Islamabad: Prime Minister Nawaz Sharif was informed on Monday that the conversion of a highly expensive thermal power plant into gas was not possible before next year amid reports of serious irregularities committed during the execution of the project.

The controversial Nandipur Power Project has lately been in the spotlight – but for all the wrong reasons. From the reports of corruption – including huge rise in the project's cost – to long delays in its launch, the plant lurched from one controversy to another.

Petroleum Minister Shahid Khaqan Abbasi told the prime minister that the conversion of Guddu and Nandipur into gas-based plants was not possible anytime soon, and said "steps" were being taken to achieve this target by next year, official sources told The Express Tribune. However, a carefully-drafted press release issued by the PM House attempted to give the impression that everything was well.

"The federal minister informed the prime minister that all arrangements were in place to ensure the provision of gas to Guddu and Nandipur power projects next year."

"Sui Northern Gas Pipelines (SNGPL) and Sui Southern Gas Company (SSGL) are heavily investing in the upgradation of transmission and distribution network across the country," the statement said.

The sources said contrary to what the minister had assured the prime minister, the stipulated timeline for power projects, including the conversion of the two projects into gas-based plants, was fixed between June 2017 and March 2018, implying that the conversion of these power projects and completion of others can drag well beyond next year.

On August 6, the prime minister was briefed by water and power officials on the progress of power projects – including the conversion of Guddu and Nandipur power projects.

The Nandipur Power Project was inaugurated in May 2014. It became fully functional in July 2015. However, in September 2015, the plant stopped functioning owing to 'technical problems'.

The plant was made functional in October, but broke down again in November and questions were raised over the capacity and operational durability of the project. The government decided to covert the plant into gas after being criticised for producing highly fuel-expensive power. Reports suggest that the cost of the project that was Rs23 billion has soared up to Rs58 billion.

Last month, Wapda chairman Zafar Mehmood had resigned reportedly due to his differences with the federal government over the issue of mega power plants.

Mehmood called on the prime minister on August 16, and quit his office on August 22 – less than a week later. The prime minister was reportedly unhappy over repeated delays in the execution of power projects and expressed his annoyance during his visit to the Neelum-Jhelum Hydroelectric Project on August 12.

Meanwhile, the statement issued by the PM Office after Monday's briefing passed the buck on to past governments for the energy crisis.

"The government has been making speedy progress in all key sectors including energy, infrastructure development and social welfare projects to mitigate sufferings of the common man," it said.

"The improved law and order situation of the country is destined to encourage further investments – from both local and foreign investors – in diverse fields of the economy. We are determined to pursue our revolutionary agenda of economic revival and development," the statement quoted the PM as having said.

http://tribune.com.pk/story/1176787/nawazs-energy-targets-set-miss-deadlines/

'EMPOWER SINDH TO OVERCOME ENERGY CRISIS' The Express Tribune, September 6th, 2016.

Ali Usman

LAHORE: "The solution to Pakistan's energy crisis lies with Sindh. The province can help meet energy demands in the country," Sindh Chief Minister Murad Ali Shah on Monday.

He was speaking at Lahore Press Club's Meet The Press session.

Shah said Sindh had 185 million tonnes of coal reserves. Nearly 70 per cent of natural gas in the country was produced by the province, he said. "Experts say that the wind corridor in Sindh has the capacity to produce 50,000 megawatts of electricity. This will be clean energy," he said.

The chief minister said he had informed Prime Minister Nawaz Sharif that Sindh could help produce 1,000MW wind power. "I requested him to let us make our own transmission and dispatch company. We can produce electricity from wind but we don't have the means to include it into national grid. I also requested that the NEPRA [The National Electric Power Regulatory Authority] give us a tariff," he said.

Asked why the Sindh government did not produce electricity in 2008 when the Pakistan Peoples Party (PPP) had formed the federal government, Shah said investors had been twice forced to leave Pakistan. He said three provinces had adopted resolutions against Kalabagh Dam. "National solidarity is more important than any project." He said the amount of water needed for the project was also not available.

The chief minister said the provincial government's operation against encroachments would continue. "We are committed to a cleaner Karachi, a greener Thar and a safer Sindh." Shah said he believed in appointing the right man for the right job. He said the law and order situation in Sindh was as good as in any other province. He said no political party [in Sindh] had been disallowed political activities.

About the National Finance Commission Award, he said Sindh had completed its work in this regard quite early and that he hoped that the next budget would be presented under the NFC.

Shah called on Chief Minister Shahbaz Sharif and discussed matters of mutual interest, including promotion of interprovincial harmony. Sharif stressed the need for collective efforts to bring about prosperity. He said consensus on the previous NFC Award was a big achievement for political parties. He said Pakistan's progress was linked to the development of all provinces.

Sharif said the Punjab government had included students from Sindh, Khyber Pakhtunkhwa, Balochistan, Azad Kashmir and Gilgit-Baltistan in its educational programmes. This had helped promote national harmony and brotherhood.

Sharif congratulated Shah on becoming chief minister and wished him success. Shah also visited the Punjab Information Technology Board and the Forensic Science Laboratory. Speaking at the PITB, Shah said Punjab's rapid progress and improved governance were due to skilful use of modern technology.

Shah also called on Governor Rafique Rajawana at Governor's House. The governor said cooperation between the two provinces would help promote harmony.

http://tribune.com.pk/story/1176738/working-together-empower-sindh-overcome-energy-crisis/

COAL IMPORTERS EYE PSM'S IDLE JETTY, OTHER EQUIPMENT Dawn, September 7th, 2016

Parvaiz Ishfaq Rana

KARACHI: Coal importers from the private sector have sought government's permission to use Pakistan Steel Mills' (PSM) idle jetty, cargo conveyor belt and other equipment until the Pakistan International Bulk Terminal becomes operational.

In communications with the ministries of industries and production and ports and shipping, the importers explained that a permission would help bring down the cost of imported coal by \$4 a tonne and, therefore, ultimately benefit the PSM which would be earning more than Rs100 million a month.

They believe that this would help meet growing demand for coal, mainly from cement and textile companies and steel re-rolling mills.

Moreover, coal consumption would rise significantly when coal-fired power plants will become operational in the near future, and both Karachi and Qasim ports could face congestion.

Younus Vayani, a shipping agent, charterer and operator, told Dawn that coal was being imported and handled at Karachi Port until about two years ago when the Sindh High Court (SHC) restricted its storage level at the Keamari Groyne because it was polluting the surrounding area.

The court restricted the volume to only 200,000 tonnes against the storage capacity of around one million tonnes, he added.

As a result, importers could no longer import coal in larger vessels having a capacity of 60,000 tonnes as they needed a draft of around 13 metres which is only available in Karachi Port's berths.

However, in order to meet the economies of scale coal importers found a way out and kept importing coal in larger vessels having 13-metre draft.

But this lengthened the unloading process as vessels initially unloaded 30 per cent of the coal at Karachi Port and later reported at Port Qasim where draft is around 10.5 metres, he said. The use of two ports raised the handing cost of vessels and port charges also doubled, he added.

Citing an example, he said the biggest coal importer currently imports around 250,000 million tonnes a month, which means four to five vessels with a load of 60,000 tonnes each have to call on both the ports.

The PSM coal jetty has a 13-metre draft and is lying idle because the steel mill is not functioning. If a coal importer pays service charges at the rate of \$4 a tonne against the use of jetty, the steel mill will alone earn around \$1m (around Rs100m) on handling of 250,000 tonnes of coal.

"This amount will enable the PSM to at least meet the monthly salary bill of its workers who have not been paid for the last several months," he maintained.

http://www.dawn.com/news/1282513

THREE 56MW HYDEL PROJECTS NEAR COMPLETION Dawn, September 8th, 2016

PESHAWAR: Pakhtunkhwa Energy Development Organisation (Pedo) Chairman Sahibzada Saeed Ahmed has said three hydropower projects having generation capacity of 56 megawatt will be completed during the current year.

These hydel projects will be proved not only a profitable source of income for the province but also help control energy crisis, he stated while speaking at the 14th Board of Directors meeting of Pedo here on Wednesday, according to a statement.

He said about 100 mini micro hydel projects had been completed in the backward areas wherein people were deprived of electricity.

The meeting was informed that the hydropower projects namely Machai, Ranolia and Daral Khwar would start power generation during the current year.

The meeting discussed the financial and management affairs of the department and reviewed the pace of work on various ongoing hydropower projects. It also approved the annual budget for Pedo.

The participants also placed their suggestion for speedy works on projects.

http://www.dawn.com/news/1282739

N. KOREA CONDUCTS FIFTH NUCLEAR TEST

Dawn September 10th, 2016

SEOUL: North Korea conducted its fifth and biggest nuclear test on Friday and said it had mastered the ability to mount a warhead on a ballistic missile.

The blast, on the 68th anniversary of North Korea's founding, was more powerful than the bomb dropped on Hiroshima, according to some estimates.

It was condemned by the United States, which said it would work with partners to impose new sanctions on North Korea, and also by China, Pyongyang's main ally.

The United Nations Security Council would discuss the test and whether the 15-member body should punish the reclusive state by imposing further sanctions at a closed-door meeting requested by the United States, Japan and South Korea, diplomats said.

Under 32-year-old leader Kim Jong Un, North Korea has accelerated the development of its nuclear and missile programmes, despite UN sanctions that were tightened in March and have further isolated the impoverished country.

US President Barack Obama spoke by telephone with South Korean President Park Geun-hye and with Japanese Prime Minister Shinzo Abe, saying afterwards they had agreed to work with the UN Security Council and other powers to vigorously enforce existing measures against North Korea and to take "additional significant steps, including new sanctions".

The test was a "grave threat to regional security and to international peace and stability," Obama said in a statement, adding North Korea should face consequences for its "unlawful and dangerous actions".

South Korea's Park, in Laos after a summit of Asian leaders that Obama also attended, said Kim was showing "maniacal recklessness" in completely ignoring the world's call to abandon his pursuit of nuclear weapons.

China said it was resolutely opposed to the test and urged Pyongyang to stop taking any actions that would worsen the situation. It said it would lodge a protest with the North Korean embassy in Beijing.

There were further robust condemnations from Russia, the European Union, Nato, Germany and Britain.

North Korea, which labels the South and the United States as its main enemies, said its "scientists and technicians carried out a nuclear explosion test for the judgement of the power of a nuclear warhead," according to its official KCNA news agency.

It said the test proved North Korea was capable of mounting a nuclear warhead on a medium-range ballistic missile, which it last tested on Monday when Obama and other world leaders were gathered in China for a G20 summit.

Pyongyang's claims of being able to miniaturise a nuclear warhead have never been independently verified.

Its continued testing in defiance of sanctions presents a challenge to Obama in the final months of his presidency and could become a factor in the US presidential election in November, and a headache to be inherited by whoever wins. North Korea has been testing different types of missiles at an unprecedented rate this year, and the capability to mount a nuclear warhead on a missile is especially worrisome for its neighbours South Korea and Japan.

"The standardisation of the nuclear warhead will enable the DPRK to produce at will and as many as it wants a variety of smaller, lighter and diversified nuclear warheads of higher strike power," KCNA said, referring to the country's formal name, the Democratic People's Republic of Korea.

Preliminary data collected by the Vienna-based Comprehensive Nuclear-Test-Ban Treaty Organisation, which monitors nuclear tests around the world, indicates the magnitude — around 5 — of the seismic event detected in North Korea on Friday was greater than a previous one in January.

Jeffrey Lewis of the California-based Middlebury Institute of International Studies said the highest estimates of seismic magnitude suggested this was North Korea's most powerful nuclear test so far.

He said the seismic magnitude and surface level indicated a blast with a 20- to 30-kilotonne yield. Such a yield would make this test larger than the nuclear bomb dropped by the United States on the Japanese city of Hiroshima in World War 2.

http://www.dawn.com/news/1283196/n-korea-conducts-fifth-nuclear-test

KUWAIT WINS APPROVAL FOR SETTING UP OIL REFINERY IN BALOCHISTAN The Express Tribune, September 10th, 2016.

#### Zafar Bhutta

Islamabad: Economic managers of Pakistan have given the go-ahead to Kuwait Petroleum Corporation for setting up an oil refinery in the coastal area of Balochistan – a welcome investment initiative for the largely under-developed province, which will reduce the need for import of refined petroleum products in the country.

The Economic Coordination Committee (ECC), the highest economic decision-making body, took the decision in a meeting held on September 7 in response to Kuwait Petroleum's interest in pouring capital into setting up a refinery in Balochistan, said an official aware of developments.

The ECC also decided to seek an extension in the timeframe for oil import credit facility from three to four months in an effort to ease pressure on the country's foreign currency reserves. It directed Pakistan State Oil (PSO), the state oil marketing giant, to try and persuade Kuwait Petroleum to extend the existing credit facility from 90 to 120 days or even more.

In another decision, the ECC permitted import of furnace oil and jet fuel from Kuwait without resorting to competitive bidding. At present, PSO imports diesel from the Gulf Arab state on 90-day deferred payment.

A representative of the Ministry of Petroleum and Natural Resources, who was present in the ECC huddle, said before the year 2000, Pakistan purchased diesel from Kuwait under a long-term contract with the Gulf state's government.

However, in the wake of market deregulation, Pakistan government in 2001-02 asked PSO to enter into a fuel supply contract with Kuwait Petroleum. Immediately after that, the two sides inked an agreement for the sale and purchase of high-speed diesel only with payment guarantees from the government of Pakistan. Now, this agreement has been in place for the last around 15 years.

Earlier, Kuwait Petroleum had expressed interest in exporting furnace oil and jet fuel as part of the existing arrangement and was looking to install an oil refinery in the coastal area of Balochistan with storage facilities.

"Pakistan and Kuwait have an old bilateral relationship in terms of oil trade and Kuwait Petroleum is a time-tested supplier, well-reputed for the most economical supplies, product quality and supply security," an official told the ECC meeting.

The Ministry of Petroleum and PSO suggested that furnace oil and jet fuel could be included in the existing sale and purchase contract by making an addition to it.

This could be done by invoking rule-5 of the Public Procurement Regulatory Authority (PPRA) Rules 2004, which provides for waiving mandatory public procurement procedures in case of an international or inter-governmental commitment of the federal government.

The ministry took up the matter with the PPRA and Law and Justice Division for legal advice.

Later, the PPRA endorsed the proposal. The Law Division, on its part, pointed out that the contract was linked with the agreement between Pakistan government and Kuwait Petroleum and new products could be added. Therefore, it would be treated and read as an integral part of the existing contract.

After examining the proposal from legal point of view, the Law Division cleared it subject to meeting all formalities.

http://tribune.com.pk/story/1179648/kuwait-wins-approval-setting-oil-refinery-balochistan/

## October 2016

NEWS COVERAGE PERIOD FROM OCTOBER 24TH TO OCTOBER 30TH 2016

COAL POWER PLANTS: A POTENTIAL CHANGE

Dawn, Business & Finance weekly, October 24th, 2016

Dilawar Hussain

In a significant development early last week, the Hub Power Company indicated that it might reduce the commercial size of its imported coal power plant joint venture with China Power Hub Generation Company Limited from 2x660MW to 1x660MW.

Management cited delays in the Power Purchase Agreement (PPA) and Implementation Agreement (IA) signing with the government (which was to be inked by Oct 11, 2016) as reasons for potentially shelving the Unit-II.

The company has also intimated improving the 'required commercial operations date' (RCOD) as Hubco had been awaiting finalisation from government before execution.

According to company management, the government has differentiated the status of the two units with Unit-I being 'early harvest' in the list of CPEC Priority Projects, while Unit-II was 'lower in the pecking order in the list', hence exposing it to potential removal in order to achieve project closure by 2018-19. Unit-I of 1x660MW may achieve commercial operations by 2018-19.

In the meantime Hubco remains in active pursuance with the government on the inclusion of Unit-II as well. "We highlight shelving of Unit-II (1x660MW) as a potential downside risk. Currently Hubco holds a 26pc equity stake in the project (2x660MW)", says energy analyst Yusra Beg at brokerage Intermarket Securities.

A year ago, in the fall of 2015, when the joint venture agreement with the China Power Hub Generation Company Limited (CPHGCL) was first signed to construct a 1,320MW (2x660MW) imported coal-fired power plant at Hub, Balochistan, the CEO of Hubco Khalid Mansoor had told this writer that the cost of the project would amount to nearly \$2.4bn and it would be "one of the biggest private-sector investments in the country".

The developments of last week have therefore thrown the expectations and calculations of energy experts in jeopardy. However, Analyst Hashim Sohail at Topline Securities argued that as per his discussions, the management was in the advance stages of negotiations with the government.

Optimism was in the air that the company may not need to compromise the scale of the whole project. Moreover, the management was confident that the 2x660MW project would achieve financial closure by Jan 2017, and the IA and PPA would be signed and finalised within the month.

Further, the company had stated earlier that it had the right to increase its stake to a minimum of 43pc and maximum of 49pc from the current stake of 26pc, 200 days before the commercial operation date (COD).

In the Annual General Meeting (AGM) of shareholders held on last Tuesday, the management indicated that it might opt to exercise the option to increase its stake. So, until something concrete emerges, energy sector experts and investors in Hubco are keeping their fingers crossed.

Meanwhile, earlier this month on Oct 06, the Thar Energy Limited (TEL) — a wholly owned subsidiary of Hubco — applied for a license with the National Electric Power Regulatory Authority (NEPRA) to set up a 330MW local coalbased power generation facility at Thar.

Amreen Soorani, analyst at JS Global, stated in a Sep 28 report that Hubco had expressed the intention of demerging its 225MW Narowal Plant into a separate legal entity, Narowal Energy Limited (NEL). The company had received permission to keep the tax-exempt status for NEL from the Economic Coordination Committee (ECC), and awaited approval from shareholders and the Sindh High Court, expected in FY17.

Hubco owns an oil-fired power station with an installed net capacity of 1,200MW at Hub and another of 214MW capacity at Narowal in Punjab. It also holds three-fourth of equity in 84MW Laraib Energy Limited, which prides itself on being the first hydropower independent power producer (HIPP) in Pakistan.

The Company is also investing \$20m in Sindh Engro Coal Mining Company Limited (SECMC), a joint venture between Engro Powergen, Thal Limited, HBL, CMEC, Government of Sindh and the Company, to develop a coal mine at Thar (which has the seventh largest reserves of coal in the world).

Analysts expect Hubco's profitability to experience an upward trajectory based on: the possibility of rupee depreciation against the greenback, higher operational savings due to self-management of Hub & Narowal power plants, and overdue interest on account of a glut of receivables due from WAPDA — which at last count amounted to a staggering 79.5bn.

Total assets of Hubco at the last close on June 30 stood at Rs134bn.

The price of the Hubco stock of the par value of Rs10, at the end of trading last Wednesday stood at Rs114.21. Investors seek the company stock for the Board's policy of a consistent payout.

http://www.dawn.com/news/1291801/coal-power-plants-a-potential-change

## GOVT SET TO ABANDON GAS SUPPLY PLAN The Express Tribune, October 25th, 2016.

Zafar Bhutta

ISLAMABAD: With gas shortages expected to hit consumers hard in the upcoming winter season, the government is set to shelve a plan of dedicated gas supply from new discoveries to a group of four fertiliser plants approved during the tenure of previous Pakistan Peoples Party (PPP) government, officials say.

The Economic Coordination Committee (ECC), in its meeting held on December 18, 2012, had allocated 202 million cubic feet of gas per day (mmcfd) from the newly discovered sources to four fertiliser plants – Engro Fertilizers, Dawood Hercules, Pakarab Fertilizers and Agritech Limited.

However, the petroleum ministry now wants to provide the gas to domestic consumers on a permanent basis. The ECC will take a decision on the matter.

Under the model approved during the PPP's tenure, the allocated gas was to be transmitted to the four fertiliser plants at an agreed delivery point.

The fertiliser manufacturers were required to enter into an agreement with the two gas utilities – Sui Northern Gas Pipelines Limited (SNGPL) and Sui Southern Gas Company (SSGC) for gas transmission through their main line from the agreed point of delivery to the designated point under the Third-party Access Rules 2012 based on a tolling fee.

The main objective behind developing the model was to ensure uninterrupted gas supply from the dedicated fields to the off-grid fertiliser plants by scrapping their gas sales agreement with SNGPL, which would have made available gas in the system and pipeline capacity for utilisation by other consumers.

According to officials of the Ministry of Petroleum and Natural Resources, Agritech Limited was running on domestic natural gas supply whereas Engro Fertilizers' new plant was being provided gas by Mari Petroleum Company.

Pakarab Fertilizers and Dawood Hercules were running on imported liquefied natural gas (LNG).

This shows that all the four fertiliser plants were operating independently without applying the gas supply model approved by the ECC in 2012.

According to an official, Kunnar Pasakhi Deep field has recently started producing gas but due to non-implementation of the gas sales agreement, it could not be provided to the fertiliser plants.

Keeping this in view, the petroleum ministry wants to allocate 130 mmcfd from Oil and Gas Development Company's Kunnar Pasakhi Deep field to SSGC and SNGPL on an equal-sharing basis. It further wants to allocate 25 mmcfd from the Makori East field to SNGPL for meeting its gas demand and supply deficit.

At present, the situation in Punjab is worsening for the domestic consumers. According to the winter gas supply management plan designed by the federal government, SNGPL will be implementing a load shedding plan from 10pm to 5am every day and for the first time domestic consumers will have no gas at night due to the shortfall.

http://tribune.com.pk/story/1208689/fertiliser-plants-govt-set-abandon-gas-supply-plan/

## PLAN TO PUT GOVT DEPARTMENTS ON SOLAR POWER Dawn, October 25th, 2016

PESHAWAR: Khyber Pakhtunkhwa Chief Minister Pervez Khattak has directed the high-ups of various provincial government departments to prepare a plan for putting their respective departments on solar power.

Sahibzada Saeed, head of strategic support unit, has been nominated to act as focal person in this regard.

According to a statement issued here on Monday, the chief minister issued the directives during a presentation given by Chief Executive Officer of Digital World International Company, Saudi Arabia, Nidal Taif, here the other day.

Minister for education, energy and power Atif Khan, adviser to chief minister on C&W Akbar Ayub, secretary energy & power and other concerned officials also attended the meeting.

Nidal Taif briefed the participants about the aims and objectives of the company and presented a comprehensive proposal for converting various departments of Khyber Pakhtunkhwa government to solar power.

He also apprised the participants about the benefits of the solar energy and its positive socioeconomic impacts.

The chief minister agreed to the proposal of the company, saying that various projects had already been initiated by the government in energy and power sector to address the issue. Putting departments on solar power is one of the best alternatives in this regard, remarked Mr Khattak.

The chief minister directed the authorities concerned to come up with solid and feasible proposals to put government departments on solar power. He also hinted at formal agreement with the Saudi company in this regard.

http://www.dawn.com/news/1292159/plan-to-put-govt-departments-on-solar-power

### DEBATING SOLAR TARIFFS Dawn October 27th, 2016

### Khurram Husain

LAST week I looked into the details of one Chinese solar power project that is struggling to be born in the Quaid-i-Azam Solar Park in Bahawalpur because at the last minute, Nepra, the power regulator and tariff-setting body, wanted to renegotiate the tariff downward. One third of the project is up and running while the remaining went into litigation and today awaits a second round of hearings to set its tariff.

I mentioned that the upfront solar tariff originally set in Pakistan was Rs17 per unit, later revised down to Rs11. I mentioned that the average tariff around the world is closer to Rs4 these days. A lot of the feedback revolved around this large difference, between what we are offering to investors versus what they are able to get in other countries. So let me explain a little further.

Some people wrote in to say that I am citing the tariff as applicable in the first 10 years of the project's life. After the first 10 years, the tariff drops to Rs8 for the remaining 15 years, meaning the average tariff for the project life, or the levelised tariff in the language of the power sector, is closer to Rs15.

Fine, but this distinction matters only to the investor and the government and is largely immaterial to the consumer. From the point of the view of the power consumer, the tariff in the first 10 years is what matters because, to put it simply, who cares what happens after a decade?

Another set of responses revolved around my comparison with other countries. Tariffs for renewable energy are difficult to compare from one country to the next. There are various reasons for this. One is that renewable energy tariffs, like solar and wind, are dependent on natural conditions in any part of the world, which vary greatly. So in the case of solar, the irradiance levels or ambient temperatures will be different from one country to the next, which will impact how much electricity the same panels can generate.

Therefore, the tariff that the investor will expect will also be different depending on these conditions. This is not the case with thermal tariffs, those that use gas or oil to generate electricity. These are largely dependent on the cost of fuel, which is easily comparable from one country to the other because oil and gas have highly developed global markets where their prices are set.

Second, and perhaps more importantly, there are at least three different tariff regimes in renewable energy. There are upfront tariffs, feed-in tariffs, and tariffs derived from competitive bidding or on a cost-plus basis. It is difficult to compare these with each other, although one can look at the differences between each and then decide which path is best for any given country to induct renewables into its energy mix.

Upfront tariffs are what we use in Pakistan. The tariff-setting body basically announces an upfront tariff, saying whoever sets up a plant and provides electricity to the national grid will be paid this amount. In the case of the first solar upfront tariff, the amount was Rs17 (yes, for the first 10 years of the project's life).

In the same year, Bangladesh announced an upfront solar tariff of Rs17 as well for a 200MW project. The Philippines has offered Rs20 as a solar feed-in tariff this year for a large number of projects totalling 526MW, although regulatory approval for them needs to be obtained, and this rate was on offer since 2012. There are a few other examples of higher tariffs offered around the world so the Pakistani offer was not unprecedented but nevertheless on the higher side.

Competitive tariffs are where the excitement is these days, where tariff bids are invited from investors and the lowest bidder wins. In India, they are getting bids at less than Rs7 (Pakistani) these days through this process, and Abu Dhabi and Chile have seen bids as low as Rs3. But Pakistan has had a bad experience with competitive bidding when it was tried in the early Shaukat Aziz years for thermal projects. There is a simple reason: people aren't exactly clamouring to come invest in Pakistan.

Nevertheless, it is a fact that prices of solar power are dropping rapidly around the world. If you're relying on competitive bids to attract investment in renewable energy, then you can easily take advantage of this trend. Feed-in tariffs for solar rooftop can also be modified with relative ease depending on the nature of the contract the utility has given to homeowners.

But upfront tariffs present a challenge under these conditions because, once issued, letters of interest come pouring in, and by the time the project nears completion the tariff has fallen. This puts the tariff-setting body in a bit of a conundrum: should they impose a revised tariff on all investors who are already in the pipeline based on the announced upfront tariff, or should they go ahead and honour their commitment to these investors, thereby burdening consumers with the abnormally high tariffs for more than a decade to come?

It's not an easy choice, because if you scare away investors today by revising their tariffs midstream, it will be harder to find new quality investors on the revised tariff. People are liable to say that you are a risky party to deal with because you change your mind midcourse, once large costs have already been incurred.

So Pakistan's entry into renewable energy has stumbled at the outset. According to one industry insider who wrote in, "[a]t one point there were as many as 3,000MW of letters of interest pending with AEDB but many of those developers have since lost interest and moved on. [Others] are stuck at various points in the pipeline. Currently, there are only four projects that have achieved financial close and two of those are QA Solar Park and Zonergy."

### http://www.dawn.com/news/1292406

### PAKISTAN MOVES UP IN EASE OF DOING BUSINESS RANKINGS Dawn October 27th, 2016

ISLAMABAD: Pakistan has made some important progress towards the ease of doing business for small and medium-sized enterprises, finds the latest edition of the World Bank Group's Doing Business report.

As a result, the country has emerged as one of the global top 10 improvers this year, says the report titled 'Doing Business 2017: Equal Opportunity for All'.

Pakistan's position in the doing business global rankings improved to 144 out of 190 economies this year under the latest methodology as a result of the reforms programme announced by the government. The country was ranked 148th last year.

The country's 'distance to frontier' score, a measure of distance each economy has moved towards best practice expressed as frontier at 100, also improved from 49.48 to 51.77 this year.

Pakistan had announced a three-year road map to improve its global ranking on doing business earlier this year. Consistent with that, the country completed three reforms in the past year in registering property, getting credit and trading across borders.

In Lahore, transferring property was made easier by improving the quality of land administration through digitising ownership and land records. This has made land administration more reliable than before.

Cross-border trade was eased by updating electronic customs platforms in Lahore and Karachi. It now takes less time for an exporter to comply with border regulations.

Pakistan improved access to credit information by legally guaranteeing borrowers' rights to inspect their own data. The credit bureau also more than doubled its borrower coverage, thereby increasing the amount of creditor information and providing more financial information to prospective lenders. Pakistan now ranks second in the South Asia region in the area of getting credit.

"These improvements provide important building blocks for a more efficient business environment that would encourage local entrepreneurs in the country," says Illango Patchamuthu, World Bank's Country Director for Pakistan.

"At the same time, Pakistan needs to accelerate reforms towards better regulatory practices for a more conducive business environment for higher growth and job creation," he said.

While Pakistan's recent improvements are encouraging, the report finds that local entrepreneurs still face difficulties in many areas such as enforcing contracts and getting electricity. For instance, it takes almost three years to settle a commercial dispute in Pakistan compared to the global average of 637 days. And firms in both Karachi and Lahore experience power outages on a daily basis, it points out.

This year's report includes, for the first time, a gender dimension in three indicators: starting a business, registering property and enforcing contracts. The country needs to pay significant attention to gender aspects, it says.

The 'paying taxes' indicator has been expanded as well to include measures of post-filing processes relating to tax audits and value added tax refund. Tax audit compliance in Pakistan takes 29 hours, which is considerably less than the regional average of 48 hours, but higher than the global average of 17 hours.

The finance ministry in a statement said reforms have been spearheaded by the finance minister and the Committee on the Ease of Doing Business through development and implementation of a National Doing Business Reform Strategy.

Commenting on the report, Mr Ishaq Dar said, "Implementation of the time-bound reforms under this strategy over the next two years is expected to significantly improve the country's business environment and act as a catalyst for increasing both domestic and foreign investment."

The strategy, according to the statement, was the result of consultative process led by the Ministry of Finance with involvement from federal and provincial government agencies concerned including key institutions, Board of Investment, Federal Board of Revenue and Securities and Exchange Commission of Pakistan.

The World Bank's report says that a record 137 economies around the world have adopted key reforms that make it easier to start and operate small and medium-sized businesses.

In its global country rankings of business efficiency, the report awarded its coveted top spot to New Zealand, followed by Singapore, Denmark, Hong Kong, South Korea, Norway, United Kingdom, United States, Sweden and Macedonia.

http://www.dawn.com/news/1292446/pakistan-moves-up-in-ease-of-doing-business-rankings

PUNJAB SEEKS POWERS FROM OGRA TO CHECK ILLEGAL LPG DECANTING Dawn, October 28th, 2016

Mansoor Malik

LAHORE: The Punjab government has sought enforcement powers from the Oil and Gas Regulatory Authority (Ogra) to check unbridled decanting (illegal refilling of gas cylinders) in the wake of growing cylinder blasts resulting in injuries and loss of precious human lives.

Since the Punjab government has no powers to enforce relevant laws, it has become impossible for Ogra to check or regulate decanting going on with impunity in every nook and corner of the province catering to fuel needs of domestic consumers as well as of private transport sector.

As many as 438 cylinder blasts have been reported across Punjab since June 2013, causing a large number of deaths and injuries, according to the Rescue 1122 data.

The death toll in such incidents is generally not reported to the departments concerned.

The gravity of the situation can be gauged from the fact that 110 people were injured during illegal decanting at an LPG outlet in August last year in Sahiwal, while a gas cylinder explosion in Shahdara, Lahore, last month claimed lives of 11 people and left many others injured. Of the 438 explosions, 102 were reported in Gujranwala, 85 in Lahore, 63 in Rawalpindi and 46 in Faisalabad.

After a cylinder blast in Shahdara last month, Chief Minister Shahbaz Sharif ordered an inquiry by the Chief Minister's Inspection Team (CMIT). In a prompt action, 52 cylinder manufacturing companies operating illegally in Gujranwala were sealed. None of these units has so far been desealed.

Sources say Ogra has issued licences to a limited number of companies, which have set up LPG filling stations with a heavy investment. They argue that smaller refilling outlets should also be encouraged to meet ever-increasing consumer needs. They suggest Ogra should also ask the licenced distribution companies to open their own outlets so that illegal decanting could be checked.

It is learnt that Ogra has issued licences to 36 companies for manufacturing cylinders and related equipment, including 10 authorised for refilling, while 21 others have storage licences.

Ogra has also issued licences to 111 distribution companies but so far only 68 LPG refilling stations have been established in the country, including the one in Lahore.

Sources allege the 111 companies have some 4,639 representatives which are not being monitored properly and many of them selling gas for illegal decanting.

Consumers want promotion of legal refilling to reduce the illegal decanting and avert fatal accidents.

Meanwhile, the Punjab government has asked all district coordination officers (DCOs) to ensure legal action against gas decanting.

The government clarifies that decanting (transferring gas from 12-40kg cylinders to 3-6kg cylinders) is not authorised by Ogra that also disallows manufacturing of small (3-6kg) cylinders.

Punjab Industries, Commerce and Investment Department Secretary Khalid Sherdil confirmed enforcement powers had been sought from Ogra to check illegal decanting business and arrest those involved in it.

He said it was impossible for Ogra to check decanting from Islamabad. There were only a few Ogra representatives in Lahore to handle the mammoth task of checking and closing illegal decanting business.

He said the Punjab government had also asked Ogra to take measures for opening of legal refilling stations through its licenced companies for legal supply of LPG to domestic as well as commercial consumers.

Mr Sherdil said the Gujranwala DCO had sealed 52 illegal cylinders factories after the Shahdara cylinder blast and added that only 11 of them had applied to the Ogra for registration and licence.

"The Punjab government has requested the Ogra to take decision on factories owners' applications on merit," he said and added now no new factory would be allowed to open without Ogra's authorisation.

LPG Distributors Association Pakistan Chairman Irfan Khokhar said there were some 400 factories in Gujranwala manufacturing substandard gas cylinders. Almost 75 per cent cylinders available in the market were substandard, he said.

He lamented that successive governments failed to legislate on the subject, adding that largely poor consumers buy small unsafe cylinders.

He admitted that some 270,000 shops in Pakistan, including 175,000 in Punjab, were involved in LPG decanting. There are some 4,600 decanting shops in Lahore alone.

He said the order to check illegal decanting had only resulted in increased prices for consumers.

"Police, town officials, civil defence and other agencies' are busy in extorting money from LPG shopkeepers, who will eventually shifted the burden onto the consumers," he alleged.

With the gas loadshedding starting next month, he said, the LPG requirement would rise to 1.2 million kilograms a day in Lahore alone.

http://www.dawn.com/news/1292772/punjab-seeks-powers-from-ogra-to-check-illegal-lpg-decanting

## FPCCI HINTS AT REVIEWING TRADE TIES WITH INDIA Dawn, October 28th, 2016

KARACHI: The Federation of Pakistan Chambers of Commerce and Industry (FPCCI) on Thursday said it would consider suspending trade with India if the situation did not improve soon.

FPCCI president Abdul Rauf Alam said that Pakistan had no compulsions of any sort to continue business and trade relations with India under the current hostile conditions. The entire Pakistani business community, he said, was united to take any decision and given the tense situation in the region, it was not possible to continue trade relations with India.

He pointed out the role of the Saarc Chamber of Commerce and Industry and said that it left them with no choice but to promote trade relations with ECO and D-8 countries.

The Kalabagh dam and the China-Pakistan Economic Corridor (CPEC) were also facing controversies and losing such opportunities could be damaging for the country, said Mr Alam, adding that the CPEC was a game-changer, but there was little awareness among the business community about the project. He advised the community to work in unison and avoid politics of accusations in order to improve the image of the apex body of trade and industry (FPCCI).

Mr Alam was of the opinion that without making payments of outstanding sales tax refunds to exporters, the country would not progress and falling exports would also not improve.

http://www.dawn.com/news/1292742/fpcci-hints-at-reviewing-trade-ties-with-india

MIRACLE OF WIND Dawn, October 28th, 2016

Zubeida Mustafa

KARACHI has been abundantly endowed with one of nature's riches — wind. Located on the Arabian Sea coast, the city cannot complain of being stifled by desultory stillness. Before the city's horizon changed drastically with the emergence of high-rise buildings, Karachiites had always enjoyed the luxury of cool breezes during summer evenings.

The breeze is still there, but has been trapped by concrete and steel structures. Now the breeze has been left only in poetic idiom to give us solace. Faiz Ahmed Faiz captured its beauty in this line, "Jaise seheraon mein haule se chale baad-i-naseem..." (Like the morning breeze in the desert)

However, the wind that greeted me at Eaglesham Moor (Scotland) was by no means as gentle or pleasant as the baadi-naseem eulogised by Faiz. It was blisteringly cold — 12 degrees Celsius — at a height of 300 metres above sea level at the Whitelee Windfarm.

It was nagging concern and healthy curiosity that led me to the wind farm at Eaglesham, a 20-minute drive from Glasgow. The concern is about Pakistan's energy crisis that is pushing the country into the abyss. The curiosity relates to our government's choices in the energy sector.

What I saw was fascinating. With 215 turbines dotting the land in their stately elegance, Whitelee generates 539MW of electricity that is equal to what is needed to light and heat 300,000 homes. The capital investment amounted to £500 million.

Whitelee is the largest wind farm of the 200 currently operational in the UK. This is what is called 'green and clean and renewable energy'. It has proved to be so feasible that 450 new wind farms are at various stages of construction in Britain. Whitelee was opened to the public in 2009, two years after work started on it. It was extended in 2013.

After visiting Whitelee, I have been wondering why we have not given serious thought to wind as a source of electricity. It needs capital, land and wind. We have the last two in abundance, and in terms of capital cost wind power is cheaper than the hydropower and nuclear energy we hanker after. Wind power is also cheaper to generate than the thermal power we produce by importing oil. Most importantly, wind power is renewable and less messy.

Whitelee is spread over 57 square kilometres, whereas in Pakistan the meteorological department has identified a wind corridor in Sindh covering an area of about 9,700 square kilometres with gross wind power potential of 43,000MW. According to the MIT's Technology Review, various constraints notwithstanding, at least 11,000MW of electricity can be generated in Sindh.

Is Pakistan using wind power optimally? It is said to be using 150MW or so from two farms in Gharo and Jhimpir. We are told this amounts to 0.5pc of our energy mix. How does this stand? Currently, we generate about 22,000MW of electricity, with thermal power being 65pc, hydropower 31pc, nuclear 3pc, and the remainder from solar and wind sources.

The government realises that thermal power is a constant drain on our resources. But the two alternatives the government seeks are politically and ecologically explosive, and so not a wise choice.

One is our relentless quest for hydropower by building big dams across our erratic and water-starved rivers. The bigger the dams the greater is their appeal for our rulers, even though big dams are now out of favour worldwide. They are costly to build and require a pretty long gestation period. They invariably upset the ecology of rivers and lead to bitter feuds with lower riparians. Then there is the massive human misery caused by the displacement of thousands of families. Take the case of the infamous Kalabagh dam. Just to mention it is enough to lead to vitriolic outpourings.

The other source of energy that is the darling of our establishment is the nuclear power plant. Even before we became the much-vaunted, though ill-advised, nuclear power, we have had to face trouble from our patrons without whose aid the country cannot survive. Now that we are a self-proclaimed nuclear power we have placed our credibility at risk by declaring for decades that Kahuta was for peaceful purposes only.

There were reports that Pakistan could generate some 1,300MW of electricity from a nuclear plant in Karachi and four at Chashma. Karachi will be the site for yet another nuclear plant being set up with China's help. Its potential hazards for this city of 20 million should not be ignored. Unsurprisingly, the controversial Kanupp-2 has drawn much fire from citizens.

We are defying world trends as stated in the World Nuclear Industry Status Report 2016. In the post Chernobyl and Fukushima age, the trend has been towards reducing dependence on nuclear energy, early closure of nuclear plants, fewer opening of new plants and more investment in renewable energy. China is the sole exception.

http://www.dawn.com/news/1292660/miracle-of-wind

EXCEPTION MADE FOR NEW 1,200MW PLANT TO END LOADSHEDDING Dawn, October 29th, 2016

Khaleeq Kiani

ISLAMABAD: In what appeared to be a policy change, the government has decided to set up a new 1,200MW power plant based on imported re-gasified liguefied natural gas (RLNG) on a fast-track basis to cover slippages on the target to endloadshedding by 2018.

In July this year, the government had banned fresh private sector investments in power generation on imported fuels, saying it had contracted surplus capacities enough to meet electricity demand beyond 2022.

Soon it dawned on the government that a few projects, which could ensure a `loadshedding-free Pakistan` before the next elections, could miss the dadline and hence an exception was given for a `contingency project`, a senior government official told Dawn.

The PML-N had come to power on the promise of ending power shortages in the country within its five-year term.

On Friday, a hurriedly called meeting of the board of directors of the Private Power and Infrastructure Board (PPIB), headed by Water and Power Minister Khawaja Asif, decided to invite bids for the 1,200MW RLNG-based power plant in Muzaffargarh, Punjab, an official statement said.

Another official said that three key members of the board secretary water and power, chairman of Wapda and chief secretary of Balochistan did not attend the meeting due to short notice and conflicting engagements.

Interestingly, a host of unauthorised senior executives of the PPIB attended the whole board meeting, although rules allow that only members of the board or their authorised nominees could attend board meetings, he said.

He said the 1,450MW Tarbela 4th Extension had been delayed beyond its completion deadline but was within the 2018 target timeline, while the strategic 969MW Neelum-Jhelum hydropower project could still not be relied upon because of its challenging geographic and hydrologic nature.

The official said the Cabinet Committee on Energy (CCoE) headed by Prime Minister Nawaz Sharif had deliberated upon the issue and wanted to ensure without any doubt that enough project capacity was available before the next elections to end even slightest of shortfall. `There are still 16 months to go and much canchange. Hence, the prime minister is not ready to take chances, he said, adding that a major plant supplier, General Electric, was already missing some deadlines.

Official sources said that the new project would be offered for bidding under a tight schedule so that it could start single-cycle production before March 2018. `We will not sign this project if it is not available within this time constraint.

When contacted, Secretary Water and Power Younas Dagha said the `capping on new plants based on imported fuel` was still intact and would remain so but one exception was approved as contingency plan. He said the government was trying to complete about 10,000MW of power generation capacity in about a year.

An official statement said the ministry was directed by the CCoE to initiate the process of advertisement through the PPIB for inviting prospective investors for installation of the combined cycle power plant of 1,200MW based on RLNG to address the power shortfall challenges.

The meeting was informed that the project would be located in Muzaffargarh, near the existing thermal power station, having gas turbines based on combined cycle technology. The power plant will have minimum annual availability of 92 per cent. Open Cycle Operation is scheduled to start by February, 2018, whereas the full Combined Cycle Operation will start by the end of 2018, the statement said. The bids will be invited in a few days through single stage, two envelope bidding approach.

The power ministry had issued written instructions in July after 105th meeting of the PPIB board not to extend expiring letters of intent (LoIs) and letters of support (LoSs) for existing proposals or issue new ones for power plants of imported fuel.

'No LoI or LoS be issued or extended by the PPIB for any power plant on imported fuel except agreed bilaterally by the government of Pakistan with the Chinese government and are part of the priority list of ChinaPakistan Economic Corridor projects,' read the order of the power ministry.

The order said the power generation capping plan approved by the PPIB board was based on a presentation that already contracted power projects that were enough not only to meet power shortages but also provide reasonable surplus reserve.

It said that 2,632 megawatts of new hydropower plants and 3960MW of coal-based power plants (both local and imported) and other renewable energy projects already under construction would bring in 13,207MW of new generation capacity by the end of 2018. This is `sufficient not only to meet our power shortages, but also to provide comfortable spinning reserves`.

The order said it was also observed that the `power generation already financed and under various stages of execution will also bring further capacity of 20,380MW by 2022, bringing the total installed capacity to 53,405MW`.

On the basis of these commitments, `it was decided that no further financial commitments would be justified for purchasing power from the private sector, especially on imported fuels`, the order said.

http://epaper.dawn.com/DetailImage.php?StoryImage=29 10 2016 003 009

HYDROELECTRIC POWER: INVESTOR THAT QUOTES LOWEST TARIFF WILL WIN PROJECT BID The Express Tribune, October 29th, 2016.

### ISLAMABAD:

in a major move, the National Electric Power Regulatory Authority (Nepra) has decided to switch to a tariff regime based on competitive bidding under which the private-sector investor that quotes the lowest tariff will win the bid for a power project.

"This is universally recognised as the fairest and most transparent method of determining tariffs," said a statement issued Friday.

Nepra has taken the first significant step towards implementing its long-term vision of market-driven tariffs based on competitive bidding by approving the Request for Proposals (RFPs) of seven hydroelectric power projects with a

cumulative capacity of 653 megawatts. Private-sector investors will undertake these projects after open competitive bidding to be held by the provincial power boards.

These boards will float Nepra-approved RFPs and invite private power companies to quote the lowest levelised tariff, which will be the sole criterion for winning the bids.

Until now, all tariffs for independent power producers (IPPs) in Pakistan have either been upfront or based on a costplus formula, which have often drawn criticism for lacking transparency.

The hydroelectric power projects whose RFPs have been approved include 135MW Taunsa power project, 188MW Naran project, 102MW Shigo Kas project, 99MW Arkari Gol project, 96MW Bata Kundi project, 21MW Ghorband Khwar project and 12MW Nandihar Khwar project.

In future, Nepra says it also intends to encourage competitive bidding for determining tariffs for other technologies including wind, solar and thermal power.

http://tribune.com.pk/story/1213603/hydroelectric-power-investor-quotes-lowest-tariff-will-win-project-bid/

# MINISTRY ALLEGES NEPRA CAUSED RS90 BILLION LOSS The Express Tribune, October 29th, 2016.

#### Zafar Bhutta

ISLAMABAD: The Ministry of Water and Power has hit out at the National Electric Power Regulatory Authority (Nepra), saying the regulator has caused a Rs90-billion loss to power producers and distributors by announcing lower electricity tariffs.

"The lower tariff set by the regulator for power distribution and generation companies will put undue financial burden on the sector and the federal budget if corrective measures are not taken," said a senior official of the ministry.

The Rs90-billion figure included Rs60-billion loss to distribution companies due to tariff reduction and Rs30-billion loss to generation companies following determination of lower tariffs, especially for the Nandipur power plant.

Because of this reason, the Ministry of Water and Power has not yet notified the tariff for the Nandipur plant.

However, while announcing its decision on a petition for fuel price adjustment in the power tariff for September 2016, the regulator voiced serious concern over the delay in notifying the tariff for the Nandipur plant. The official alleged that Nepra was not performing its duties according to its mandate, which would have an adverse impact on the performance of power companies. This was the reason why the water and power ministry wanted to amend the Nepra Act to bring the regulator under its supervision, he said.

"If this plan is implemented and Nepra is brought under control of the ministry, the regulator, which is supposed to safeguard the interest of consumers, will become toothless," argued another government official.

Despite efforts, Nepra could not be reached for comments. Apart from the losses caused by lower tariffs, the power companies were also finding it tough to cope with subsidy payments and general sales tax (GST) refunds.

This is creating hurdles in the way of generating funds for critical power production projects aimed at easing energy shortages in the country.

According to the official, subsidy payments amounted to Rs5 billion for the months of July and August 2016. At present, the government is providing an annual subsidy of more than Rs100 billion to the electricity consumers.

Subsidy payments valuing Rs98 billion were outstanding in respect of Azad Jammu and Kashmir, Federally Administered Tribal Areas (Fata) and K-Electric by the end of August 2016.

Claims of Rs62 billion on account of GST refund were also outstanding by the end of August.

The official pointed out that with the planned increase of 10,000 megawatts in electricity production over the next two years, the subsidy bill would also go up. In addition to this, the electricity distribution system, which is already under stress, will be unable to bear the load of 10,000MW.

In 2013, more than 750 instances of system constraints were recorded in power distribution, but they have now come down to 500. The tripping of feeders has been reduced significantly. A few constraints in the distribution system will, however, remain beyond FY17, especially in some parts of Sindh and Khyber-Pakhtunkhwa.

http://tribune.com.pk/story/1213609/power-companies-ministry-alleges-nepra-caused-rs90-billion-loss/

NEWS COVERAGE PERIOD FROM OCTOBER 17TH TO OCTOBER 23RD 2016 GAS SHORTAGES SET TO RISE DESPITE LNG IMPORTS, NA BODY TOLD Dawn, October 18th, 2016

Kalbe Ali

ISLAMABAD: Domestic consumers in Punjab will face severe gas shortages during the upcoming winter due to the curtailment of supply from 10pm to 5am daily, the National Assembly's Standing Committee on Petroleum was informed here on Monday.

Minister for Petroleum and Natural Resources Shahid Khaqan Abbasi told a meeting of the committee, chaired by Chaudhry Bilal Ahmed Virk, that the worst year of gas shortages for consumers in Punjab had started.

He said that gas load management plan had been activated and gas shortages were being felt in certain areas of the province.

The minister expressed concern over priority access to natural gas enjoyed by provinces that were producers of the vital resource, claiming that this had been made possible under the 18th Amendment to the Constitution.

"This restriction should not apply to domestic users," the minister said, adding that the issue has importance because Punjab is the largest consumer of natural gas and the smallest producer.

The brunt of any curtailment, therefore, falls on Punjab since it has to do with whatever gas is left in the system after consumption by domestic, commercial and industrial cosumers in Balochistan, Sindh and Khyber Pakhtunkhwa.

He said that despite importing liquefied natural gas (LNG), the gas shortfall remained significant and the costly imported LNG would be consumed mainly by industrial consumers.

The minister said that the gas shortfall for domestic consumers was 40 per cent on the system of Sui Northern Gas Pipelines Limited (SNGPL) at present, which would further increase in the coming days.

SNGPL officials told media that the peak estimated in Punjab and KP was 1.45 billion cubic feet daily, whereas the average supply of gas is between 800 and 900 million cubic feet daily.

"But there are chances that the demand will go up as more areas are being covered by the SNGPL network whereas the supply usually declines in winter months that see peak demand."

They listed various reasons for this, including technical reasons, as the gas flow is reduced due to a decling in temperature.

The committee was informed that the Oil and Gas Regulatory Authority had allowed SNGPL to expand its network and execute development works.

"We are now giving connections to the applicants of 2014 and soon the applications of 2015 will be taken up," Amjad Latif, SNGPL managing director, told the meeting.

Based on complaints by the members of the committee, it was decided that like electricity bills, both gas utility companies too would print the photo of gas meters showing the reading in all monthly bills.

The committee was also informed that India continued to be part of the TAPI gas pipeline project, which was expected to be operational by Dec 2019.

Interstate Gas Systems managing director Mubeen Saulat said that the project was on track and Turkmenistan had agreed to become the consortium leader by contributing up to 85 per cent of equity, while Afghanistan, Pakistan and India would take five per cent equity share each.

The TAPI Pipeline Company Limited was incorporated as an offshore company in the Isle of Man in Nov 2014.

http://www.dawn.com/news/1290675/gas-shortages-set-to-rise-despite-lng-imports-na-body-told

# PAKISTAN IN TALKS WITH RUSSIAN, MALAYSIAN LNG SUPPLIERS The Express Tribune, October 19th, 2016.

### Zafar Bhutta

Islamabad: As Pakistan is seeking liquefied natural gas (LNG) supplies to do away with long-running energy shortages, Russian and Malaysian companies are likely to win the race as they could be awarded billions of dollars worth of contracts, officials say.

Other energy companies, particularly from the Middle East and Europe, are also vying to win LNG supply orders, but they are lagging behind.

Owing to growing relations between India and the United States, which is Russia's arch rival in the global political scene, Moscow is looking towards Pakistan for deeper economic ties.

Already, Russia is at an advanced stage of talks on laying a \$2-billion LNG pipeline from Karachi to Lahore for the transport of imported gas.

The Ministry of Petroleum and Natural Resources is seeking the go-ahead of the Economic Coordination Committee (ECC) to start negotiations on LNG prices with the Russian and Malaysian companies and award them supply contracts, officials say.

Qatar is the first country that has captured Pakistan's gas market with an LNG export contract valuing over \$15 billion.

The government has set up Pakistan LNG Limited to secure LNG deals through open competitive biddings as well as through government-to-government arrangements.

According to officials, Pakistan LNG has informed the petroleum ministry that it is engaged in negotiations with Petronas of Malaysia and Gazprom of Russia in a bid to strike LNG supply agreements.

The company is also negotiating with Engie of France, Eni (Italy), OTI (Oman) and Socar (Azerbaijan) for LNG import. Any agreement reached with these companies will be executed after completing required formalities.

Considering it a capital-intensive project of national importance, the Ministry of Petroleum has suggested that a price negotiating committee should be constituted to finalise the LNG price and other important aspects with Petronas and Gazprom.

In the case of Qatar too, a price negotiating committee had been set up for critical talks on the price at which LNG would be supplied.

The first LNG terminal built at Port Qasim has already started working on March 27, 2015. Pakistan State Oil (PSO) is continuously receiving LNG cargoes under a competitive bidding process as well as under state-to-state arrangement from Qatar.

Over 43 LNG cargoes have been handled at the terminal and 400 million cubic feet of re-gasified LNG is being injected every day into the national grid.

For the past few years, Pakistan has been enduring acute gas shortages both for electricity generation plants and for general use by varying sectors.

Punjab has faced its worst gas shortage during this period. This winter, domestic consumers in the province will experience a suspension of gas supply in the night for the first time.

Pakistan produces nearly 4 billion cubic feet of natural gas per day (bcfd), way short of the demand for 6 bcfd, which is continuously rising. The energy deficit has not only caused hardships for the ordinary people in their daily life, but has also hurt economic growth of the country. In the face of the grave situation, the government is aggressively pushing ahead with the import of LNG to bridge the shortfall.

http://tribune.com.pk/story/1203887/ahead-others-pakistan-talks-russian-malaysian-lng-suppliers/

## 49.5MW WIND POWER PROJECT STARTS OPERATIONS Business Recorder, 20 October 2016

KARACHI: The 49.5 MW Wind Power Project of Tenaga General Limited has started the commercial operations on October 11, 2016.

According to material information sent to Pakistan Stock Exchange on Wednesday, the power project is located at Mirpur Sakro, Distt Thatta, Sindh. Tenaga General Limited is a subsidiary company of Dawood Lawrencepur Limited.

http://epaper.brecorder.com/2016/10/20/21-page/805289-news.html

NEAR PRODUCING FIELDS: PROVINCES REFUSE TO PAY COST OF GAS SUPPLY SCHEMES The Express Tribune, October 22nd, 2016.

ISLAMABAD: All four provinces of the country have refused to foot the bill of new gas supply schemes planned near producing fields in order to stave off the threat of protest by local residents and have asked the federal government to release the entire capital, officials say.

The move came after the federal government stopped fund allocations under the Public Sector Development Programme (PSDP) for fresh gas supply schemes.

The Ministry of Petroleum and Natural Resources has found it impossible to undertake such projects for gas supply to the villages and localities falling within 5km radius of the producing fields because of the absence of funds.

Gas companies are also encountering problems in their exploration work and gas theft is on the rise near the producing fields, especially in Khyber-Pakhtunkhwa.

According to officials aware of the development, the petroleum ministry has written to the provinces, asking them to bear the cost over and above the funding criteria.

The Sindh government argued that the federal government may pay the entire cost whereas Balochistan and Khyber-Pakhtunkhwa suggested that the cost should be borne by gas utilities.

The government of Punjab was of the view that per-consumer cost criteria should be revised, before discussing costsharing with the provinces, in a bid to collect the entire cost from the consumers.

The petroleum ministry was also working on some other proposals. It pointed out that the cost may be borne by the utility companies depending on approval of the Oil and Gas Regulatory Authority (Ogra).

It said the utility companies would try to provide gas from their system to the villages and localities near producing fields where reserves had been exhausted.

The ministry also proposed that the cost of legalising the illegal network in Khyber-Pakhtunkhwa near the gas producing fields could be shared between the province and the centre. However, Khyber-Pakhtunkhwa was not ready to share the cost.

The ministry's proposals as well as arguments of the provinces will be taken up in the Council of Common Interests – an inter-provincial body – for a decision.

At present, two public-sector gas distribution companies – Sui Northern Gas Pipelines and Sui Southern Gas Company – are supplying natural gas across the country through their extensive pipeline networks together serving millions of consumers.

These state-owned companies had been required to provide gas for various schemes under federal government directives from time to time.

Based on per-consumer cost criteria, the companies proceeded to undertake gas supply schemes with support of PSDP funds under the prime minister's directives. In 2013, however, the federal government halted the block allocation of funds for such schemes.

http://tribune.com.pk/story/1205910/near-producing-fields-provinces-refuse-pay-cost-gas-supply-schemes/

RENEWABLE SOURCES: ENERGY CRISIS A GLOBAL ISSUE, EXPERTS DISCUSS SOLUTIONS The Express Tribune, October 22nd, 2016.

LAHORE: Punjab Minerals and Mines Minister Sher Ali Khan said that developing countries all over the world are suffering from an energy shortage and Pakistan is no exception.

"The government is trying its best to fulfill the energy needs of the country, both at federal as well as the provincial level," Khan said while speaking at an energy conference Friday. The conference titled, 'Energy for Environmental and Economic Sustainability', was organised by the University of Management and Technology (UMT) in collaboration with Texas Tech University (TTU), USA, National Science Foundation, USA and International Association for Hydrogen Energy, USA.

Khan said that the government has launched the world's largest solar power project of 1000 megawatts in Bahawalpur, the Quaid-e-Azam Solar Park, which would be commissioned by the end of this year. "The first 100MWs were already commissioned in May last year," he added.

The speakers at the conference noted that the need for energy is a global issue due to technology, industrialisation of developing countries, social development and population growth. Both developed and developing countries are now in search of alternative sources of energy. Fossil fuels are causing a harmful impact on the environment including air and water pollution, damage to human health, wildlife, water use and land use, which then leaves the economy affected.

"All energy resources can stop functioning but the sun is never-ending and a great source of energy. It will always be there to cater to our needs," said Dr Hasan Sohaib Murad, Director of UMT, Lahore. He emphasised on adopting maximum sources of alternative energy, saying that one day hydro, thermal and nuclear power plants will prove to be insufficient.

Punjab Higher Education Commission Chairman Dr Nizam ud Din said that energy plays a critical role in the development of countries. "Dangerous climate changes are jeopardising human health conditions since the industrial revolution and its solution lies in non-polluted clean energy sources like solar and wind energy."

Speakers said that the solution for agricultural revival lies in alternative sources of energy especially solar, which is a purely renewable source. They said that Pakistan lies in a hot zone with an average solar radiance of 5.3 kwh per day, which makes solar energy all the more viable for the country.

http://tribune.com.pk/story/1205904/renewable-sources-energy-crisis-global-issue-experts-discuss-solutions/

BRAZIL OFFERS ASSISTANCE TO PAKISTAN IN CLEAN ENERGY, AGRICULTURE The Express Tribune, October 22nd, 2016.

ISLAMABAD: Brazil Ambassador Claudio Raja Gabaglia Lins has offered Pakistan cooperation in producing renewable energy and improving agricultural productivity as the South American nation has made rapid progress in these areas.

"Brazil is meeting 42% of its energy needs through renewable resources and is ready to help Pakistan generate energy through wind, solar, ethanol, biomass and other sources," the ambassador said.

Apart from clean energy, Brazil has achieved robust growth in the agriculture and livestock sector.

The envoy was speaking to the business community at the Islamabad Chamber of Commerce and Industry (ICCI).

Brazil was the seventh largest economy of the world and the second largest in Latin America, he said and suggested that Pakistan could achieve better results for its economy by ramping up cooperation with the South American country.

He noted that many Pakistani products had an excellent potential in the Brazilian market and businessmen should step up efforts for trade promotion.

He cited increased direct contacts between private sectors of the two countries as the best approach to explore all untapped areas for potential cooperation.

The envoy assured businessmen that his embassy would provide all possible support in the search for business opportunities in Brazil.

Earlier, ICCI President Khalid Iqbal Malik revealed that Brazil's trade with the world stood at \$369 billion in 2015 with exports valuing \$191 billion, but its trade with Pakistan was worth a mere \$300 million.

"This is not commensurate with the real potential of both countries, which are doing trade in limited goods; they should focus on trade diversification to achieve better results," he said.

Malik insisted that many Pakistani products such as pharmaceuticals, chemicals, sports goods and agro-products including basmati rice, pulses, fruits and vegetables could find a good market in Brazil and the embassy should play its role in highlighting their potential to Brazilian consumers.

He highlighted poultry meat, agricultural machinery, orange juice, tea, spices, coffee, auto parts, leather goods, granites, electrical appliances and handicrafts as other potential areas of mutual cooperation.

He asked the two sides to encourage frequent exchange of trade delegations and organise single-country exhibitions to push bilateral trade and economic relations up to the real potential.

Malik also briefed the ambassador about the investment opportunities in various sectors of Pakistan's economy and urged him to persuade Brazilian investors to visit Pakistan for seeking business and investment opportunities in the China-Pakistan Economic Corridor and other areas of interest.

http://tribune.com.pk/story/1205908/trade-ties-brazil-offers-assistance-clean-energy-agriculture/

NEWS COVERAGE PERIOD FROM OCTOBER 10TH TO OCTOBER 16TH 2016 COAL MAY BE CHEAP, BUT IT COMES AT A HEAVY PRICE The Express Tribune, October 10, 2016

Bilal Memon / Farhan Zaheer

KARACHI: Pakistan's romance with coal has just begun and environmentalists are not happy with the country's new-found love. Industrialists, on the other hand, seem okay with the idea, but not when it comes at the expense of environmental damage around their factories.

Pakistan is set to build a coal transshipment project at berth number 3 and 4 of Port Qasim that will be used to transport the fuel for two, 660MW coal-fired power plants in Sahiwal. The project is part of the multi-billion dollar China-Pakistan Economic Corridor (CPEC) and forms part of the PML-N promise that it would end load-shedding before the next general elections.

However, the industrialists' objection is not aimed at discouraging the government from taking steps towards an energy-sufficient Pakistan. Their argument stems from the worry that their exports may be threatened due to the dispersion of coal dust in the surrounding areas.

"There are many sensitive industries in the vicinity of the proposed project and we are concerned that the output of these factories would be damaged due to coal dispersion," spokesperson of Bin Qasim Association of Trade and Industry (BQATI) told The Express Tribune.

The coal jetty, which envisages transporting thousands of tons of coal north of the country, is surrounded by industries including pharmaceutical, edible oil, food and a water filtration plant among others. There are currently 180 large- and medium-size industrial units operating in the industrial area at Port Qasim, Pakistan's second busiest port that handles about 40% of its seaborne trade.

Factory owners are worried about escalation as well. They fear that this may just be the start of a gradual move towards many such coal-powered projects at the port. Since the country's electricity demand is growing fast, the

government may encourage more investment in other coal transshipment projects, which would hurt the businesses of surrounding industries.

Environmentalists believe the project will cause more harm than good, given the country's history of weak enforcement and monitoring incapability.

"The project is going to badly affect the natural environment. The Sindh Environment Protection Agency (SEPA) should work in the interest of people and not those who destroy the environment," said Roland deSouza, executive member Shahri, a Karachi-based NGO that works for environment protection.

He said that SEPA does not have the required workforce to monitor such a huge project. "The agency is likely to approve it and, like the other projects it has approved in the last decade, this one will too, end up destroying the environment."

Proponents say that it is still possible to control the dispersion of coal dust by spraying water and other binding agents at the coal import facility. Their arguments are based on regular monitoring as the project moves forward. However, detractors maintain such mitigation measures would not be enough.

"We fear the project would hurt our exports. Due to the sensitive nature of our products, we cannot afford a coal jetty within a kilometre's radius of our factory as it will affect the quality of our medicines," a top official of a pharmaceutical company told The Express Tribune.

There are also some automobile industries in the area that are concerned about the air-mix, which is crucial to their operations.

"I think we will have to move our industry somewhere else if this project is built at the proposed location. We produce highly sensitive auto parts that cannot be produced in the presence of air that is polluted with coal particles," a representative of an auto parts making company commented on condition of anonymity.

Another business owner echoed a similar view.

"We produce food products. We believe it will not be humanly possible for us to protect our machinery and our products from the dispersion of small coal particles," said an official of a multinational food company that is located within a kilometre or so of the proposed coal jetty.

On the other end is SEPA Director General Naeem Ahmed Mughal.

He says that his office would ensure the project meets all environment protection measures during and after completion of the project.

However, Mughal, who presided over a recent public hearing organised at a local hotel, said that the project is very important for the country's economy.

He tried to convince environmentalists, industrialists, social workers by saying that he would not approve the project at the cost of the environment.

"There are coal import facilities even in residential areas in leading industrialised countries. We can protect our environment without compromising our economic interests," he told participants towards the end of the public hearing.

His argument did not entirely convince the gathering that left with one simple thought — would he be okay with having his house in the vicinity?

http://tribune.com.pk/story/1196362/coal-may-cheap-comes-heavy-price/

### OGRA ALLOWS 14PC INCREASE IN GAS PRICES Dawn October 10th, 2016

Khaleeq Kiani

ISLAMABAD: The Oil and Gas Regulatory Authority (Ogra) has allowed two gas utilities to increase their average gas prices by about 14 per cent (Rs58 per unit) for the current financial year.

The decision came following a lengthy process spreading over nine months on the basis of tariff petitions filed by the Sui Northern Gas Pipelines Limited (SNGPL) and Sui Southern Gas Company Limited (SSGCL) and public hearings.

Ogra almost accepted the Rs57.89 per unit (MMBTU) increase in average price sought by the SNGPL to fix its average prescribed price at Rs480.63 per unit, up from the existing Rs422.74 per unit, to meet its estimated revenue requirement for the financial year 2016-17.

However, this was not the case with the SSGCL, which had sought an increase of Rs16 per unit in the average prescribed price of Rs419 per unit to take it to Rs435.

The regulator determined the average prescribed price for the company at Rs354.24 per unit, with a reduction of Rs65.12 per unit.

The reduction will, however, not benefit consumers in Sindh and Balochistan because of a government formula currently in vogue that maintains a uniform natural gas tariff across the country.

This policy requires the implementation of a higher-than-average prescribed price of either gas utility.

The higher tariff collected this year from the SSGCL consumers (to maintain uniformity) will then be deposited in the federal kitty as gas development surcharge, which is transferred to the respective province based on the quantum of its gas production.

In a nutshell, the Sindh government will be the highest beneficiary of this revenue because the province has the highest gas production. Balochistan will receive a nominal share.

The Ogra determinations will ensure about Rs39.5 billion in profit for the SNGPL during the current fiscal year, according to the regulator's own estimates. The SSGCL's profit has been estimated at Rs35.4bn.

The regulator approved an operating income of Rs201bn and operating expenditure of Rs161bn for the SNGPL, leaving an operating profit of Rs39.5bn.

Likewise, the operating income of the SSGCL was set at Rs175bn against operating expenses of Rs140bn for the current year — an operating profit of Rs35.4bn.

Ogra has sent two separate decisions on the SNGPL and the SSGCL to the government, which have an additional revenue impact of Rs75bn on consumers. Under the law, it is up to the government to decide within 40 days — by Nov 15 — how this Rs75bn additional revenue requirement be charged to various consumer categories depending on its political and socioeconomic priorities.

Historically, successive governments have been putting the most burden on industrial, commercial and power sector consumers and trying to lower the burden on residential consumers and fertiliser plants through a system of cross-subsidisation that ensured total revenue to the gas utilities as determined by the regulator.

Ogra allowed the two utilities to recover 4.5pc of the cost of unaccounted-for-gas (UFG) losses against the SNGPL's demand for 10pc allowance and that of the SSGCL for 7pc allowance. As such, the regulator decided that the SNGPL bear a financial impact of Rs7bn and SSGCL absorb Rs13bn for failing to reduce their system losses to the permissible 4.5pc level.

Conversely, Ogra also allowed 9.5pc UFG cost for liquefied natural gas (LNG) in the tariff for its dedicated consumers — setting two separate benchmarks for the same network. It also allowed the utilities to charge Rs113bn cost of the pipeline network for LNG transportation from consumers. Of this, the SNGPL was allowed Rs64bn and the SSGCL Rs49bn on the basis of a government directive.

The regulator said the interveners had pointed out a valid legal question, i.e. following the constitutional devolution, matters relating to gas and its revenue should be decided by the Council of Common Interests (CCI) because the Economic Coordination Committee of the cabinet had lost its legal standing in such matters.

Ogra, however, conceded that it had followed the ECC decision in the larger national interest, which had "advised" that subject projects (of LNG) will be included in the asset base of gas companies and "financial costs incurred in creation of RLNG infrastructure of national importance should be allowed as admissible expense in the revenue requirement of the utility companies.

The regulator also allowed Rs9bn additional expenditure on a 5500km pipeline for new projects following the recent lifting by the prime minister of a moratorium on domestic connections.

The moratorium was imposed in 2011 by the then prime minister because of gas shortages.

https://www.dawn.com/news/1289232/ogra-allows-14pc-increase-in-gas-prices

### GOVT-PROPOSED AMENDMENT TO CLIP POWERS OF ENERGY REGULATORS Dawn October 11th, 2016

Khaleeq Kiani

ISLAMABAD: The government is contemplating bringing an amendment to the National Electric Power Regulatory Authority (Nepra) Act 1997 to make it binding on the regulator to implement policy guidelines of the federal government.

Informed sources told Dawn that a draft amendment to the Nepra Act has been circulated to the stakeholders concerned for comments before it could be tabled before the Council of Common Interests (CCI) for approval.

These sources said Nepra has strongly opposed the draft act because it viewed the proposed changes against the basic spirit of the regulatory bodies. The proposed amendment seeks to change the status of the regulator from an independent quasi-judicial forum to an advisory body of the Ministry of Water and Power, the regulator is reported to have conveyed.

Also, it said the institutions need to be strengthened with passage of time to build trust of the markets as the government planned to progress towards a deregulated regime going forward instead of going on a backward journey, these sources said.

The sources said the changes to the law have originated from the Ministry of Water and Power, which has been irritated by the repeated resistance from the regulator on allowing higher inefficiency standards in consumer tariff. The sources said the ministry had drawn its arguments from a book on Indian regulators and suggested the regulator should guide the sector through its advisories to the government instead of exercising executive powers to setting rates and standards.

The ministry believed Nepra was trying to regulate the government, meaning by its generation and distribution companies instead of regulating the private sector, primarily K-Electric.

A continuous rift in the matter of final settlement of Nandipur power project's tariff, Matiari-Lahore Transmission line and renewable energy projects were also a few recent example of an ongoing unease. The government led distribution companies are already in court against implementation of Nepra determinations suggesting Rs2-3 per unit reduction in base tariff.

"The changes proposed are wide-ranging but crux of the matter is that the policy guidelines issued by the 'federal government' would be binding on Nepra without any excuse," an official who read the amendments said. He said the comments from the provincial governments were yet to come on the issue but the provinces had historically opposed such moves during the PPP and Musharraf tenures.

He recalled that an attempt to bring similar changes to the Ogra Act were blocked by then law minister Farooq H. Naek at the eleventh hour during the PPP period.

In the famous rental power case, Nepra had wrote to the government that its directives were not binding on the regulator if these were against the spirit of the Nepra act, rules and regulations.

The apex court had ruled that the federal government should improve its affairs and impress upon power companies to reduce theft and inefficiencies instead of asking Nepra to build in inefficiencies in tariff and has censured the regulator for failing to protect consumer interest while following government directives and directed not to implement government directives if these were against the law or the principle of prudence.

Interestingly, the current government has been advocating merger of two energy sector regulators — National Electric Power Regulatory Authority and the Oil and Gas Regulatory Authority — into a single regulator, with slightly compromised powers and had made this part of the Annual Plan 2015-16.

The plan was slightly delayed for fears that the merger at a time of massive investment in the energy sector would create uncertainty among investors. Many within the government believed the energy crisis was not only because of the demand and supply gap but also due to a deeper problem in energy policymaking, governance and regulation. This means the regulation and capacity-addition will not deliver unless decision-making and public-sector management is simultaneously improved.

Some of these changes would normally require the clearance of the CCIs. Both Nepra and Ogra have been resisting government pressures for the last 10 years to allow higher system losses and the non-recovery of bills to be made part of the electricity and gas tariffs. Consequently, the government has been using its executive authority to impose various surcharges.

On top of the energy regulator, the new legal framework would also create dedicated appellant tribunals, which would have the power to scrutinise the regulator's decisions. These decisions can currently be challenged before the high courts and the Supreme Court, which normally uphold the regulators' decisions rather than the government's policy desires.

On the administrative side, there would be regulatory advisory committees for the reorganisation of both the regulators during the transition period. These would then keep a check on their performance through federal oversight and 'merit-based transparent and efficient appointment process'. These powers are currently with the quasi-judicial and autonomous regulators without any interference from the government, except in the case of members and the chairmen.

Some other reforms would relate to the tariff-setting regulatory process, which has been the sorest point for political governments trying to build all the inefficiencies into the consumer tariffs, except for resistance by the two regulators.

#### http://www.dawn.com/news/1289369/govt-proposed-amendment-to-clip-powers-of-energy-regulators

# MINISTRY OPTIMISTIC ABOUT SMOOTH CNG SUPPLY IN WINTER The Express Tribune, October 11th, 2016.

ISLAMABAD: The Ministry of Petroleum and Natural Resources is optimistic about ensuring a smooth supply of gas to compressed natural gas (CNG) stations in the upcoming winter season after the import of LNG.

"The gas situation is improving gradually; especially after the arrival of imported liquefied natural gas (LNG) and 84 new oil and gas discoveries. This winter, the supply will be even better than the previous years," said official sources on Monday.

They said the government was making all-out efforts to keep the gap between demand and supply of gas at the lowest in peak winter season. They said the load management would also be observed on need-basis.

Responding to a question, officials said that currently, uninterrupted gas supply was being provided to the domestic, commercial, industrial, power, fertiliser and CNG sectors.

Concerning oil and gas exploration activities, they said companies operating in different parts of the country made 84 discoveries during the last three years, following which around 631 million cubic feet (mmcfd) per day gas and 27,359 barrels per day (bpd) crude oil production have been added to the system.

"Imported LNG is playing a major role in meeting the energy needs as regular shipments of the commodity are arriving after Pakistan signed the LNG import agreement with Qatar last year," they said.

"The government has initiated different gas-related projects worth Rs800 billion to steer the country out of the energy crisis and hopefully Pakistan will have surplus power due to effective policies of the present government by 2018," they added.

Meanwhile, a representative of the All Pakistan Compressed Natural Gas Association (APCNGA) expressed confidence that the sector, earlier affected due to gas shortage, will fully revive with increased import of LNG.

He admitted that currently, the sector was not attracting motorists as they were still uncertain about its future but expressed confidence that the future will be of the "inexpensive and environment-friendly fuel, which is almost 30% economical compared to petrol at existing rates".

http://tribune.com.pk/story/1196789/ministry-optimistic-smooth-cng-supply-winter/

NO PROBLEMS: SEPA GAVE GO-AHEAD TO THAR COAL MINING PROJECT, COURT TOLD The Express Tribune, October 14th, 2016.

HYDRABAD: The Sindh Environment Protection Agency (SEPA) clarified on Thursday in the Sindh High Court (SHC) that Sindh Engro Coal Mining Company's (SECMC) reservoir project in Tharparkar has obtained the due approval. In his statement, SEPA director-general Naeem Ahmed Mughal rebutted the petitioner's allegations that work on the Ghorano reservoir project was progressing without SEPA's approval.

"The environmental impact assessment for the reservoir ... was approved on February 10, 2016, after completing all the legal formalities as prescribed under the law," reads the statement. The reply was submitted in the Hyderabad circuit bench in a case filed by residents of Islamkot taluka of Tharparkar, including Lakho Bheel and Dost Ali.

The petitioners claim the project will adversely affect thousands of people, livestock, ecology and wildlife and will turn the subsoil water of Ghorano and other villages in the vicinity brackish.

According to the SECMC, the 1,400-acre reservoir in Ghorano is an essential component of its \$2-billion coal mining and 660 megawatt power generation project in Thar Coal Block II. The water pumped out from the coalfields will be carried to the reservoir through a 37.5-kilometre-long pipeline of 50 cusecs capacity.

"The petitioners filed this petition after an unexplained delay of over three months after the issuance of the no objection certificate [by SEPA]," stated Mughal, who also apprised the court that the public hearing for the project was conducted on April 17, 2015. "The reservoir will not cause any destruction of the area."

In another reply, the mukhtiarkar of Islamkot submitted that the land for the project is far away from the village of the petitioners. Furthermore, none of the petitioners own a piece of land that comprises the 1,400 acres on which the reservoir will be built.

The SECMC was confronted with a hiccup in the SHC when the Sindh Coal Authority, a partner in the project, submitted in the court that it had only approved the Dukkur Cho site for the reservoir, not Ghorano. However, on September 22, the authority replaced advocate Sher Ali Rizvi with advocate Saman Riffat and withdrew the statement that Rizvi had submitted on their behalf.

The SECMC planned to begin the coal mining by the end of 2016 or beginning of 2017. The company's power generation is scheduled to begin from June, 2019. The SHC will resume the hearing of the case on November 10.

http://tribune.com.pk/story/1198410/no-problems-sepa-gave-go-ahead-thar-coal-mining-project-court-told/

### GOVT TO SELL OFF HAVELI BAHADUR SHAH POWER PLANT The Express Tribune, October 15th, 2016.

Zafar Bhutta

ISLAMABAD: The government has decided to privatise, in the first phase, the 1,200-megawatt liquefied natural gas-based power plant being set up at Haveli Bahadur Shah, Punjab in an effort to cope with power shortages.

The Cabinet Committee on Energy took the decision in its meeting held on September 15, a senior government official said.

The committee, chaired by Prime Minister Nawaz Sharif, asked Water and Power Secretary Younus Dagha to hold a meeting with Finance Minister Ishaq Dar to explore the best possible options for selling off the power plant such as creating a special cell and prepare the Request for Proposal (RFP) document in light of his advice.

The secretary suggested that matters pertaining to privatisation fell within the domain of the Privatisation Commission and the planned sale of Haveli Bahadur Shah power plant should be referred to the Ministry of Privatisation.

Committee members saw a great potential in the power project to stimulate foreign investment and stressed that the traditional approach should not be pursued for its privatisation.

Three LNG-based power plants with a cumulative capacity of approximately 3,600MW are being built in the public sector at Bhikki, Balloki and Haveli Bahadur Shah in Punjab. They will consume imported LNG as fuel for power generation and help ease the shortfall.

The Bhikki plant is being constructed by the Quaid-e-Azam Thermal Power Private Limited, a company wholly owned and controlled by the government of Punjab.

The remaining two projects are being developed by the National Power Park Management Company Limited, which is wholly owned and controlled by the federal government, and are being financed through the Public Sector Development Programme.

"In case of privatisation of Haveli Bahadur Shah and Balloki projects, the Privatisation Commission before discharging the responsibility under applicable laws and in case of privatisation of Bhikki project, the ECC will review and adjust the risk allocation under the implementation agreement," the Economic Coordination Committee (ECC) said in a meeting held on June 28.

The implementation agreement is exclusively for the three public-sector power projects in light of the policy designed for independent power producers (IPPs).

The ECC also allowed the LNG-based plants to run without considering the merit order, which entails gas supply to the cheaper power plants first, in accordance with the concept of take-or-pay liability and the gas sales agreement with LNG supplier Qatar.

A long-term supply contract between Qatar and Pakistan State Oil (PSO) also contained the take-or-pay provision, hence, all enterprises within the supply chain including PSO, Sui gas companies, IPPs and the Central Power Purchasing Agency would take their part of risk for failing to consume the ordered gas.

During the meeting, the Ministry of Water and Power revealed that according to the gas ordering mechanism, a firm order had to be placed for every calendar year months before the start of the year and then the entire volume should be consumed, otherwise losses would have to be borne.

"This means that the power purchaser will not like to make capacity payments to the producer with the utilisation of gas," the ministry said. "LNG plants are amongst the most efficient and there is a remote possibility that they do not come on top in the merit order."

http://tribune.com.pk/story/1199066/lng-based-project-govt-sell-off-haveli-bahadur-shah-power-plant/

NEWS COVERAGE PERIOD FROM OCTOBER 3RD TO OCTOBER 9TH 2016 GOVT CHALLENGES TARIFF FOR POWER TRANSMISSION LINE Dawn, October 3rd, 2016

Khaleeq Kiani

ISLAMABAD: The government has challenged around 71-paisa per unit tariff for the 878km Matiari-Lahore transmission line determined by the power regulator as the Chinese contractor has expressed its inability to pursue the \$2.1 billion project for being unviable.

A government official said the Private Power and Infrastructure Board (PPIB) — the one-window entity set up by the water and power ministry to facilitate investors — had filed a petition before the National Electric Power Regulatory Authority (Nepra) requesting it to review its decision in the interest of foreign investment so that loadshedding could end by 2018.

A Nepra official said the regulator would invite public comments in a few days before holding a public hearing to reach a prudent decision on the matter.

He said the mega project was the first private sector investment in the transmission line and, therefore, any decision on it would set a principle for such projects in the future.

A PPIB official said the Chinese investors had declined to go ahead with the project at the tariff and, therefore, the regulator had been requested to consider a revised tariff of about 95 paisas per unit — up by about 30 per cent.

On Aug 18, the regulator had approved the upfront tariff of 71 paisas per unit to be charged to consumers for evacuation of up to 4,950MW of electricity from Tharparkar, Hub and Karachi to load demand centres in Punjab as

part of the China-Pakistan Economic Corridor. The transmission line is crucial for evacuation of electricity to be produced at three coal-based projects in Tharparkar, Hub and Port Qasim currently in development phase.

The tariff petition filed by the country's only transmission line operator with 14,000km of operational lines — National Transmission and Dispatch Company (NTDC) — was twice rejected by Nepra in November 2015 and January this year. The authority said it was against the rules to offer an upfront tariff for a single project and also objected to the tariff being executed without competitive bidding.

However, it allowed the tariff for the project when the petition was filed by the PPIB on behalf of the NTDC along with government directives. The NTDC and the China Electric Power Equipment and Technology — a subsidiary of the State Grid Corporation of China — had already entered into a cooperation agreement in April 2015 as part of priority projects of CPEC.

Based on engineering procurement and construction cost of \$1.76 billion and other cost build-ups totalling \$2.1bn, the PPIB had requested Nepra for a transmission tariff of 95 paisas (0.914 cents) per unit (kWh) for 30-year life of the transmission line. It will involve 80:20 per cent debt-equity ratio.

But Nepra worked out the upfront tariff of 71 paisas per unit for 25-year operational life of the transmission line. It noted that the government had given guarantee to the Chinese firm for ensuring payment obligations of the NTDC, protection against NTDC default for any transmission service agreement or any other defaults by NTDC to the Chinese firm and protection against change in laws and political force majeure risk.

The tariff petition was prepared purely on the basis of financial and technical data received from the Chinese firm. The project will be transferred to the NTDC on completion of 25 years. The NTDC and Chinese firms had signed cooperation agreement for two similar transmission lines. Apart from Lahore-Matiari, the other project is 660kv High Voltage Direct Current (HVDC) transmission line from Port Qasim to Faisalabad with 4,000MW capacity, but that was not part of the petition.

The 660kv HVDC Matiari-Lahore transmission line will transmit generation in southern part of the country to mid-country load centres.

However, due to constraints on public sector resources and borrowing capacity of the NTDC, the government had announced a policy framework last year for transmission line development in the private sector.

The future of electricity transmission from 660MW Engro Thar coal plants, 1,320MW Sino-Sindh Resources Thar coal plant, 1,320MW Port Qasim project, 660MW each of two Hub Coal Power plants and 330MW Siddique Sons Energy plant will depend on the Matiari-Lahore project.

The transmission line will mostly pass through rural land away from settlements and obstruction with least temporary loss to crops and trees to be properly compensated.

The tariff petition said the Chinese investor had been involved in the project because "currently there exist a number of lengthy, time and money consuming complicated procedures due to which private investors are problem-stricken", like provision of bank guarantees and finalisation of project agreement with multitude of government agencies.

Moreover, the project is associated with power generation based on imported and local coal at low operating costs that will save billions of dollars every year otherwise needed for import of oil for equivalent electricity generation.

The project will take 36 to 42 months to be developed, although power generation at the plants in Thar, Hub and Port Qasim will start much earlier.

http://www.dawn.com/news/1287722/govt-challenges-tariff-for-power-transmission-line

#### IMPORTED LNG: CIRCULAR DEBT SOARS TO OVER RS 12 BILLION

Business Recorder, October 03, 2016

Aamir Saeed & Zaheer Abbasi

As circular debt of power sector reaches over Rs650 billion, another circular debt on imported Liquefied Natural Gas (LNG) has started piling up and now stands at over Rs12 billion.

As on September 22 this year, an amount of Rs4,693 million was receivable from Independent Power Producers (IPPs) on account of Re-gasified Liquefied Natural Gas (RLNG) while an amount of Rs8,021 million was payable to Pakistan State Oil, according to Ministry of Petroleum and Natural Resources.

Sources told Business Recorder on Saturday that the government's failure to bring about structural reforms in the power sector during the last three years has started generating circular debt on account of electricity produced through imported LNG and this will start piling up if recoveries are not made promptly.

At the end of the day, the government has to give either subsidy to power sector or increase electricity tariff to clear the circular debt, they said, adding that either way the end consumers will bear the entire burden.

The first LNG vessel carrying 60,000 tons of imported LNG valued at Rs3.25 billion docked in April 2015 and was mainly financed by Pak-Arab Fertiliser, but the private company has so far paid only Rs 800 million to PSO, and the cost of RLNG that was used by the IPPs is also yet to be recovered, they said.

Pakistan State Oil imports the LNG under a sovereign guarantee and then transfers it to the gas companies, Sui Southern Gas Company Limited (SSGCL) and Sui Northern Gas Pipelines Limited (SNGPL).

SNGPL provides the LNG to the power sector, fertiliser plants and textile industry and it directly recovers gas charges from textile and fertiliser sectors, but there is a complicated process of recovery from the IPPs, sources explained to Business Recorder.

The electricity generated is transferred to the distribution companies for onward supply to consumers and then the same distribution companies are responsible for collecting bills from consumers and repaying to IPPs.

Sources said that there is an increasing gap in billed amount and recovery from consumers due to lines losses of the distribution companies on account of transmission, theft and administrative cost.

This all creates circular debt in the power sector which becomes a final liability of the government, sources said.

http://www.brecorder.com/top-stories/0/90146/

ASIAN BANK UNHAPPY OVER DELAY IN IMPLEMENTATION OF ENERGY PROJECTS Dawn October 4th, 2016

Khaleeq Kiani

ISLAMABAD: The Asian Development Bank (ADB) has expressed serious concern over Pakistan's slow progress in implementation of energy sector projects and their loan utilisation.

This is the outcome of \$6.4 billion annual portfolio review by the Manila-based multilateral lending agency. Of the annual portfolio, about \$3.1bn financing was meant for the energy sector projects, of which 43 per cent related to five multi-tranche financing facilities (MFF) and 29pc related to Jamshoro Power Project.

"Except for the MFF in the ANR (agriculture, natural resources and rural development) sector, more than half of the MFF amount remains uncommitted. A substantial under-utilisation is in the transport and energy sectors," the ADB said in its "Country Portfolio Review: Pakistan 2016".

At present, the energy sector is the biggest sector representing about 48.2pc of the ADB's active portfolio. As a result of the assessment, the lending agency has asked the government to obtain approval of the project details by the Executive Committee of the National Economic Council before the submission of project documents to ADB's management for approval to minimise the delays.

The ADB observed that "the time taken to award the first contract after loan approval is more than 13.1 months on an average; the last five years average shows that signing of first contract after approval took more than a year". It also included projects where these contracts were signed prior to loan approval.

"The energy and ANR projects took relatively longer time to complete their first procurement; average time consumed is 18.1 months and 16.8 months respectively," the ADB said, adding that on an average 18.5 months were passed in three loans where no contract was signed by Dec 31, 2015 since approval.

The ADB also highlighted key reasons for the delayed procurement. These were related to unavailability of design, weak procurement capacities of implementation agencies, litigation, delay in establishment of project monitory units and project administration challenges. As a result, the contract awards projection provided in the procurement plan could not be achieved.

For example, a project loan for the power sector was approved in December 2015 by the ADB but this approval could not become effective in the absence of approval of PC-1 (project documents by the Planning Commission).

"It is unfortunate that even though the project is procurement ready, no activity could be started due to issues relating to delayed PC-1 approval. Resultantly, the implementation of the project has been delayed for almost a year," it noted.

The ADB highlighted weak performance of contractors and executing agency in contract management. This led to subsequent extensions in sub-projects completion dates resulting in project extension, incomplete works at loan closure and slippages in completion schedule to critical path against the loan closing date.

It also pointed out institutional arrangements bottlenecks as key problem. This included lack of ownership, decision making and frequent staff changes at the project monitoring unit, weak project management structure, multiple units and tiers in national transmission and despatch company resulting in impeding efficiency in project management and oversight by National Transmission Despatch Company.

On top of that there was ambiguity in roles and delegation of authority for implementation and delays in taking major decisions at the highest level. The projects also suffered because of procurement challenges because of court cases and specifications, mis-procurement and major re-biddings.

It said there was delay in mobilisation of consultants for preparation of next tranche and utilisation of loan amounts, delays in establishment of project management and allied actions while under-performance of implementation support consultants caused procurement delay and complaints on safeguards compliance.

Many projects also suffered due to a lack of understanding of ADB's procurement guidelines and stipulations of projects and loan agreements on procurement which were challenged when found contrary to the government laws and regulations and absence of a fully functional internal approval mechanism leading to procurement processes inefficiency.

It said the ADB and government need to take certain measures to achieve full readiness for pipeline projects. At the upstream level, the government should create an enabling regulatory and legal environment without ambiguities,

widespread dissemination of a project approval as well as key decisions on use of a particular procurement guidelines amongst key stakeholders and identify procurement risks on the onset while undertaking procurement capacity.

At the downstream level, executing agencies should formulate and implement a comprehensive procurement strategy, which should include enhanced and informed understanding of ADB procurement guidelines and refining of procurement skills.

#### http://www.dawn.com/news/1287823

PAKISTAN, BELARUS AGREE ON NUCLEAR ENERGY COOPERATION The Express Tribune, October 6th, 2016.

Sardar Sikander

Islamabad: Pakistan and Belarus on Wednesday agreed to cooperate in the field of nuclear energy and on devising a tripartite trade mechanism by involving a third country. Just days after India's Prime Minister Narendra Modi claimed that India had 'isolated' Pakistan globally, the president of Belarus also voiced support for the resolution of the Kashmir dispute in light of the United Nations charter.

"Belarus and Pakistan want to promote cooperation in nuclear energy for peaceful means," President of Belarus Alexander Lukashenko said in a joint news briefing with Prime Minister Nawaz Sharif following their meeting at the PM House. He also supported Pakistan's bid for membership in the Nuclear Suppliers Group (NSG).

An official statement also quoted the Belarusian president as supporting the resolution of all outstanding disputes between Pakistan and India, including the Kashmir issue, in accordance with the United Nations Security Council resolutions and through peaceful means.

Government sources are interpreting the three-day visit of Alexander Lukashenko, who arrived in Pakistan on Tuesday to sign a number of important agreements, as a direct blow to the Indian premier's claim. "Lukashenko's visit is a scathing rejoinder to the claim Modi made a few days ago," said a senior functionary of the Prime Minister's house. "This is an extraordinary move that entails extraordinary implications in the region," the insider said.

Elaborating on this assertion, the source said the visit needs to be seen in the backdrop of Pakistan's revamped relationship with Russia and developments to this effect. "Pakistan and Russia have lately warmed up to one another and joint military ventures are going on. Belarus and Russia share a close diplomatic and strategic equation. Pakistan's emerging appearance in this picture is something India never wanted to happen."

Prime Minister Nawaz Sharif, in his meeting with Lukashenko, once again held India responsible for escalating tensions at the Line of Control (LoC), linking this move to the hostile neighbour's bid to divert international community's attention from grave human rights violations in Indian-Occupied Kashmir (IOK).

"More than 110 innocent people have lost their lives (in IOK), and more than 12,000 have been injured, with hundreds in critical condition. More than 700 people have suffered severe eye injuries due to the use of pellet guns by the Indian occupation forces and more than 150 have become permanently blind," the premier informed the visiting president, according to the PM House statement.

On cooperation between Belarus and Pakistan, the premier said, "Our two countries enjoy a warm, cordial and multi-faceted relationship. Pakistan is keen to forge closer ties with Belarus in all fields including trade, economy, investment, industry, education, defence, agriculture, culture and other areas—the momentum of increased high level exchanges between the two countries needs to be maintained."

The visiting president said Belarus and Pakistan need to explore the possibility of creating joint ventures for the production and processing of wide range of agricultural products, including the production of milk powder, other dairy

products, textiles, auto parts, surgical instruments, pharmaceuticals and other areas of mutual benefit. "Belarus has significant expertise in building of heavy machinery including automotive engineering, agricultural harvesting machinery, road construction machinery and dump trucks—Both sides can develop joint ventures and business-to-business contacts in these areas," he said.

A number of memorandums of understanding (MoUs) were signed between the two sides during bilateral talks, related to the expansion of areas of cooperation in the field of agriculture, industrial cooperation, crime counteraction, education, postal, customs and banking collaboration.

A joint statement issued after the bilateral meetings envisages strengthening of 'inter-parliamentary' relations, trade and economic relations, as well as the expansion of the legal framework for bilateral cooperation.

The visiting president invited Prime Minister Nawaz to visit Belarus. The invitation was accepted. Details of the visit will be coordinated through diplomatic channels.

http://tribune.com.pk/story/1194273/three-day-visit-pakistan-belarus-agree-nuclear-energy-cooperation/

VILLAGERS LINK POWER PLANT'S SUCCESS TO PROTECTION OF RIGHTS AT SEPA HEARING Dawn, October 7th, 2016

HYDERABAD: Participants in a public hearing held in Tharayo Halepoto village in Islamkot on Thursday regarding a 330 MW coal-based power plant being installed by the ThalNova Power Thar Private Ltd (TNPTL) linked the project's success to protection of locals' fundamental rights.

The Sindh Environmental Protection Agency (Sepa) conducted the hearing which was presided over by Sepa Director General Naeem Mughal and attended by Sepa officers TNPTL COO Zulfiqar Ali Rana, members of general public, non-governmental organisations, journalists and political activists.

Local journalists believe the majority of participants included relatives of those who were employed in Thar Coal projects and predictably they supported the TNPTL power project.

The locals Hyder, Ameet Kumar and Ahmed Halepoto linked the project's success to protection of community's fundamental rights and expressed their confidence in the company.

But members of NGOs, journalists and political activists including Mir Hassan Arisar, Sajid Bajir, Ashok Majrooh, Dilip, Ghulam Mustafa Khoso and others expressed reservations over some issues involving environment and the company's resettlement policy.

They said that they were not opposed to the coal project or development but the protection to sources of community's livelihood like livestock must be ensured first.

They said the policies for resettlement and issues of land acquisition had remained vague and the Sepa should see whether past commitments made by the company were met.

They said the company should give serious attention to conservation of wildlife and plantation and emphasised the need for companies busy in development works to adhere to the commitments they had made.

Sepa officers said that EIA for this power project would be approved after due process keeping in view concerns raised by the community. "Sepa is here to ensure protection to biodiversity and social issues as is done for the EIA approved for a related project earlier in respect of this indigenous coal reserves that is to be used for energy production after mining," said Sepa DG Naeem Mughal from Islamkot over phone.

He said that social uplift would be ensured at all cost. All environmental laws that governed question of pollution, ash disposal, groundwater disposal would be given due care, he said.

Sepa official Imran Sabir said that Sindh Engro Coal Mining Company (SECMC) informed the hearing that a foundation was being established which would take care of all issues being raised by the community. Objections had been noted and EIA was to be approved after attaching required conditions, he said.

He said that a technical review committee would evaluate everything relating to coal extraction, production etc before that and informed that compliance was to be ensured by the firm under a proper monitoring process as had been done in past.

He said the community wanted training for different works and jobs in the project.

Representatives of TNPTL told the hearing that the TNPTL intended to develop a 330 MW power plant based on Thar lignite coal which would be located at power park site within Block II, Thar Coalfields, Tharparkar.

They said the power project would use CFB (circular fluidized bed) technology with a target efficiency of 37 per cent. The coal plant being designed and procured for this project was state of the art and would have a sub-critical boiler. CFB technology was considered one of best technologies, they said.

Latest global coal technologies and equipments were being used to ensure minimal emissions levels. Electro Static Precipitators (ESPs) were installed to control particulate matter emissions, they said.

The company would spend about 10 per cent of project cost on pollution control technologies. A detailed Environment and Social Impact Assessment (ESIA) was carried by Hagler Bailly, an international firm, they said.

TNPTL strongly believed in engaging local communities in areas where it would operate and endeavour to have a positive influence on local community of Tharparkar.

TNPTL intended to lay a strong focus in areas of employment, health, education, training and development of indigenous population of the local community. The company would work with its partners to develop schools and enhance infrastructure available for health and education facilities in Thar.

TNPTL is a joint venture between Thal Limited and Novatex Limited. Thal is part of House of Habib and Novatex is part of the Gani & Tayub group.

http://www.dawn.com/news/1288480/villagers-link-power-plants-success-to-protection-of-rights-at-sepa-hearing

SEPA HOLDS HEARING ON TNPTL 330MW COAL-BASED POWER PLAN Business Recorder, 7 October, 2016

KARACHI: The Sindh Environmental Protection Agency (SEPA) on Thursday held a public hearing on Thal Nova Power Thar Private Ltd (TNPTL) 330MW coal based power plant.

Public hearing was headed by Director General SEPA Naeem Mughal. SEPA's Deputy Director Technical Imran Sabir, Dr Ahmad Hussain, Professor of Mechanical Engineering NED University and COO TNPTL Zulfiqar Ali Rana were also present on the occasion.

The appointed representatives of TNPTL gave a detailed presentation on the project. TNPTL intends to develop a 330MW power plant based on Thar lignite coal and shall be located at the power park site within Block II, Thar Coalfields, District Tharparkar, in Sindh.

One of the biggest issues of power sector in Pakistan is the shortage of power and high cost of generating electricity. Cost-effective electricity production through indigenous Thar coal will help to reduce the power sector deficit and ultimately bring down the circular debt. Project will contribute 330MW of cheaper electricity annually into the national grid under a 30-year PPA with NTDC. This project will provide energy security to the country.

The Power project shall use CFB (Circular Fluidized Bed) technology with a target efficiency of 37 percent. The coal plant being designed and procured for this project is state-of-the-art and will have a sub-critical boiler.

CFB technology is considered one of the best technologies to control SOX levels. Latest global coal technologies and equipments are being used to ensure minimal emissions levels.

Electro Static Precipitators (ESPs) are installed to control particulate matter emissions.

TNPTL is employing all these technologies and will spend approximately 10 percent of project cost on these pollution control technologies. A detailed Environment and Social Impact Assessment (ESIA) has been carried out by Hagler Bailly, an international reputed firm. The site will follow all SEQS (Sindh Environment Quality Standards).

TNPTL is an extension of the socially responsible businesses that reflect the DNA of its parent groups.

TNPTL strongly believes in engaging the local communities in the areas where it shall operate and shall endeavour to play a positive influence on the local community of Tharparkar.

TNPTL intends to play a strong focus in areas of Employment, Health, Education, Training and Development of indigenous population of the local community.

The Company shall work with its partners to develop schools and enhance the infrastructure available for health and education facilities in Thar.

Both parent companies of TNPTL already have a rich history of developing both educational and health facilities for the local communities near the various factories that they operate.

Thal Nova Power Thar Private Ltd is a joint venture between Thal Limited and Novatex Limited. Thal is part of the House of Habib – one of the most respected business houses in Pakistan with investments across banking, auto, retail, building materials and packaging sectors in Pakistan.

Novatex is part of the Gani & Tayub group which is a leading player in the polyester and textile sectors of Pakistan and contributes a major component of the total exports in the country.

http://epaper.brecorder.com/2016/10/07/9-page/800520-news.html

### November 2016

NEWS COVERAGE PERIOD FROM NOVEMBER 28 TH TO DECEMBER 4TH 2016

NAWAZ SAYS REFORMS TO HELP PAKISTAN MEET FUTURE ENERGY REQUIREMENTS

Business Recorder, November 30, 2016

Prime Minister Nawaz Sharif has said that load shedding will be a reference of history as the government is exploring new power generation projects on micro as well as mega levels to ensure sustained and uninterrupted electricity for the future generations.

While chairing a meeting of the Cabinet Committee on energy to review all ongoing power projects on Tuesday, the prime minister stated that previous governments have been unable to fulfil the duty of power generation.

He said that by the end of tenure of the present government, reliance on costly fuel for power generation will be reduced a great deal. The prime minister said that the country was gripped by energy crisis when the present government came into power; today the situation has changed significantly.

There is now zero load shedding for the industrial sector and load shedding in urban and rural areas has substantially and gradually been reduced, the prime minister said. The meeting reviewed timelines of the clean energy projects as well as planned coal fired power plants, hydel and LNG power plants thereby noting that these projects will add significant electricity to the national grid during the year 2017 and before March 2018.

He said that the focus of the present government right from the first day is to resolve energy crisis in the country and adding sufficient energy to the national grid.

"Besides, we are determined to provide cheaper electricity to our people," the prime minister added. The CCOE deliberated on the future power generation projects to cater for the energy requirements of the country in wake of economic activities, infrastructure and industrial development.

The meeting also discussed the status of work on establishment of new transmission lines in detail in addition to streamlining the power distribution system. The meeting was informed that bottlenecks are being removed in the distribution system to ensure uninterrupted supply of electricity to the consumers.

Secretary Water and Power briefed the meeting that circular debt has been caped, recoveries are satisfactory and line losses have been minimised. The meeting was informed that transmission and distribution lines projects are on track. The prime minister said that holistic reforms in the energy sector and efforts for generating additional power through diversifying the energy mix will help in meeting the future energy requirements of the country, expressed the prime minister.

These endeavours of the present government have earned significant recognition and acknowledgement on a wide scale the world over, the Prime Minister further stated. He added that the present government has unprecedented edge to execute power generation projects having capacity more than the power generation initiatives taken during the last 20 years.

http://www.brecorder.com/fuel-a-energy/193/108339/

### EFFORTS ON FOR 1,500MW ELECTRICITY FOR BALOCHISTAN Dawn, November 30th, 2016

QUETTA: Farmers and traders in Balochistan have faced load-shedding for long, but the government was making efforts to procure 1,500 megawatts of electricity for the province which is presently getting only 600MW, Governor Balochistan Muhammad Khan Achakzai said on Tuesday.

A delegation of Kalat district, headed by Mir Zia Langove, had called on him at the Governor House.

He suggested that farmers should also avail solar energy to cater their need.

Governor Achakzai observed that farmers and traders of Balochistan faced a difficult time for years due to multiple reasons but things are bound to change now as agriculture, trade and export activities are gaining momentum in the region.

Balochistan is being connected with international trade — particularly to Central Asia — which would directly benefit local peasants and business community of the province, he stressed.

The delegation thanked the Balochistan governor for providing funds for development schemes in the areas of Khaliqabad, Kalat and Killi Ismail, Quetta.

http://www.dawn.com/news/1299451/efforts-on-for-1500mw-electricity-for-balochistan

### CANADIAN SOLAR WANTS TO INVEST IN BALOCHISTAN

Dawn, December 1st, 2016

QUETTA: A Canadian company on Wednesday expressed interest for investment in Balochistan's solar energy sector.

A delegation of Canadian Solar, led by David Arenburg, called on Chief Minister Balochistan, Nawab Sanaullah Khan Zehri. The company expressed interest in installing computerised, solar pump irrigation system in the province.

Mr Arenburg informed the CM that his company has been working on solar projects in several countries and wanted to explore Balochistan's solar sector.

The chief minister informed the delegates that the provincial government is keen on launching different projects in collaboration with local and international companies – particularly in the energy sector. Vice Chairman, Balochistan Board of Investment, Khawaja Hamayun Nizami was also present in the meeting.

http://www.dawn.com/news/1299693

NORTH-SOUTH PIPELINE: PAKISTAN, RUSSIA REACH LNG PRICE ACCORD The Express Tribune, December 1st, 2016.

Zafar Bhutta

ISLAMABAD: Pakistan and Russia have agreed on the price for the \$2-billion North-South pipeline that will pump imported liquefied natural gas (LNG) from Karachi to Lahore to satisfy growing energy needs of Punjab. They will sign a commercial contract soon.

"The Foreign Office played a key role in finalising the gas price with Russia ahead of Brics summit in October in order to muster Moscow's support against Indian influence," an official told The Express Tribune.

"India has abandoned Russia and gone into the US camp, prompting Pakistan to forge strong ties with Moscow for gaining vital support at the international level."

In a major friendly gesture to Pakistan, Russian President Vladimir Putin has not endorsed Indian Prime Minister Narendra Modi's stance accusing Islamabad of sponsoring terrorism.

According to officials aware of the development, the North-South pipeline will be the first major Russian investment in Pakistan after decades. Earlier, Russia had assisted Pakistan's largest hydrocarbon explorer Oil and Gas Development Company (OGDC) in search for energy resources.

Before the agreement on LNG price, the Economic Coordination Committee (ECC) had approved the constitution of a price negotiating committee to finalise the multibillion-dollar gas import contract with Russia.

Russia is a big exporter of gas to Europe, but the US is lobbying to drive away Moscow from this market. Washington's backing of the Turkmenistan, Afghanistan, Pakistan and India (Tapi) gas pipeline project is also part of that move to capture energy markets of Afghanistan, Pakistan and India.

Russia gets major supplies of gas from Turkmenistan and exports it to Europe.

"Russian investment in the LNG pipeline will open more avenues for investment in the energy sector," the official said, adding it was also interested in oil and gas exploration in Pakistan.

Power production is another area where Moscow has expressed interest and it has even offered electricity export to Pakistan.

Russia will build the North-South gas pipeline and charge a tolling fee for LNG supply from Karachi to Lahore.

According to the official, it had demanded a fee of \$1.2 per million British thermal units (mmbtu) for gas supply. However, the negotiating committee agreed on a fee of 85 cents per mmbtu.

"It is the ideal rate for gas transmission; Russia will pour capital to build the pipeline," the official said.

At present, Pakistan is importing LNG from Qatar and local gas utilities are paid a total of 85 cents per mmbtu for gas transmission through their pipeline networks. The fee agreed with Russia is equal to the fee being charged by the gas utilities.

Earlier, Russian company RT Global, on which the US had imposed sanctions, was designated to implement the LNG pipeline project in Pakistan.

However, in a revised plan, Russia will get a special purpose vehicle registered in Pakistan. This will be a local company that will deal with the pipeline project.

The step has apparently been taken as a precaution, though the Ministry of Law is of the view that RT Global could work in Pakistan as companies facing US sanctions could not do transactions only with US financial institutions. They are not barred from working in other countries.

http://tribune.com.pk/story/1249730/north-south-pipeline-pakistan-russia-reach-lng-price-accord/

### EU AMBASSADOR INAUGURATES POWER STATION IN SWAT Dawn, December 1st, 2016

MINGORA: The entire Kalam valley echoed with shouts of joys after the 1.2megawatts hydro power station in Ashuran area was inaugurated by European Union Ambassador Jean François Cautain on Wednesday.

Setting of the hydro power station is the first ever big project, executed by a non-governmental organisation, Sarhad Rural Support Programme, in the district with the financial support of European Union.

Local elders and residents of Kalam valley participated in the inaugural ceremony while Provincial Minister for Tourism Mehmood Khan, local MPA Syed Jafar Shah, district nazim Mohammad Ali Shah, tehsil nazim Habibullah Saqib, Additional Secretary Ghazanfar Ali, Rural Support Network chairman Shoaib Sultan Khan, SRSP chief executive officer Masoodul Mulk were present on the occasion.

Mr Cautain said on the occasion that he was really happy to be among the people of Swat. "I hope the electricity produced by the MHPs will make the lives of people, particularly women and children, comfortable.

He said that supply of electricity would promote tourism and create opportunities of small enterprises in Kalam.

He also thanked the team of SRSP for installing the huge hydro power station in Kalam.

"The hydro power will provide the residents of whole Kalam town and nearby villages with low cost electricity where there had been no active national grid since 2010. It will also provide more business and economic opportunities to the residents of Kalam," said Masoodul Mulk.

Minister Mehmood Khan thanked the people of European Union for supporting poor communities in Khyber Pakhtunkhwa.

MPA Syed Jafar Shah lauded the support of European Union and said that upper Swat was bestowed with a heavenly beauty but unfortunately its people were faced with multiple problems.

He hoped that both European Union and SRSP would continue to support the people of backward areas. He also assured them of his full support.

http://www.dawn.com/news/1299805/eu-ambassador-inaugurates-power-station-in-swat

NEWS COVERAGE PERIOD FROM NOVEMBER 21ST TO NOVEMBER 27TH 2016 MINISTER REITERATES GOVT'S RESOLVE TO END ENERGY CRISIS The Express Tribune, November 22nd, 2016

LAHORE: Drawing attention to one of the crucial challenges of the economy, Provincial Minister for Mines and Mineral Chaudhry Sher Ali on Monday said that the government is committed to overcoming energy deficiency in addition to increasing production to meet future needs.

He added that the academia should be taken on board for the conservation of energy and for creating awareness among new generations regarding the vitality of energy.

He was addressing a consultative meeting held under the initiative of 'sustainable energy for all' organised jointly by the United Nations Development Programme (UNDP), Planning Commission of Pakistan and Energy Department Punjab.

The minister stressed the importance of sustainable energy and said that the Punjab government was all set to complete its various energy projects ahead of schedule in collaboration with Chinese and other foreign companies.

The participants shared various issues and gave recommendations on 'sustainable energy for all' as it is a global initiative under the Unites Nations. Secretary Energy Asad Rehman Gilani spoke about Punjab's current energy ventures particularly renewable energy.

http://tribune.com.pk/story/1238836/minister-reiterates-govts-resolve-end-energy-crisis/

TEXTILE PACKAGE: APTMA WANTS CUT IN ENERGY COST The Express Tribune, November 23rd, 2016.

KARACHI: All Pakistan Textile Mills Association (Aptma) Punjab Chairman Syed Ali Ahsan has urged the government to make the energy cost competitive to restore industry based in the province.

"The energy cost should be made regionally competitive – for example, electricity at Rs7/KWh and RLNG at Rs600 per mmbtu should also be included in the textile package," he said in a press conference Tuesday.

The Aptma leadership also urged the government to protect the domestic market from dumped and subsidised import of yarn and fabric from India, China and the Far East.

He said overall exports have reduced from \$25.1 billion to \$19.5 billion in the last two years and textile exports have also dropped from \$13.8 billion to \$11.6 billion during the same period.

According to the Aptma leadership, as many as 70 spinning mills have been closed down in Punjab during the last two years, particularly due to the high cost of doing business that has hit around two million spindles while rendering the workforce of 150,000 (direct/indirect) unemployed.

"The prevailing uncertainty is leading to the closure of a mill every second day," he stressed. The Aptma Punjab Chairman said that it is ironic that the availability of competitive energy tariffs, both electricity and RLNG, is not part of the textile package.

"A mill of 25,000 spindles is incurring Rs120 million per annum additional costs on account of energy versus the same size mill in other provinces," he added.

He said the Punjab government's growth strategy envisages 15% annual growth in exports, 8% in GDP and investment worth \$17 billion by 2018.

"It is high time that an enabling environment is made possible for the Punjab-based textile industry to perform and achieve the goals set by the government, he added.

He said RLNG to the Punjab-based textile industry is 45% more expensive as compared to other provinces.

He further pointed out that the electricity generation cost for Pakistan Electric Power Company (Pepco) was Rs4.75/KWh for October 2016 while it is being provided to the industry at Rs11/KWh.

"This hefty charge includes line losses and theft surcharges. Textile industry, being export-oriented, cannot pass on these charges to its international buyers," he said.

http://tribune.com.pk/story/1239886/textile-package-aptma-wants-cut-energy-cost/

GOVERNMENT DOING ITS BEST TO OVERCOME ENERGY CRISES: JAM KAMAL Business Recorder, November 23, 2016

Abdul Rasheed Azad

Pakistan has tremendous potential to grow as an energy-sufficient country that only needs investment-friendly policies and improved law and order, state minister for petroleum and natural resources jam kamal khan said here on tuesday.

He was speaking on occasion of inaugurating the 23rd annual technical conference (atc) organized by the pakistan association of petroleum geoscientists (papg) in collaboration with the society of petroleum engineers (spe), titled 'oil price: domestic challenges and exploration and production (e&p) strategies.'

chairmen papg abdul wahid chughtai and atc gulzar ahmed memon while talking with the participants said that this conference is not only being attended by local and multinational oil/gas exploration and production (e&p) companies but also by students, teachers and regulatory bodies are present here.

Jam kamal said that the government is committed to speed up exploration efforts across the country, adding that it is moving in the right direction. He said that to control the energy crisis, the ruling pml-n government is not only relying on tapping local natural oil/gas resources, but it has completed the first ever liquefied natural gas (lng) terminal in karachi, which at present is handling 400 million cubic feet per day (mmcfd) of imported gas.

Jam kamal said that within the next 2 years, the government will complete 3 lng terminals in karachi and gawadar with taking current lng import of 400 mmcfd to 2.4 billion cubic feet per day (bcfd). Jam kamal khan remarked that pakistan has one of the world's largest shale gas and oil reserves, and recent comprehensive studies indicate that the potential to be larger than originally envisaged.

He further said, "we are in the process of developing policies to attract investment for exploitation of this shale oil and gas potential, which will radically change the dynamics of energy sector in pakistan." the government has expanded areas in all provinces for oil & gas exploration, and licenses have been awarded to different companies. "we are hopeful to narrow the gap of shortage in the both oil and gas sectors, and pass on this relief to the masses," he added.

The minister told the participants of the conference that a petroleum policy with a lucrative pricing regime had been fully implemented and additional incentives were being provided to e&p companies. Other dignitaries shared their insight and vision with the participants too.

He also congratulated the organisers for providing unique opportunity to all petroleum engineers and geoscientists and to gather under one roof for exploring more opportunities in this regard.

The participants were informed that pakistan's current crude oil production has reached 100000 barrels a day from 65000 barrels a day in 2013, which reflects the efforts of present government in increasing domestic crude oil production. Papg-spe annual technical conference (atc) is the only technical event of the upstream oil and gas industry of pakistan.

The conference attracted around 1000 to 1500 industry professionals from the exploration and production companies, academia, service providers from all over pakistan and a large number of technology experts from overseas as well as the officials of the industry regulators.

The students of leading universities across pakistan studying the disciplines of petroleum engineering and geo sciences were encouraged and sponsored by the societies to take part in the conference, by contributing technical papers.

http://www.brecorder.com/fuel-a-energy/193/105549/

### NEPRA SEEKS EXPLANATION FOR NANDIPUR PLANT CLOSURE Dawn, November 25th, 2016

Khaleeq Kiani

ISLAMABAD: The Nandipur power project appears to have become a somewhat permanent headache for the government which was asked on Thursday to explain why the 425-525MW power plant had not produced electricity since June.

At a public hearing on Thursday, Himayatullah Khan, vice chairperson of the National Electric Power Regulatory Authority (Nepra), ordered a written explanation from the Ministry of Water and Power and the Northern Power Generation Company Limited (NPGCL) as to why the plant had remained closed for so long. The regulatory body also approved a Rs2.60 per unit cut in electricity rates for a month.

A team of Central Power Purchase Agency (CPPA) officials, led by Mohammad Ilyas, its general manager, told Mr Khan that the plant had been closed for inspection.

The Nepra vice chairperson responded by saying that such a big power plant could not be shut down for so long on the pretext of inspections, adding that the regulator would like to know why it did not contribute power to the grid.

He said it had come to the regulator's knowledge that the plant had been partially dismantled by its Chinese contractors in June. The Nandipur project's inability to produce electricity had caused a loss of billions of rupees to the nation, he said.

Responding to a question from a journalist after the hearing, Mr Khan said the regulator could impose a penalty on the generation company concerned on the basis of written responses from the government and the company.

The Nandipur power project has attracted controversy ever since the plant's installation was delayed during the Pakistan Peoples Party-led government when the Chinese contractors demobilised and the machinery remained stranded at the ports. The Pakistan Muslim League-Nawaz government revived the project but, by then, its cost had risen from Rs42 billion to over Rs65 billion.

The power plant has faced a series of operational hiccups during and after launching its commercial operations. During the two government tenures, the project continued to attract a series of court cases, inquiries, investigations, audits and political and commercial disputes.

At the hearing on Thursday, Nepra expressed concern over the use of expensive fuel at power plants despite the availability of cheaper alternate fuel. The case of Kot Addu Power Plant was highlighted as part of the power plant runs on diesel, even though it could be operated on regasified liquefied natural gas (RLNG).

The regulator also called for an explanation from the Ministry of Water and Power for not notifying reductions in base tariff for distribution companies announced by the regulator in January this year, for the financial year 2015-16. Mr Khan said because of the delay in notification, consumers had been at a huge financial disadvantage.

Nepra then ordered all distribution companies (except K-Electric) to refund Rs2.60 per unit to consumers for electricity consumed in October. The Rs20 billion refund would not apply to agricultural tube-wells and domestic consumers using less than 300 units per month.

Distribution companies charge a higher estimated fuel charge to power consumers which is later adjusted against the actual cost in the subsequent month, with the approval of the power regulator.

The CPPA claimed that it had sold an approximate 9.5 billion electricity units (kilowatt hours) to consumers in October 2016, at a total cost of Rs40.27 billion. The power companies had charged reference fuel charges of Rs7.34 per unit to consumers, while the actual fuel cost turned out to be Rs4.74 per unit, hence the refund.

The CPPA reported that the highest contribution to power generation – almost 32 per cent (2.76 billion units) – came from hydropower plants which had no fuel cost at all. On the other hand, the cost of furnace oil-based power generation was Rs7.96 per unit, which had contributed about 30.3 per cent (2.63 billion units) of the total electricity generation in October.

Likewise, the cost of operating gas-based plants for 2.1 million units or (24.4 per cent of total generation) was around Rs5.5 per unit, while power production from RLNG had a two per cent share at an average cost of Rs6.7 per unit.

The fuel cost of diesel-based plants was reported to be Rs12.11 per unit with a generation share of about two per cent. The cost of generating power from coal-based plants was worked out at Rs4.5 per unit with a negligible contribution of less than 0.2 per cent. Nuclear power plants contributed about five per cent of the total power at a cost of Rs1.16 per cent.

http://www.dawn.com/news/1298488/nepra-seeks-explanation-for-nandipur-plant-closure

NEWS COVERAGE PERIOD FROM NOVEMBER 14TH TO NOVEMBER 20TH 2016 OGRA HINTS AT 12PC INCREASE IN GAS TARIFF Dawn, November 14th, 2016

Khaleeq Kiani

ISLAMABAD: The Oil and Gas Regulatory Authority (Ogra) has warned the government that it would be legally bound to notify an across-the-board increase of 12 per cent in the natural gas tariff for all consumers on Nov 15.

In a letter to the ministry of petroleum and natural resources, the regulator told the government that it had forwarded the prescribed price for the two gas utilities — Sui Northern (SNGPL) and Sui Southern (SSGCL) — on Oct 6, on the basis of their revenue requirements for the current fiscal year.

The letter reminds the government that under section 8(3) of the Ogra Ordinance, it was bound to set minimum charges and the sale price for each category of retail consumer within 40 days of the determination.

Section 8(4) of the law makes it binding on Ogra to "notify in the official Gazette the prescribed price as determined by the authority...to be the sale price for the said category of retail consumers for natural gas" if the federal government fails to notify the same within those 40 days.

However, in a case before the Islamabad High Court, the ministry has adopted the stance that it is the purview of the regulator to notify the gas tariff 40 days after it determined the prescribed price. If the regulator had not increased the consumer tariff in the past, then Ogra was responsible for the lapse. Separately, Petroleum Minister Shahid Khaqan Abbasi said last week the government would not increase the gas prices.

This position has put Ogra in a bind. In its letter, a copy of which was also sent to the Cabinet Division, the regulator told the government that it would be left with no other option but to notify the prescribed price as the consumer tariff with effect from Nov 16 unless it was given written advice on how to proceed.

A senior Ogra official confirmed it had issued a reminder to the government, but said the government still had two days to take a decision. "If the government doesn't want to increase prices, it needs to convey its decision in writing and Ogra would maintain the status quo," the official said, adding that if the government did not, "we don't have any option, more so with [the] petroleum ministry's position before the high court".

The official said that Ogra had determined a 12pc average price increase to meet the revenue requirements of the gas utilities. However, if the government wanted to protect domestic consumers and farmers through fertiliser prices, an increase of 36pc would need to be passed on to industrial, commercial and power sector consumers to cross-subsidise domestic consumers and fertiliser plants.

At the heart of the political question is an amount of about Rs60 billion, including Rs44bn carried forward due to the indecisiveness on part the government and Ogra. Under the law, if the tariff is not increased, an amount of Rs60bn of provincial revenue could be eroded and cause an equivalent loss to gas companies.

It is believed that the PML-N government is in a win-win position in terms of popular politics in case the status quo prevails over gas price. A majority of gas consumers are in Punjab, even though it produces the least natural gas. No change in gas prices benefits the PML-N politically, although consumers across the country would also be relieved.

On the other hand, status quo means the erosion of provincial revenue worth around Rs60bn, but this still won't affect Punjab much. The biggest loser in that case is Sindh, with an almost 70pc share in gas production, followed by the 17pc and 13pc shares of Balochistan and Khyber Pakhtunkhwa.

The matter is of an inter-provincial nature and hence could be tackled by the Council of Common Interests (CCI), unless the federal government compensates the provincial governments through budgetary transfers.

On Oct 6, the regulator almost accepted the 12pc or Rs57.89 per million British Thermal Units (MMBTU) increase in average prices demanded by the SNGPL to fix its average prescribed price at Rs480.63 per MMBTU, up from the existing rate of Rs422.74 per MMBTU, to meet its estimated revenue requirements for FY2016-17. This cost of gas is also applicable to SSGCL under the existing laws.

http://www.dawn.com/news/1296260/ogra-hints-at-12pc-increase-in-gas-tariff

The Express Tribune, November 15th, 2016.

#### Zafar Bhutta

THAR: The coal mining and power project in Thar, called a project of national importance, has finally entered its construction phase at a swift pace, which will give a boost to economic activities and development in the desert area where poverty and health problems haunt people because of a lack of basic facilities.

Pakistan has long been suffering from hours-long electricity outages as it banks on a poor energy mix that leads to heavy imports of fuel oil. Consequently, the consumers are burdened with higher electricity tariffs and the government is compelled to provide over Rs100 billion in subsidy despite a sharp fall in global crude prices.

The poor energy mix has also caused accumulation of a huge circular debt, which has enveloped the entire energy chain. At present, oil-based energy has a share of 61% in the energy mix.

In the Thar desert, the world's largest coal reserves are buried. Studies suggest the region has 175 billion tons of coal deposits out of a total of 186 billion tons in Pakistan.

The Thar coal reserves beat the oil reserves held by Saudi Arabia and Iran. When converted into gas, the coal deposits are equal to 2,000 trillion cubic feet, which is 68 times more than Pakistan's total reserves.

Despite such coal reserves, their share in electricity generation in Pakistan is zero. Engro Corporation has been consistently pursuing a coal mining and power project in That that has entered its construction phase.

Sindh Engro Coal Mining Company (SECMC), which works in partnership with the Sindh government, has been allotted Thar block-2, which contains 1% (1.57 billion tons) of Thar coal reserves, which will be enough to generate 5,000 megawatts of electricity for the next 50 years.

The company is also setting up coal-based power plants with over 600MW production capacity at the mouth of the mine.

Briefing journalists at the project site, SECMC Chief Executive Officer Shamsuddin Ahmad Shaikh said financial close of the project was achieved in April 2016 and work was planned to be completed in 42months.

"We have achieved 9.5% progress compared to the planned 8% in the mining project; we are hopeful we will complete the mining and power plant project in 38 months," he said.

The targeted completion date was October 2019, but he voiced hope that the project would be ready on June 3, 2019.

"We have so far invested half a billion dollars out of a total \$2 billion," he said, adding coal-power tariff would be 10 to 10.25 cents in the beginning and it would come down to 5.5 to 6 cents after eight years.

The levelised tariff for the plant is 6 cents per unit and the internal rate of return on coal projects is 20% because of being pilot projects.

He said Pakistan would be generating 2,700MW with the help of coalreserves by December 2020. In India, six coal-fired plants are running and producing 8,000MW.

India has exhausted its coal reserves and its plants are being run on coal imports from Indonesia. These plants were 300 to 400 kilometers from the Thar project, providing Pakistan an opportunity to export coal to these plants.

"This coal will be cheaper compared to imported coal from Indonesia due to low freight charges," Sheikh said.

He pointed out that the Thar project had become part of the China-Pakistan Economic Corridor and Beijing was providing 50% of financing at London Interbank Offered Rate (Libor) plus 4.5%. The remainingfunds are being provided by Pakistani financial institutions.

He revealed that the Sindh government would receive 2.5% of coal price as royalty from the Thar project amounting to \$7 to \$8 million per year initially, which would go up to Rs3 to Rs3.5 billion later.

"We have requested the Sindh government to invest the royalty in the welfare of Thar people, who have been facing poverty and poor healthservices," he said.

Shaikh pointed out that they had hired unskilled manpower from Thar and sent them to well-reputed training institutes. At present, skilled drivers and masons are working there.

Drivers were receiving a salary of Rs30,000 per month and they were enjoying the same food and residential facilities as the Chinese free of charge, he said, adding unskilled workers from the area were getting a pay of Rs15,000 per month.

http://tribune.com.pk/story/1231304/thar-coal-project-enters-construction-phase/

### GAS SUPPLY TO INDUSTRIES IN PUNJAB, KP CURTAILED Dawn November 16th, 2016

Khalid Hasnain

LAHORE: The Sui Northern Gas Pipelines Limited (SNGPL) curtailed on Tuesday gas supply to industries in Punjab and Khyber Pakhtunkhwa following a shortfall of about 500mmcfd (million cubic feet per day) in domestic and commercial sectors against a total demand of 2,500mmcfd in the two provinces.

The SNGPL authorities also indicated a shortfall of 800-900mmcfd in the days to come, raising the alarm about loadshedding and low gas pressure in domestic and commercial sectors of the two provinces.

"We have asked the dyeing, ghee, chemical, sizing and steel units to either switch to re-gasified liquefied natural gas (RLNG) or LNG or other alternative sources of energy because the SNGPL will not be able to provide them gas from Tuesday, following a shortfall of about 500mmcfd in the system. We have to ensure frequent gas supply to other essential sectors, especially domestic consumers, in Punjab and KP," SNGPL Managing Director Amjad Latif said.

Meanwhile, former president of the Lahore Chamber of Commerce and Industry Mian Anjum Nisar criticised the government for not taking appropriate measures to keep the wheel of the industry running, which provided jobs to a large number of people.

"I just ask them (the government) why they are going to eliminate the industry in Punjab. Why don't they take steps to import more and more LNG/RLNG and set up more terminals to meet the gas shortage the industry continues to face," Mr Nisar wondered. He appealed to the prime minister to save Punjab's industry by ensuring it gas supply through imported LNG/RLNG or indigenous gas.

According to the SNGPL authorities, the total gas demand of all sectors in Punjab and KP at present stands at 2500mmcfd — over 700mmcfd for domestic consumers and 100mmcfd for the commercial sector. "Besides this, the CNG, textile and fertiliser sectors are being provided 50, 300 and 125mmcfd of gas, respectively. The power sector is getting about 700mmcfd," the SNGPL managing director said.

Mr Latif told Dawn that the total gas demand included 450mmcfd imported LNG/RLNG being supplied to the industry — 300mmcfd to textile and fertiliser sectors, 100mmcfd to Rosch and Fauji power plants in Kabirwala (Khanewal) and 50mmcfd to the CNG sector.

"Keeping in view the available sources, we have only curtailed 50mmcfd of gas to 20 per cent of the total industry that is exclusively using indigenous gas. And we have told them clearly to shift to RLNG/LNG like other industries or use any other alternative fuel during winter," he explained.

The SNGPL chief said that since Punjab had not been producing even a single unit of gas, its domestic and commercial sectors might face low gas pressure in night hours. There would be no gas loadshedding in the industry using LNG or RLNG, he added.

Meanwhile, a spokesman for the Pakistan Textile Exporters Association (PTEA) said on Tuesday that at the request of the association, the SNGPL chief had directed regional offices to supply system's gas to textile units (both industrial and captive connections) till Nov 21 with 100pc load.

"Members (of the association) are requested to use gas accordingly. Those interested in RLNG allocation may apply for the same through the PTEA," the spokesman said in a statement.

http://www.dawn.com/news/1296662/gas-supply-to-industries-in-punjab-kp-curtailed

# LUCKY POWER PLANT TO BE THE FIRST TO RUN ON THAR COAL The Express Tribune, November 16th, 2016.

KARACHI: Lucky Electric Power Company Limited (LEPCL), a wholly owned subsidiary of Lucky Cement Limited, is all set to install a 660-megawatt coal-power plant at Bin Qasim, Karachi, which will be the first plant to use Thar coal as fuel 350km from the mine's mouth.

"Lucky Electric's electricity tariff will be marginally lower compared to the mine-mouth project despite the transportation cost because of a lower rate of return, higher plant efficiency and no water cost," said LEPCL Chief Executive Officer Intesarul Haq Haqqi while speaking to media on Tuesday.

The project would not only set a precedent for the entire power sector by using the coal produced by Sindh Engro Coal Mining Company, a hefty distance away from the plant, but it will also pave the way for export of Thar coal, as its power plant is located at Port Qasim.

If this coal could be transported to Port Qasim for producing power, it can also be exported from the same port.

"The project will cost approximately \$850 million," he said. The company is targeting to start commercial operation by December 2019.

It has already obtained all the requisite approvals including the letter of support, upfront tariff from Nepra and has leased 250 acres of land close to Port Qasim.

Haqqi revealed that the company was finalising a power purchase and implementation agreement with the government and was likely to achieve financial close by March 2017.

He said the Lucky Electric Power project was in line with the government's policy of increasing reliance on indigenous resources for power generation. This will facilitate foreign exchange savings besides bringing the electricity cost lower, thus making it affordable for the consumers and helping make exports more competitive.

Moreover, the use of Thar lignite, away from mine-mouth, would also help in expansion of mining in Thar, which was in the interest of the country, the province and the people of Thar, he said.

He mentioned that the project was initially intended to run on imported coal. However, upon advice of the government, it was converted to local (Thar) coal in line with the national policy of reducing reliance on imported fuel.

"The Thar coal field has total lignite reserves of 175 billion tons, which can be utilised to produce 100,000 megawatts for over 200 years," he said.

Haqqi said LEPCL had done due diligence of Thar coal and was in discussion to formalise a coal supply agreement with Sindh Engro Coal Mining Company. The coal from Thar is to be transported via roads to the plant site. "Initial feasibility has been completed with the objective of ensuring a sustainable transportation mechanism," he said.

http://tribune.com.pk/story/1232465/away-mines-mouth-lucky-power-plant-first-run-thar-coal/

### AT OPEC, ENERGY DIPLOMACY WORKING OVERTIME

Dawn, November 20th, 2016

Syed Rashid Husain

TORONTO: With the stakes running high, the Organisation of the Petroleum Exporting Countries (Oepc) needs to act. Efforts are on. Behind the scene, energy diplomacy is working overtime and in top gear.

Officials were endeavoring to nail down differences and narrow the sticking points, Reuters reported, quoting Opec sources. "It is difficult at some points but I don't see any deadlock," one of the sources said. "What happened in Algeria gave a lot of hope and impetus and I think people are committed to that."

What production level, Iran is to be permitted under a possible Opec output restraint arrangement, remains a major 'stumbling' block. Some movement has reportedly been made on this issue too. Initially, Iran wanted an output cap of 4 million barrel per day, while other Opec members wanted Iran to freeze supply at about 3.7m bpd.

The issue was reportedly hotly debated and contested at the October 28 Vienna meeting of the Opec High-Level Committee, entrusted with the task to define individual supply limits of member countries. The committee is now set to meet again on Monday, for the second time.

To overcome, 'the most severe oil market crisis in 50 years' shuttle diplomacy is on. Opec Secretary General Mohammed Barkindo is visiting a number of member states. As per some reports, he met Minister Khalid Al-Falih, in London. Before travelling to Ecuador and indeed Iran, he landed in Caracas last Wednesday – to call on Venezuelan President Nicolas Maduro, the leading proponent of the output cut agreement.

Maduro appeared exalted after the meeting with Secretary General. Opec countries are ready to reach a "forceful" agreement on cutting oil output, he emphasised. "There is sufficient will among Opec countries to take the step we need to take in the month of November, [to reach] a forceful agreement to reduce production and construct new mechanisms to stabilise the market," Maduro said in a televised broadcast from the presidential palace.

In the meantime, availing the opportunity of the Gas Exporting Countries Forum (GECF) moot, global energy leaders were seen huddled in Doha, Qatar.

For non-Opec Russia to be onboard remains critical to the prospects of achieving the objective of stabilising the markets. That seems possible now. Russia, the world's largest crude producer, is now emitting signals that it is ready to cooperate with Opec. Russian Energy Minister Alexander Novak emphasised Russia would "support any decision" adopted by Opec.

The overall mood within Opec now appears positive. "Whatever it takes to reach a consensus will be taken by the ministers," an Opec source familiar with discussions, referring to finding a compromise over Iran, told Reuters. "We cannot leave Vienna on November the 30th without an agreement."

Sensing the positive mood inside, Saudi Energy Minister Khalid al-Falih is now beginning to target the Opec output level of 32.5m bpd – the lower end of the previously agreed range. In Algeria, end-September, Opec agreed to bring its output to between 32.5 – 33m bpd.

Meanwhile, stakes continue to be high. Falih has also underlined it is imperative, for the Opec to reach a consensus on a deal to curb production. Nov 30 ministerial is Vienna is a critical one — Opec is conceding too. "Whatever the outcome, the Vienna meeting will have a major impact on the eventual – and oft-postponed — rebalancing of the oil market," the IEA too agreed in its Oil Report.

Major obstacles are still to be surmounted. Overall crude production is touching new heights. In the week to Nov 11, EIA too reported a larger-than-expected crude buildup of 5.3m barrels.

Opec pumped 33.64m bpd last month, up 240,000 bpd from September, Opec reported in its monthly report. The Paris-based IEA too said the overall global supply rose by 800,000 bpd in October to 97.8m bpd, led by record Opec output and rising production from non-Opec members such as Russia, Brazil, Canada and Kazakhstan.

"If no agreement is reached and some individual members continue to expand their production then the market will remain in surplus throughout the year, with little prospect of oil prices rising significantly higher. Indeed, if the supply surplus persists in 2017 there must be some risk of prices falling back," the IEA reported.

With the stakes rising high, a lot now hinges on Vienna.

http://www.dawn.com/news/1297401/at-opec-energy-diplomacy-working-overtime

NEWS COVERAGE PERIOD FROM NOVEMBER 7TH TO NOVEMBER 13TH 2016 WAPDA TOLD TO PAY PUNJAB RS82 BN AS NET HYDEL PROFIT Dawn November 8th, 2016

Khaleeq Kiani

ISLAMABAD: The federal government has directed the Water and Power Development Authority (Wapda) to pay the Punjab government Rs82 billion as net hydel profit (NHP) for power generated by the 1450MW Ghazi-Barotha hydropower project (GBHP) since 2005.

This will raise consumer tariff by 33 paisa per unit countrywide, an official, speaking on condition of anonymity, told Dawn.

The agreement was reached at a meeting between Finance Minister Ishaq Dar, Punjab Chief Minister Shahbaz Sharif, Water and Power Minister Khawaja Mohammad Asif and other senior officials on Monday.

"The federal government has agreed to settle the net hydel profit relating to the GBHP following the principles of a similar settlement reached earlier this year with the Khyber Pakhtunkhwa government [in the matter of Tarbela Dam]," the announcement said.

Under the agreement, the Punjab government would be paid Rs82 billion for power generated by the GBHP since 2005. Of this, Rs38 billion would be settled upfront and the remaining Rs44 billion would be paid in the next three fiscal years at a rate of about Rs14.5 billion per year. Wapda will continue to pay Rs9.5 billion to Punjab every year for the productive life of the project.

Given Wapda's tight fiscal position and its overexposure to the banking sector, the authority was directed to issue a Rs38 billion promissory note of one-year's maturity by December 31, 2016. The provincial government can encash the promissory note from the relevant commercial bank by paying a discount on interest.

The official said Punjab would get Rs1.10 on each unit of electricity produced by the GBHP — the same rate paid to KP for Tarbela. However, payment to Punjab will be higher as it will get full arrears for the last 11 years. KP had received partial NHP for more than two decades at a capped rate of Rs6 billion instead of Rs19 billion per year, announced by the Council of Common Interests (CCI) last year.

Wapda has been resisting borrowing Rs38 billion from a bank to pay the Punjab its first instalment, saying it is overexposed to the banking sector because it has recently borrowed Rs100 billion for the Neelum-Jhelum hydropower project, Rs25 billion for KP's share of NHP and upcoming payments worth Rs40 billion for the Dasu hydropower project.

At present consumers pay Rs19 billion every year to KP as NHP at the rate of Rs1.10 per unit under an agreement approved by Nepra in November last year. At the time, the regulator had, however, not approved requests for Rs9.5 billion NHP payment to Punjab and Rs6.5 billion to Azad Kashmir on power stations in their areas. It had said that the issue required approval by the CCI under Article 161(2) of the Constitution.

#### http://www.dawn.com/news/1294953

### ECC RULES OUT SUBSIDY ON LPG SALES IN REMOTE AREAS The Express Tribune, November 9th, 2016.

ISLAMABAD: The Economic Coordination Committee (ECC) has turned down a proposal of the Planning Commission that suggested direct subsidy on liquefied petroleum gas (LPG) supply through cylinders in line with an Indian model.

The ECC's response came in its meeting held on October 31, 2016 to consider and give approval for establishing LPG air-mix plants in remote and hilly areas of the country.

The Planning Commission had floated the direct subsidy proposal to do away with the plan of setting up expensive LPG air-mix plants that would put a burden of Rs2,638 per unit on gas consumers.

The commission pointed out that synthetic natural gas to be produced by air-mix plants would cost Rs3,238 per million British thermal units (mmbtu) in Murree. Of this, a tariff of Rs600 per mmbtu would be charged from consumers in the hilly areas and the remaining Rs2,638 would be borne by rest of the consumers.

On the other side, on an LPG cylinder of 11.8 kilogramme costing Rs895 (Rs1,685 per mmbtu), which was approved by the inter-provincial Council of Common Interests, the cross-subsidy cost would be Rs1,085 per mmbtu.

The commission, therefore, suggested that the Ministry of Petroleum and Natural Resources should analyse the alternative option of LPG supply through cylinders.

However, both the petroleum and finance ministries said they had no funds to provide direct subsidy on LPG sales. The latter suggested that the government should not take any financial burden.

The petroleum ministry, on its part, pointed out that natural gas was purchased at around Rs500 per mmbtu and supplied to domestic consumers at Rs110, Rs220 and Rs600 per unit – the three different slabs for these consumers.

The same criteria were being applied in the case of LPG air-mix plants to provide gas to the domestic consumers at affordable prices, it said.

The ministry insisted that the air-mix schemes in Pakistan and the subsidy scheme in India could not be compared. The air-mix plants were solely for the remote and hilly areas of Pakistan whereas India introduced the subsidy across the country and implemented the scheme through ration cards.

According to a cost analysis conducted by Sui Southern Gas Company, the ministry said, the total consumer cost of synthetic natural gas in Gwadar, for example, was estimated at around Rs60 million compared to the cost of LPG to be provided through cylinders at Rs45 million.

However, the ministry said the transportation of cylinders was not reliable as compared to the gas pipeline, which was considered more efficient and reliable.

The ECC, while ignoring suggestions of the Planning Commission, approved the setting up of LPG air-mix plants and a tariff formula which would burden rest of the consumers with Rs2,638 per unit.

However, the additional impact would be included in the weighted average cost of all gas consumers which was estimated at Rs0.60 per mmbtu.

http://tribune.com.pk/story/1224899/proposal-rejected-ecc-rules-subsidy-lpg-sales-remote-areas/

AGRICULTURE SECTOR: PROMOTION OF SOLAR-BASED ENERGY, TECHNOLOGIES TO CUT POST HARVEST LOSSES

Business Recorder, November 9th, 2016.

Faisalabad: the promotion of solar-based energy and technologies would not only help the country to overcome energy crisis but also boost the agriculture sector by narrowing down post harvest losses with technologies including solar dryers and solar milk pasteurizer.

This was stated by university of agriculture faisalabad vice chancellor prof dr iqrar ahmad khan while chairing the inaugural session on attentive energy for community development arranged by department of energy engineering, university of agriculture faisalabad.

Vice chancellor prof dr iqrar ahmad khan said that as many as 95 percent of milk remained unprocessed. if we promote pasteurized milk technology at village level, it will help provide address the issue.

He said that the university had developed milk chiller that will save the nutritive values of the milk. he also said that the country was producing a huge quantity of biomass and crop residue every year that must be converted into electricity as an alternative way.

Pakistan agriculture research council's engineering division director general Dr Munir Ahmad said that the country was producing dates million tones but only 20 percent are dried with the sun lights. he stressed upon the need to promote solar dryer.

Dean faculty of agri engineering Dr Allah Buksh said that pasteurized milk could be preserved for the longer shelf life hence it is marketable. He said that farming community don't get the proper price for milk due to non-availability of processing facilities at the farm level.

He said that the country spend the 14 million us dollar yearly on the import of oil.

Dr Munir Ahmad said that the country was importing the oil worth Rs 14 billion dollar to cater its need. he said that country can generate 3million mw solar energy. Whereas, 5000 mw can be generated from biomass, MPA Najma Afzal also spoke.

### 'TAJIKISTAN UNDERSTANDS PAKISTAN'S ENERGY REQUIREMENTS' Dawn November 12th, 2016

RAWALPINDI: Tajik Ambassador Sherali S. Jononov said on Friday that Tajikistan understands Pakistan's energy requirements, and power would be provided to Pakistan under the Central Asia South Asia (CASA 1000) energy project.

He said a better road and railway network between the two countries could help them increase their volume of bilateral trade.

Mr Jononov was speaking during a visit to the Rawalpindi Chamber of Commerce and Industry (RCCI) on Friday. While addressing traders, the envoy said Tajikistan and Pakistan have a historical, cultural and religious background and the roots of their relationship are very deep. He said both countries enjoy cordial relations.

"We understand bottlenecks in promoting bilateral trade between Pakistan and Tajikistan that included banking and transportation and custom tariff issues and they will be rationalised for better cooperation and bilateral trade activities," the envoy said.

"Pakistan is emerging in the globe and under the China Pakistan Economic Corridor (CPEC) its importance has increased. Central Asian countries including Tajikistan now have the shortest access to sea via Gwadar Port," he said.

Mr Jononov added that the Pakistani trade and business community should take advantage of the emerging opportunities. He praised the role of the RCCI in promoting trade exhibitions under the indigenous Made in Pakistan Expo brand, and said they would replicate this in Pakistan.

RCCI President Raja Aamer Iqbal, during his welcome address, said the Pakistani economy is taking a leap and expressed the hope that the CASA 1000MW energy project would help Pakistan meet its energy requirement.

He called for an exchange of trade delegations of both chambers, and also gave an update on the Pakistan Afghanistan Central Asian Trade Summit, saying that the research report is in its final stages and will be available shortly.

The Tajik ambassador was also presented with a memento at the end of the event.

http://www.dawn.com/news/1295857

### FEDERAL GOVERNMENT TO PAY RS25BN HYDEL PROFIT TO KP, SAYS MINISTER Dawn November 12th, 2016

TAXILA: Khyber Pakhtunkhwa Finance Minister Ali Amin Gandapur on Friday said the federal government would provide Rs25 billion to the provincial government on account of the total net hydel profit of Rs70bn.

Addressing a public meeting near Hasan Abdal, Mr Gandapur said the Pakistan Tehreek-i-Insaf's protest on Nov 2 was aimed at breaking the status quo and bringing the system under transparency. He added that it was the need of the hour to eliminate malpractices from government institutions otherwise they would lead to destruction.

Mr Gandapur said that the investigation into Panama Papers leaks would lead to the end of the political careers of corrupt rulers. "The matter is taken up by the Supreme Court, which in itself is a victory for the PTI," he said.

Mr Gandapur said the provincial government had taken practical steps to eliminate corruption from the country, adding that it was planning to increase the recovery revenue target for KP from Rs3bn to Rs5bn for the next financial year. The State Bank had reported that the KP government's budget was more than other provinces of Pakistan, he added.

The minister also claimed that most of the provincial revenue department's record was being computerised, adding that almost 80 per cent of the record from different districts was already digitised. Mr Gandapur maintained that the land record of KP would become digitised by 2018 to prevent fraud.

The provincial government also allocated funds for the Chashma Right Bank Canal project.

http://www.dawn.com/news/1295894/federal-government-to-pay-rs25bn-hydel-profit-to-kp-says-minister

MEGA POWER PLANTS SHUT AS DEMAND DROPS MASSIVELY The Express Tribune, November 13th, 2016

Salman Siddiqui

KARACHI: The Ministry of Water and Power has abruptly shut down at least four mega power plants, saying that demand for electricity has gone down massively by 7,000 megawatts compared to the peak in summer season.

"Power plants were closed after the gap between demand and production became very narrow," said ministry spokesman Muhammad Ismail.

"We had hit the peak in power production at 17,000 megawatts in June and July {peak summer days} this year; the production level dropped to around 12,000 megawatts last week," he said.

In summer, the demand shoots up to around 22,000 megawatts whereas in winter it comes down to about 14,000 megawatts. The production, however, always remains short of demand with the shortfall sometimes reaching 6,000 megawatts for varying reasons.

The drop in demand is seasonal. "Now, we are entering winter days; people have switched off air conditioners that consume a significantly higher volume of electricity," the spokesman said.

The power plants running on furnace oil and diesel including the Muzaffargarh, Jamshoro, Nandipur and Hubco units were shut down last week.

"Only those units that were operating on diesel were closed; the plants running on gas at the same stations continued to generate electricity; some of the plants were closed for annual overhauling," the spokesman said.

It, however, remained unclear as to how much electricity the closed plants were supplying to the national grid.

"The plants that were chosen for shutdown were generating the most expensive electricity; they will be activated when the demand goes up," he said.

These power units may not be a top priority of the government after new plants start running.

Some of the new plants will come online by May 2017 before the peak summer days. They will produce much cheaper electricity.

When asked about power outages, the spokesman said load-shedding had been slashed to mere three hours in urban areas and four hours in rural regions. However, it remains high at 18-20 hours in areas where power theft is rampant.

"Industrial zones and residential areas with zero power theft are provided electricity round the clock," he said.

With the shutdown of power plants, the stocks of furnace oil have mounted in the country. "This may lead to imposition of demurrages on three cargoes awaiting berth at the Karachi seaport," said a source.

Fuel cargoes are imported by state-owned Pakistan State Oil (PSO). "The recent oil demand projection of the Ministry of Water and Power for electricity production stood at 13,700 tons per day. On the contrary, it accepted only 1,800 tons of furnace oil on Saturday," the source added.

When approached, PSO confirmed that power plants had stopped taking furnace oil supplies last week. "This is putting us in a difficult situation," a company official said.

About a week ago, PSO was supplying 18,000 tons of furnace oil per day to the power plants, including those in the private sector.

http://tribune.com.pk/story/1229170/winter-relief-mega-power-plants-shut-demand-drops-massively/

NEWS COVERAGE PERIOD FROM OCTOBER 31ST TO NOVEMBER 6TH 2016 CHINESE FIRM IN DEAL TO BUY K-ELECTRIC STAKE Dawn, October 31st, 2016

Khurram Husain

KARACHI: In a long anticipated announcement, the Abraaj Group said on Sunday evening that one of its companies, KES Power, had reached an agreement to divest its stake in K-Electric, the country's largest and only vertically integrated power utility.

Abraaj owns 66.4 per cent of K-Electric's total shares, along with management control. The deal, when closed, will be worth \$1.77 billion.

The deal was finalised a week ago in China, but the announcement has only just been made.

The buyer is Shanghai Electric Power (SEP), a state-owned enterprise controlled by China's State Power Investment Corporation, a Fortune 500 company. Listed on the Shanghai Stock Exchange, it is mainly responsible for Shanghai's power supply, with a generation of 35.23TWh (terawatt hours) last year.

(Major energy production or consumption is often expressed as terawatt hours for a given period, which is often a calendar year or financial year. One terawatt hour is equal to a sustained power of approximately 114 megawatts for one year).

It is not known whether any of the money involved in the deal will actually pass through Pakistan. Neither of the parties involved in the deal commented on the details.

The deal will end a stormy, but ultimately fruitful, engagement that Abraaj began in 2009 when it acquired the controlling stake with management control in the midst of a severe crisis in the utility. According to people familiar with the original acquisition, Abraaj intended to implement its turnaround plan and exit the investment in five years, but the exit was delayed due to regulatory hurdles in unbundling the utility, as well as difficulties in locating buyers.

Along the way, the new management clashed often with the ministry of water and power, with labour unions, and with the state-owned gas supply company responsible for providing fuel for its power plants. It saw three CEOs come and go, and faced an embarrassing overbilling scandal along the way.

By all accounts, the exit is a hard-earned one.

"Abraaj fully recognised the outstanding growth opportunity that K-Electric represented for the power sector in Pakistan when we made our investment in 2009. Over the past seven years, we have worked very closely with the

management and staff at K-Electric to catalyse that potential and achieve real and tangible value for the business, its consumers, and the city of Karachi at large," said Arif Naqvi, founder and Abraaj group's Chief Executive.

The Dubai-based private equity fund claims it has achieved "a landmark turnaround" and transformed "an under-utilised strategic asset into a leading Asian energy player". It claims to have added 1,000MW to KE's power generation, improved "overall efficiency levels" from 30.4pc in 2009 to 37.4pc this year, and reduced transmission and distribution losses by 12 percentage points.

The company recorded its first net profit in 2012 after languishing in loss for over a decade. Its last reported net profit, for the nine-month period ending in March this year, surged 40pc year-on-year to touch Rs22.8 billion.

In official communications, the KE management has taken pains to underline that it has invested more than \$1bn into the utility, but the press release from Abraaj makes no mention of any investments made in the company.

In August, when the company notified the stock exchange that "Abraaj is evaluating the possibility of divesting" its stake, it also disclosed a \$2.2bn investment plan for the next decade

Zubair Motiwala, one of the two government-appointed directors on the company's board, is concerned about the lack of transparency surrounding the deal. "No board meeting has been held to brief the directors" about the deal, he says. "Nothing is clear about this. As a board member, I still don't know how this transfer is going to take place."

He wonders about the fate of various incentives, like the subsidy on tariff, worried whether this will continue or not.

According to some KE insiders, the deal will only go through once the multi-year tariff that the company applied for has been approved by Nepra, the regulator. Hearings on that application have already been held and a final decision is awaited.

SEP Chairman, Wang Yudan, said the deal marked the beginning of SEP's cooperation with Abraaj. "SEP is confident about working together with Abraaj in the future to transform K-Electric into one of the best companies in Pakistan."

The statement implies a continuing role for Abraaj in KE management after the divestment, but no further clarity is available at the moment. Arif Naqvi, the Abraaj CEO, would only say that the company was divesting its stake "to a strategic buyer who is fully committed to continuing this success story into the future".

Abraaj's communications director, Mitali Atal, did not return calls seeking comment on the development.

http://www.dawn.com/news/1293340/chinese-firm-in-deal-to-buy-k-electric-stake

GOVT MOVES TO APPEASE MASSES, KEEPS OIL PRICES UNCHANGED The Express Tribune, November 1st, 2016.

Zafar Bhutta

ISLAMABAD: The government decided to keep oil prices unchanged from November 1 (today) amid increasing political pressure building up in the capital.

Following an uptick in the international price, the Oil and Gas Regulatory Authority (Ogra) had recommended an increase in the range of 2.8% to 15.6% for November.

However, Finance Minister Ishaq Dar announced to keep oil prices unchanged during a press conference as the government looks to settle the nerves of the public currently rattled by the ongoing political chaos in Islamabad.

Dar said that the government decided not to pass on the increase in oil prices to the consumers following directions of Prime Minister Nawaz Sharif. "The government has not increased prices of petroleum products since April this year," said Dar.

The finance minister said the government would bear a revenue loss of around Rs3.5 billion due to its move of keeping oil prices unchanged.

At present, the administration is faced with a stiff protest from Pakistan Tehreek-e-Insaf (PTI) that has announced to march to the federal capital. The opposition party wants the country's premier to present himself for accountability in the wake of the Panama Papers or step down from his post. The government, in its attempt to appease the masses, has hence decided not to pass on the price-increase.

In its summary to the government, Ogra had calculated the potential hike in petroleum products by keeping in view fluctuations in the international market and the oil pricing mechanism; it concluded that if the current high tax rate is to be maintained then an increase in oil prices has to be enforced.

Despite over 50% decline in global prices, consumers have largely been denied a full relief in previous months due to hefty taxes. At present, two types of taxes are being charged from oil consumers including petroleum levy and general sales tax.

The regulator had recommended an increase of Rs2 in the price of High Speed Diesel (HSD), a 2.8% change that would have taken the price from Rs72.52 to Rs74.52 per litre. HSD is mostly used in the transport and agriculture sectors.

The regulator had also proposed an increase in the price of petrol by Rs2.29 per litre (3.6%) from Rs64.27 to Rs66.56 per litre. The price of kerosene oil, used for cooking purposes in remote areas where liquefied petroleum gas is not readily available, was recommended to be increased by Rs6.75 per litre (15.6%) from Rs43.25 to Rs50 per litre.

Similarly, the price of LDO, mainly used for industrial purposes, was suggested to increase by Rs6.40 (14.8%), up from Rs43.35 to Rs49.74 per litre.

http://tribune.com.pk/story/1216606/govt-moves-appease-masses-keeps-oil-prices-unchanged/

CHINA WILLING TO FINANCE PAKISTAN'S PORTION OF IP PIPELINE The Express Tribune, November 3rd, 2016.

#### Zafar Bhutta

Islamabad: With Iran coming out of decades-long global economic isolation, China has offered Pakistan that it was willing to finance the un-built portion of a multibillion-dollar gas pipeline project.

Officials told The Express Tribune that the China Petroleum Pipeline Bureau (CPPB) – currently engaged with the \$1.4 billion Gwadar-Nawabshah LNG terminal and pipeline project – was keen to work on the remaining portion of the gas pipeline from Gwadar to the Iranian border to implement the Iran-Pakistan gas pipeline project.

China was providing 85% of the total financing for the LNG pipeline project and wanted to emulate the same model for building the remaining portion of the pipeline from Gwadar up to the Iranian border.

The IP gas pipeline project had been stalled due to international curbs against Tehran. But soon after lifting of the sanctions, the United States had imposed certain sanctions against Tehran that were hindering the implementation of the IP gas pipeline project.

Officials said China had also expressed its desire to work on the remaining portion of the 80km pipeline from Gwadar to connect it with the Iranian border. China was lobbying to award the contract of this portion as per the cost decided for the Gwadar LNG pipeline.

A senior government official said Pakistan was working on LNG import projects but LNG supply was not a secured source because in case of war, this supply source could be halted.

He said this was the reason why the IP project was considered to be an essential as well as strategic project for Pakistan.

"In case of some interruption in the supply of LNG, Pakistan will be able to get gas supply through the IP pipeline," the official added.

The other reason was that prices of steel and other material for gas pipelines had dropped over the years. During the last PPP government, Iran had decided to lay the IP pipeline by nominating an Iranian company. Iran had also pledged \$500 million financing for the project.

The offer of the Iranian company contract was \$2.8 billion. German consultant ILF had estimated the contract cost at \$1.8 billion. However, its cost had come down to \$1.6 billion since.

The official said the approved cost of the LNG pipeline project by the Executive Committee of the National Economic Council (Ecnec) was \$2 billion that included the \$1.4 billion EPC (engineering, procurement and construction) cost and \$600 million in duties to the government.

He said if the pipeline is extended up to the Iranian border, its cost as per the Gwadar LNG pipeline terms and conditions would come to \$1.6 billion.

The official added that the government was working on a plan to set up two jetties at the Gwadar Seaport to deal with 1,200 mmcfd LNG where two floating terminals would be made operational.

The Chinese company would also work on the project as the EPC contractor and China would provide financing for it.

http://tribune.com.pk/story/1219157/china-willing-finance-pakistans-portion-ip-pipeline/

# PAKISTAN PRODUCING MORE THAN 1,000MW OF CLEAN ENERGY The Express Tribune, November 3rd, 2016

KARACHI: Pakistan has become a member of the exclusive club of nations that are producing over 1,000 megawatts of electricity through renewable energy sources as it has been consistently exploiting wind, power and biomass resources for producing clean power, announced Alternative Energy Development Board (AEDB) CEO Amjad Ali Awan.

Speaking at a press briefing on Wednesday, Awan told the media that Pakistan would be producing 3,000 megawatts from renewable energy sources by the beginning of 2019. So far, the electricity production from these resources has reached 1,135MW.

"This will be increased to 1,185MW by next month when wind mills for the first clean energy project under the China-Pakistan Economic Corridor will be installed at Gharo, Sindh," he said.

Of the 1,135MW, Pakistan is producing 590MW with the help of wind mills, 400MW is solar energy and 145MW is based on bagasse produced by sugar mills in northern Sindh and southern Punjab.

Awan revealed that the AEDB was planning to step up solar power generation to 1,756MW by the end of 2018 whereas wind power projects would be producing well over 1,000MW after two years.

He said Letters of Interest (LoIs) had been issued for four more projects to take bagasse-based electricity production to 375MW and by 2019, different sugar mills would be contributing up to 500MW.

He insisted that the Gharo-Jhimpir wind corridor in Sindh had the potential to generate 32,000 to 35,000MW of electricity.

As part of its future strategy, the AEDB will encourage sponsors of wind power projects in Sindh to install solar panels at their sites in order to produce more clean power on a sustainable and reliable pattern.

According to Awan, the AEDB has also been facilitating the process of arranging finances from international donor agencies for building capacity of the national grid to transmit the electricity produced through new wind projects to distribution companies of the area.

For one and a half years, the AEDB is not issuing LoIs for new wind projects in Sindh as there are already a number of such schemes in the pipeline.

It has started conducting the mapping of renewable energy sources available in the country with the assistance of the World Bank.

For the purpose, 12 wind masts have been installed for wind energy and 10 solar data stations have been established in different parts of the country to scientifically assess the potential of electricity production from the two main alternative energy sources.

Although it was not part of the AEDB mandate, it had drafted and got approved from the federal government the standards of safety and quality of solar cells being used by domestic consumers for various appliances, Awan said, adding the standards would prevent import of substandard products being recharged through solar power.

By the time the country develops its own testing labs to ascertain the quality of solar cells, it will be binding upon the pre-shipment inspection companies to ensure compliance with the safety and quality standards enforced for the solar cells being imported into the country.

Awan claimed that the AEDB had been doing all the work needed to develop the guidelines and regulations for the "net-metering" system, which would be adopted by the power distribution companies.

This will encourage individual consumers to install solar panels or windmills to generate renewable electricity as it will be beneficial and lucrative for the household consumers..

http://tribune.com.pk/story/1218970/exclusive-club-nations-pakistan-producing-1000mw-clean-energy/

TAPI PROJECT: PAKISTAN TO GET 13.8BN CUBIC METERS GAS Business Recorder, November 04, 2016

#### Zaheer Abbasi

The TAPI gas pipeline's early completion would bring 13.8 billion cubic meters gas from Turkmenistan to Pakistan to cater for its growing energy demand and strengthen the country's energy security.

Source said Pakistan gave a briefing on energy sector progress report to the participants of two days CAREC meeting last week and maintained that availability of TAPI gas would bring economic benefits through job opportunities in Pakistan and upgrade associated infrastructure. They added that allocated gas volume for Pakistan and India is 14

billion cubic feet for each country and 5 billion cubic feet for Afghanistan annually over a commercial operation period of 30 years. The project is said to enhance energy security of the region.

Although the cost of the project is currently expected to be over \$10 billion, the total project cost will be determined upon completion of the detailed design and the arrangements for the procurement of long-lead items, construction and other services.

Reference document presented to the meeting available with Business Recorder noted that on August 2015, Turkmengas was unanimously endorsed as consortium leader for TAPI Pipeline Company Ltd. Four months later, the shareholders agreement was signed in Ashgabad, Turkmenistan at a ground breaking ceremony to commemorate the beginning of the construction of the Turkmen portion of the planned TAPI pipeline.

An investment agreement, which provides for an initial budget for each party and cost estimates for pre-construction activities was endorsed on 7 December 2015 immediately after the conclusion of the 24th Steering Committee Meeting.

The meeting was further informed that acting as TAPI secretariat since 2003 and as transaction advisor since 2013, Asian Development Bank (ADB) has been involved in the progress of the TAPI pipeline and helped establish the TAPI Pipeline Company Limited (TPCL), due diligence activities, production of the technical and financial feasibility studies.

More recently in April 2016, the TAPI shareholders signed the investment agreement, which includes TPCL's initial Business Plan and Budget for the necessary project development activities, enabling the shareholders to take the project's final investment decision (FID).

The planned pre-FID activities include, the project's detailed design, environmental and social safeguards due diligence, preparatory procurement and debt raising activities.

http://www.brecorder.com/fuel-a-energy/193:pakistan/99743:tapi-project-pakistan-to-get-138bn-cubic-metersgas?date=2016-11-04

### December 2016

NEWS COVERAGE PERIOD FROM DECEMBER 26 TH TO JANUARY 1ST 2016

*NAWAZ-LED GOVT YET TO FULFIL PROMISE OF WHOLESALE ENERGY MARKET* The Express Tribune, December 26th, 2016.

ISLAMABAD: In its economic manifesto, unveiled in 2013, the PML-N government has given a commitment that "in five years there will be a market for wholesale trade of electricity". However, this electoral promise has been put on the backburner and it has yet to be fulfilled.

The excess capacity over peak demand, which is known as reserve margin, is quite low in Pakistan. Since it helps in balancing any sudden variation in energy markets, it is used as an indicator of production reliability.

The lower reserve margin means that the existing power generation system is insufficient to support the overall infrastructure in case of any plant breakdown and to cover the forecasting errors made by the National Transmission and Despatch Company (NTDC).

The NTDC was established in 1998 to coordinate the demand and supply of electricity in the country. Although it is presented as an independent system operator, yet it works under immense control of the government.

As like many other publicly owned enterprises, the NTDC embodies operational mismanagement and lack of capacity in maintaining the balance between supply and demand.

Separately, the government's control over Nepra is causing severe market imperfections, resulting in many other problems such as increase in transaction costs, which creates barriers for new entrants in energy markets, thus, threatens competitiveness.

At the production stage, the existing cost-plus pricing mechanism is believed to be highly inefficient. Nepra sets the tariffs based on operational costs of power generation plus a mark-up percentage.

The flaw in this mechanism is that a company can earn higher profit by simply overstating its operational costs. There is no incentive for cost minimisation. Any company which reduces its operational costs will earn a lower profit, then why it will ever do that?

At the retail stage, the incremental tariff rate is highly ineffective in covering the supply costs. Any upheaval in the supply cost is largely unshared by the retail side. The resulting deficit between the cost of supply and retail price is, therefore, covered by government subsidies.

Countries like the US, UK and Argentina have experienced a similar electricity crisis in the past, which Pakistan is facing today. However, they deregulated the sector and introduced competitive wholesale and retail electricity markets that worked extremely well.

In the wholesale market, the electricity generated by a power company is bought and re-sold a number of times before being finally served to the end-user.

Underinvestment in the energy sector, particularly at the production stage, is a point of major concern. The establishment of the wholesale market can be helpful in attracting investment from competitive suppliers in the generation resources. This increase in investment will definitely ensure sustainability in the supply of electricity.

The existing electricity infrastructure lacks the capacity of countering any unexpected shock to the electricity market. However, wholesale markets can ensure reliable production by providing a platform of spot markets in which a generator can offer its production any time at a competitive price.

Most of the countries use spot markets in order to overcome any unexpected deviation in the energy market.

Wholesale electricity markets are usually organised under an independent system operator (ISO).

As a regional planner, it is responsible for balancing the supply and demand and making sure that the right infrastructure is built at the right place and at the right time.

Since there are multiple sellers in the market, the ISO ensures that no preference is given to any vertically integrated utility against other competitive generators and ensures competition.

As sales in electricity markets occur within multiple regions, a supplier has to pay the transaction cost before entering into any other region. However, the ISO system reduces this transaction cost which not only facilitates the producers but also the end-users.

As opposed to the inefficient cost-plus pricing mechanism, the wholesale electricity market offers a system of uniform clearing price auction.

Under this system, the generators place bids with an independent market administrator, which then dispatches the lowest bidder first and so forth until all the demand is met.

Each generator then receives the same per unit price as what was paid to the last unit of electricity needed to meet the total demand regardless of their actual bid.

In this mechanism, profit can be earned only when the operational cost falls below the clearing price, otherwise, there will be no or very little profit. Hence, this pricing system drives generators to reduce their operational cost by ensuring efficiency – a win-win situation for both the buyer and seller.

In many countries, establishment of wholesale electricity markets has done a tremendous job in eroding inefficiencies in the electricity sector. Pakistan can also learn from their experience by adopting the same policies.

The government has made some headway at the policymaking level, however, the reform process is quite slow. For instance, the regulatory framework for the net metering and wheeling of electricity has been approved by Nepra, but distribution and generation companies have yet to make the necessary arrangements.

An independent report, which has been tracking performance of the government since May 2013, also suggests that performance of the PML-N administration is not up to the mark in the area of energy security.

Ali Salman is the founder and executive director of PRIME Institute, an independent think tank based in Islamabad, and Talha Hassan is a research analyst

http://tribune.com.pk/story/1274741/wholesale-energy-market-govt-yet-fulfil-promise/

'CHASHMA-III PROJECT VITAL STEP TOWARD ENDING LOAD-SHEDDING' The Express Tribune, December 29th, 2016.

Peshawar: Member Provincial Assembly Rushad Khan said the Chashma-III power project, which was inaugurated by Prime Minister Muhammad Nawaz Sharif on Wednesday, was a significant step towards making Pakistan a country free of load-shedding by 2018.

The project is due to add 340 megawatts (MW) of electricity to the national grid.

Khan said the government's aim to end the energy crisis was turning into a reality.

"The project, jointly completed by Pakistan and China, is another example of the time-tested friendship between the two countries," said Khan.

He added that the priority of the government to address the grave problem of energy crisis can be judged from the fact that about \$34 billion would be spent on energy projects in the China Pakistan Economic Corridor.

He said Chashma-III project will provide clean and affordable energy to the people besides contributing to agricultural, industrial, commercial and socio-economic development. The project would also help the small industries to grow and increase their production, besides ending monopoly of large industrial units, he explained.

Nearly a dozen of federal funded hydropower projects are near completion in Khyber-Pakhtunkhwa (K-P) to help the government achieve its target of ending load-shedding by 2018.

He said these power projects include Tarbela 4th Extension Hydropower Project (EHP) of 1410 MW generation capacity, Gomal Zam dam (18MW capacity) and a host of others.

http://tribune.com.pk/story/1278034/power-crisis-chashma-iii-project-vital-step-toward-ending-load-shedding/

SENATE PANEL TO PROBE HIGH SPENDING ON POWER PLANTS The Express Tribune, December 31st, 2016.

ISLAMABAD: Expressing concern over high spending on setting up three power plants – Nandipur power project, Neelum-Jhelum hydroelectric power project and Sahiwal power plant, a parliamentary panel has decided to investigate the extra expenditures.

The Senate Standing Committee on Water and Power, chaired by Senator Taj Haider, formed a three-member committee to look into the increased spending on the three power plants. The sub-committee, to be chaired by Senator Nauman Wazir, will submit its report in a month.

Officials of the Ministry of Water and Power also briefed the committee on the merit order for operating the power plants.

They said the government had shut down the plants generating expensive electricity under the merit programme, adding the three power plants were also staying closed at present due to expensive power generation.

The committee was informed that power plants were being operated keeping in view the demand and supply of electricity.

Power ministry officials said consumers in areas where power theft was high and bill recoveries stood low were facing load-shedding. They pointed out that 2,083 cases had been registered against the consumers involved in power theft.

The Islamabad Electric Supply Company (Iesco) has registered 480 FIRs against the people involved in power theft.

During the meeting, committee members proposed briefings by company heads through video links instead of attending the meetings in order to save expenses. Senator Nauman Wazir argued that attending the meetings was a waste of money.

Power ministry officials said the ministry had been conducting meetings with the heads of power companies through video links.

The committee members noted that K-Electric was neglecting those consumers whose tariff was low and was not providing electricity to shanty towns. It observed that K-Electric was depriving these areas of electricity to provide electricity to the elite.

http://tribune.com.pk/story/1279839/managing-money-senate-panel-probe-high-spending-power-plants/

NEWS COVERAGE PERIOD FROM DECEMBER 12 TH TO DECEMBER 18TH 2016 PAKISTAN'S POWER SECTOR: GOING UP, DOWN OR NOWHERE? The Express Tribune, December 14th, 2016.

Mohammad Younus Dagha

When did we last read positive reviews in the international reports about Pakistan's power sector? Never. It is now accepted internationally that Pakistan's power sector has come out of its worst financial crisis, from posting a loss to the national budget of Rs200bn to now a negligible Rs8 bn per annum. In terms of its impact on the national exchequer, the power sector's performance has brought savings of Rs400 bn in the past two years.

On the operations side, the power sector has come a long way from a routine of 12-15 hours of industrial and domestic load-shedding, often unscheduled just a few years back, to now zero load-shedding for industries and a scheduled predictable load-shedding of three hours in urban and four hours in rural areas, as per the new schedule announced in November 2016.

Due to an uncontrollable circular debt, rising at a pace of Rs10-18 billion a month (in a month) during 2007-14, no investors and their bankers were ready to put in their funds in Pakistan's power sector till 2014. After strenuous

efforts, the menace of circular debt has been successfully tackled with better recoveries in distribution companies and better management of generation plants plugging losses from all sides. The reduction in oil prices also helped to an equal extent. The result: an increase in circular debt has been capped since Oct 2014.

Now, there is a beeline of foreign and local investors vying to get a space on our grid. In just one year (2015), more than 12000 MWs of new private sector power projects were facilitated as against only 8756 MWs of private sector power generation in the entire (20 years') history of IPPs in the country from 1994-2013.

This demonstrates that the power ministry has been able to successfully put better monitoring systems for oversight of the power sector entities which has helped reduce the sector's losses.

However, in order to keep this system afloat, such vigilant monitoring and supervision will need to continue, perhaps with greater vigour if new generation is to be smoothly added to the system. In addition, there is also a need to keep the power tariffs realistic and cost-covering. Any artificial lowering of tariffs, will again jeopardise the stability achieved in the power sector, after decades of turbulence.

This tells the story of reduced load-shedding and better financial performance of the power sector, but how would that translate into zero load-shedding as being claimed. We read some worrisome views of few analysts who maintain that the aims for bringing load-shedding (outages) to zero are not supported by the available transmission and distribution capacity.

Some other views even question the expected timelines for completion of the new generation projects. These views cannot be ignored especially when they get the support in the reports issued by the regulator which though based on outdated data, still get attention of the power sector analysts.

Power sector projects, like all such large scale undertakings, always have possibilities of changes in the timelines. In order to cater for any such eventuality, against an expected generation shortfall between 7000-8000 MWs estimated for 2017-18, the additional capacity planned to be achieved by March 2018 is around 10,996 MWs.

The question is whether there are any projects expected to get delayed and substantially reduce power availability in March 2018? The frank answer — while the possibility of such an eventuality occurring owing to any unforeseen technical problems in any project can never be ruled out, it will be too far-fetched presuming such problems occurring everywhere, putting the entire plan of zero-load-shedding into jeopardy, God forbid.

And there are plans for the years after 2018, as well. There is a healthy pipeline of 30,837 MWs of the new generation projects already in execution, expected to complete by the year 2022. This includes the capacity of 10,996 MWs expected by March 2018, but doesn't include many projects such as Diamer Basha Dam and others which are also expected to be initiated soon.

In these new projects, a large funding came from the CPEC Energy portfolio which solved the problem of Coal (especially Thar Coal) power financing which Pakistan was seeking to replace costlier generation and to improve the energy security.

There is no doubt that the weak and unreliable transmission and distribution system plagued with constraints and bottlenecks has been a major challenge, for successfully inducting new generation. The simulations run in the Ministry of Water and Power showed that there was no chance of transmitting any new generation on the system as it prevailed in 2013.

It could not carry more than 15000-16000 MWs. For a generation of more than 25000 MWs, expected in 2018, there were 38% constraints on the NTDC's 500 KVA and 29% constraints on its 220 KVA transmission network. The work on improving system resilience is going on in all areas of the country, and closely monitored in the Ministry. It has helped reduce these constraints substantially since 2014.

This was the reason that all the generated capacity, which went up to 17340 MWs in 2016 summers, was transmitted without major issues. However, the system augmentation work will be completed by the end 2017. It is expected that more than 90% of the system will be constraint free in 2018.

Zero outages for the industry since November 2014 (except during the month of Ramazan) has also helped enhancing GDP growth in 2015-16. The reduced domestic load-shedding has also alleviated the sufferings of the common man to some extent. We need to work hard every hour, all the days in the next eighteen months to ensure that the nation can see the end of the menace of power outages and its remaining adverse effects on the economy and the lives of our people, before the summer of 2018.

The increased generation and removal of system constraints will eliminate outages in most of the country. Futuristic investments will still require to be made into all spheres of power sector, from generation to distribution. The Ministry is committed to keep on working beyond 2018 end load-shedding plan to turn the entire power setup into a modern, efficient and resilient system in line with the aim to enhance energy security of the country.

http://tribune.com.pk/story/1262369/pakistans-power-sector-going-nowhere/

AFTER SINDH'S OBJECTION, GOVERNMENT WITHDRAWS DECISION TO CUT GAS TARIFF The Express Tribune, December 16th, 2016.

Islamabad: The federal government on Thursday withdrew its decision of cutting gas tariff by one-third for the industrial sector after the Sindh government protested against distributing its rightful financial resources among industrialists.

The Economic Coordination Committee (ECC) of the Cabinet approved the revision of its earlier decision of reduction in gas sale price for the industrial sector, according to a handout issued by the Finance Ministry after the meeting.

Although the ECC withdrew its decision for the industries, it approved to cut gas prices for Independent Power Producers from Rs613/mmbtu to Rs400/mmbtu. This decision will eliminate price disparity to a large extent and reduce electricity generation cost in the country, which will provide relief to electricity consumers across the board, said the Finance Ministry.

On November 26, the ECC reduced the gas prices for the influential industrial sector from Rs702 per mmbtu including GST to Rs500 - a reduction of 28.8%.

The benefit for the five-export oriented industries had been higher than this, as exports are exempted from paying 17% sales tax. The reduction for the export-oriented industries was 33.3%, as their gas prices came down from Rs600 per mmbtu to Rs400 per mmbtu.

The space for reducing up to 33.3% prices was created after the government decided to pass on the benefits of lower input prices to the industries instead of giving them to provinces as Gas Development Surcharge (GDS).

However, immediately after the ECC's decision, Sindh government objected to it, forcing the federal government to withhold the notification of the ECC decision, according to sources in the Ministry of Finance. They said that Sindh Chief Minister Syed Murad Ali Shah wrote a letter to Prime Minister Nawaz Sharif and protested against the decision.

The GDS is an important source of non-tax revenue for the provinces. In fiscal year 2015-16, ended on June 30, the federal government gave Rs33 billion to the federating units in GDS. During first three months of this fiscal, the Centre transferred Rs9.9 billion on account of the GDS.

The industrialists in Punjab also protested against the decision of reduction in gas prices, as their gas prices are determined after including the cost of Liquefied Natural Gas, which is an imported and expensive fuel. After the 33%

cut in in the industrial gas tariff, the price for Sindh industries had come down to Rs400 per million British thermal units (mmbtu) excluding GST whereas Punjab industries were paying over Rs1,000 per mmbtu for RLNG.

The finance ministry had also objected to the summary of reducing the gas prices for the industries on the grounds that the provinces would not take it lightly. However, at that time, ECC Chairman, Finance Minister Ishaq Dar, overruled the objections.

The ECC also approved disbursement of one and a half month salary to Pakistan Steel Mills employees. The Privatization Division had sought approval of Rs570 million for payment of 50% remaining salary for the month of August 2016 amounting to Rs190 million and Rs380 million for the month of September 2016.

The employees have yet to be paid for the October-December period, as the country's largest industrial unit remains closed for 18 months.

The ECC also approved in principal the funding on expenditure of Inter State Gas Systems (Private) Limited (ISGSL) subject to completion of corporate formalities. The Ministry of Petroleum and Natural Resources proposed that the Government Holding (Private) Limited (GHPL) being the parent company will give a three year term loan to ISGSL to fund all its expenditure on all government mandated projects being undertaken by (ISGSL). This loan and related interest will be repayable after three years through a single bullet payment on terms separately agreed between GHPL and ISGSL through a Loan Agreement.

http://tribune.com.pk/story/1264590/ecc-meeting-sindhs-objection-government-withdraws-decision-cut-gas-tariff/

# FATIMA JINNAH PARK IN ISLAMABAD GOES SOLAR The Express Tribune, December 16th, 2016.

Shahzad Anwar

Islamabad: In a bid to reduce its dependence on carbon-based energy, lights and sprinklers at the Fatima Jinnah Park in Sector F-9 have will now work on energy provided by a large solar project set up in the park.

However, the larger water pumps at the park are likely to continue their dependence on the main power grid.

Called the F-9 Park Solar Lighting Project, 3,400 solar panels have been installed over an area of around five acres inside the park. These panels would generate 0.85 megawatts (850KW) of power and have a back-up facility to provide energy to street lights, offices of Islamabad Metropolitan Corporation (IMC) and Capital Development Authority located inside the park.

The project was built by the China Railway 17th Bureau Group Corporation at a cost of \$4.8 million. Funds for the project were provided by the Chinese government as a grant. Under the project,

The project was handed over to the IMC in a formal ceremony at the park on Thursday.

The ceremony was witnessed by Federal Minister for Finance Senator Mohammad Ishaq Dar, China's Ambassador to Pakistan Sun Weidong and IMC Mayor Sheikh Anser Aziz.

On the occasion Dar thanked the Chinese government for the project.

The finance minister added that projects such as the China-Pakistan Economic Corridor, which included energy projects worth \$ 34 billion, were an excellent example of the friendship between Pakistan and China.

"The current project is yet another example of the good relations which both countries have had for decades," Dar said, adding that the incumbent government aims to resolve loadshedding by the end of 2017.

Weidong said that the project was a gift from the Chinese government to the people of Islamabad. He also congratulated Chinese firm for completing the project two months ahead of schedule.

Aziz said the project would be a permanent source of energy supply for the park.

While the project would help power street lights and the sprinkler systems in the park, they are unlikely to power the large water pumps.

This is the second largest solar power facility in the capital. Earlier in February, the Parliament House was completely shifted to solar energy after panels generating 1.8 MW of energy were installed.

However, that solar project lacks a backup facility.

A source in the Capital Development Authority told The Express Tribune that China was likely to bear maintenance costs of the project, including providing backup batteries for five years.

http://tribune.com.pk/story/1264684/clean-energy-fatima-jinnah-park-goes-solar/

# INDUSTRIALISTS IN SINDH FLAY REVERSAL OF GAS PRICE CUT Dawn, December 17th, 2016

Parvaiz Ishfaq Rana

KARACHI: The Sindh-based industry has objected to the reversal of the government's earlier decision to cut the gas price for the industrial sector from Rs600 per million British thermal units (mmBtu) to Rs400 per mmBtu.

It said the revised decision will increase the cost of production and render its products uncompetitive in the world market.

Industry leaders said reduced prices of wellhead contracts will benefit provinces at the cost of the industry after the reversal of the November 25 decision by the Economic Coordination Committee (ECC).

Earlier, the federal government had decided to reduce gas tariffs for the industry across the country by 33 per cent to Rs400 per mmBtu. The rate would go up by Rs200 per mmBtu to Rs600 per mmBtu after adding the Gas Infrastructure Development Cess (GIDC). However, no formal notification was issued regarding the price cut approved by the ECC in November.

The Punjab-based industry had protested against the ECC decision, claiming that it would benefit Sindh- and Khyber Pakhtunkhwa-based industry because up to 70pc control over the rights of natural resources rests with federating units after the 18th Amendment.

Punjab produces little gas and, as such, industrial units in Sindh and KP have ample availability of natural gas as opposed to those units based in Punjab.

Sindh Chief Minister Murad Ali Shah also objected to the reduced tariff as it transferred the benefit of low-cost gasfield contracts to the industry instead of the province.

Talking to Dawn, Al-Karam Textile Mills Managing Director Fawad Anwar said the industry is already suffering because of the delay in the implementation of the textile relief package promised a few months back.

All Pakistan Textile Mills Association Sindh Zone Chairman Asif Inam said the revised decision will put the Sindh-based industry at a disadvantage because most units in the province have captive power plants. This will result in a high cost of power generation for the industry, he added.

In contrast, most of the Punjab-based industry gets energy from independent power producers (IPPs), which generate electricity through gas, he said. The latest decision by the ECC has not changed gas tariffs for IPPs that continue to pay Rs400 per mmBtu plus GIDC of Rs100 per unit. As a result, Mr Inam said the industry in Punjab will get cheaper power from IPPs but its counterparts in Sindh and KP will have to pay a higher cost.

https://www.dawn.com/news/1302782/industrialists-in-sindh-flay-reversal-of-gas-price-cut

NEWS COVERAGE PERIOD FROM DECEMBER 5 TH TO DECEMBER 11TH 2016 ISLAMABAD LEADS IN GREEN ENERGY INITIATIVES
The Express Tribune, December 5th, 2016.

Shahzad Anwar

Islamabad: As millions of Pakistanis continue to suffer from hours-long power outages, it is but natural that they would seek out alternatives.

With clean energy technologies such as solar power become cheaper, more efficient and the government introducing net-metering, citizens of Islamabad and Lahore are taking the lead in installing these systems. The Alternative Energy Development Board (AEDB) was established in 2006, and since then, the policies of subsequent governments have consistently promoted investment in renewable energy or green energy.

"We are focusing on three types of projects for alternative energy production in the country – solar, wind and biomass – and our progress is very encouraging. We have installed 1,135 megawatts worth of projects including 590MW generated through wind, 400MW from solar, and 145 from biomass projects," AEDB Chief Executive Officer (CEO) Amjid Ali Awan told The Express Tribune.

He said that by the end of 2018, almost 3,000MW energy will be generated from alternate resources. He said more than 90 per cent of the gains came made after 2012.

He further said that government was taking steps to promote solar energy in the country by exempting import duties on solar products, converting government buildings to solar power, permitting net metering, and introducing feed-in tariffs for independent solar power producers (IPPs) and interest-free loans for farmers to promote solar tube wells.

"There is a large perception among the general public that alternative energy is an expensive solution, whereas flooding of cheaper substandard products in local market besides, instability of the national grid, and uncertified installers are considered major impediments hindering the promotion of green energy in the country," Pakistan Solar Association (PSA) Vice chairman Nauman Khan Yusufzai told The Express Tribune.

"The energy demand gap of Pakistan can be fulfilled by using only 0.3 per cent of Balochistan," Yusufzai said, adding that the National Electric Power Regulatory Authority (Nepra) introduced net metering in September 2015, which boosted solar panel installations in the country, particularly in Islamabad and Lahore.

He said that from 2015-16, solar panels with total capacity of 970MW were imported, while imports for this year imports are expected to have around 2,000MW capacity. He said that it will promote domestic and small-to-medium industrial level solar installations from 1KW up to 1MW. He said that solar energy production potential in the country is 2.9 gigawatts, as the country is host to some of the world's highest solar irradiation areas.

"Nepra has introduced up front tariffs for solar IPPs, which are US Cents ( $\phi$ ) 11.36 to  $\phi$ 11.53 for north regions and  $\phi$ 10.73 to  $\phi$ 10.89 for south region," Yusufzai said, adding that these rates were ceilings, with downward adjustments

for saving based on power produced in excess of capacity factor 17.5 per cent for north and 15.78 per cent for south, besides construction period interest and plant insurance.

He said that no customs duty or sales tax on import of equipment, with exemption of income tax, withholding tax, and turnover tax, besides repatriation of equity along with dividends are freely allowed, and non-Muslims and foreigners are exempted from payment of zakat on dividends.

"There are 35 wind power projects with a cumulative capacity of 1,747.5MW at different stages of development, of which 12 plants with 590.5MW capacity have started commercial operations and are supplying electricity to the national grid," said AEDB Policy Director Ageel Hussain Jafri.

He said that AEDB was going for 28 solar power projects with cumulative capacity of approximately 956.52MW on the grid, while four solar power projects with 400MW capacity are also operational. Jafri said that in order to tap the potential clean electricity generation from sugar mills in Pakistan, the government had announced the framework for biomass power co-generation in February 2013. He said four sugar mills had begun commercial operations, supplying 26.4MW to national grid.

http://tribune.com.pk/story/1253502/power-islamabad-leads-green-energy-initiatives/

#### GOVT INTERVENTION DESTABILISES ENERGY MARKET

The Express Tribune, December 5th, 2016.

Zafar Bhutta

ISLAMABAD: Energy sector experts believe the market should be left alone to perform and determine prices, as continued government intervention to set petrol and gas prices has destabilised the market.

As Pakistan has started importing liquefied natural gas (LNG), fresh competition has emerged in the market. Some experts say petrol consumption is rising and is expected to exceed high-speed diesel (HSD) demand in the next three years.

CNG consumers and textile industry in Punjab are using imported gas compared to consumers of other provinces. Recently, the government announced a cut in locally produced natural gas prices for industries, which has resulted in protests from Punjab industrialists who are using imported gas.

For the past eight months, the government had not increased petrol prices, leading to a reduced difference between the price of petrol and imported gas for CNG consumers. According to experts, due to government's intervention, petrol will continue to rule the market.

About 3.7 million cars were on CNG and of these 2.5 million were running in Punjab. Now, about 0.5 million vehicles in Punjab are using LNG.

The CNG association hopes that two million cars will switch to LNG. All Pakistan CNG Association Chairman Ghiyas Paracha told The Express Tribune that unchanged petrol prices for the last eight months had narrowed the gap between LNG and petrol.

He said the government should not intervene and let the market determine the prices.

The business would become unfeasible if the government continued to intervene and it would be difficult for CNG retail outlets to maintain the difference between prices of petrol and LNG, Paracha added.

Oil industry sources say gasoline import will continue to grow at minimum 15% a year and in the next three years Pakistan will be consuming more gasoline than gas oil.

They say the gas oil market will not grow and import will remain stagnant at 3-3.5 million tons per year.

LNG imports have slightly affected furnace oil consumption in the last 12 months and the same trend is expected to continue for the next two years. It will impact the furnace oil market more when an additional two to three LNG terminals start functioning in the country.

In the short term, gasoline imports will increase by almost a million tons per year due to less LNG imports. In the medium term, if more LNG terminals come online, there may be a slight decrease in gasoline imports.

However, in the long term when LNG imports reach more than 2 billion cubic feet per day, furnace oil imports may come down further but that depends greatly on prices of LNG and furnace oil. Since refineries' production is stagnant, the present trend of imports will continue till LNG is available in abundance.

Currently, LNG imports are made through one terminal (ETPL) having capacity of 400 mmcfd. The gas is distributed to fertiliser, industrial, domestic and energy sectors.

A new terminal having capacity of 600 mmcfd is at an advanced stage of implementation. A new pipeline from Karachi to Lahore having capacity of 1.2 bcfd is also at an advanced stage of execution.

Petroleum consumption stood at 19.1 million tons in 2011-12 and jumped up to 22.9 million tons in 2015-16. Increase in demand for motor gasoline has been attributed to the significant increase in sales of two, three and four wheelers mainly due to very low interest rates.

Other reasons that led to the increase in demand for motor gasoline include a significant decrease in smuggling of motor gasoline from Iran due to strict monitoring at borders, subsidy withdrawal in Iran, lower price compared to neighbouring countries, closure of CNG stations due to gas shortage and high sales of portable generators due to excessive power shortages.

The government has taken the initiative of introducing new grades of motor gasoline from November 2016. Under the plan, RON92 motor gasoline has been introduced in the local market.

HSD consumption has also increased due to a significant decrease in smuggling from Iran. Closure of CNG stations resulted in re-conversion of heavy vehicles to HSD. Increased consumption by commercial/industrial generators was due to excessive power shortage. It was also due to increased yield in the agricultural sector.

Market sources say power plants are operating at maximum output levels to meet demand for which consumption of fuel oil has increased. However, some of the load of fuel oil has been shared by the supply of imported LNG to these plants. Until and unless there is necessary infrastructure for handling and transportation of imported LNG, consumption of fuel oil will remain the same.

http://tribune.com.pk/story/1253296/govt-intervention-destabilises-energy-market/

ECONOMIC TIES: PAKISTANI ENVOY IN TEHRAN HINTS AT ENERGY COOPERATION The Express Tribune, December 6th, 2016.

Islamabad: A delegation from Islamabad is due to visit Iran in a bid to consider more cooperation in electricity and even propose buying more electricity from Iran, said Pakistan's Ambassador to Tehran Asif Durrani.

In a meeting with Iran Power and Water Industries Equipment and Services Export Company's (Sunir) Managing Director Bahman Salehi, Durrani said that the Gwadar region in Pakistan needs more electricity, IRNA reported.

Durrani said that in case of Sunir's desire for more direct investment, there is potential to cede projects in the energy sector to Iranian companies without international tender to the company.

According to Salehi during Iranian President Hassan Rouhani's visit to Pakistan in April he signed an agreement with the Pakistani president to increase electricity export to 3,000 megawatts.

Salehi said that Sunir has the capability to increase electricity export capacities to 5,000 megawatts.

He underlined the cooperation agreement as the key reason behind the execution of the project to transfer electricity into Gwadar. He also highlighted that this deal was signed before the West imposed sanctions against Iran, but it has still not been implemented.

Tehran Chamber Energy Commission Deputy Head Hamid-Reza Salehi also said Sunir has permission from Iran Power Generation and Transmission Company (Tavanir) to transfer 400 megawatts electricity to Pakistan and is ready to build the transmission line.

"Pakistan has also authorised two banks to build connection with Sunir, but there is no indication for implementation of the project," Salehi added.

Already Minister of Water and Power Khawaja Muhammad Asif had told IRNA that Iran is the best choice for Pakistan to import electricity, gas and oil.

During its past 22 years of activity Sunir has commissioned more than 230 projects in different countries and now has 18 projects in 13 countries under implementation.

http://tribune.com.pk/story/1254512/economic-ties-pakistani-envoy-tehran-hints-energy-cooperation/

# FIRST COMMERCIAL-SIZE BIOGAS PLANT STARTS IN PAKISTAN Business Recorder, 6 December, 2016

LAHORE: The United States Consul General Yuriy Fedkiw on Monday inaugurated the Pakistan's first commercial-size biogas plant at the government-owned Bahadurnagar Farm in Okara.

The Minister for Livestock and Dairy Development Department, Punjab Asif Saeed Manais was also present on the occasion. Joining these dignitaries were Lollywood singers and dancers, bringing a bit of glamour to biogas technology.

The United States Agency for International Development (USAID) and Nestle Pakistan, working together through the Dairy and Rural Development Foundation (DRDF), collaborated with the Punjab Livestock and Dairy Development in the construction of this biogas unit.

The plant will yield significant benefits including electricity generation for agricultural production, cooking gas, and manure production. "Promoting energy efficiency and scaling up renewable energy requires an effective and supportive enabling environment. Today's ceremony highlights the importance of alternative energy resources, not just in Pakistan, but globally as well," said Consul General Fedkiw. "Establishing biogas units in rural communities is an efficient and effective way of meeting local energy needs by utilizing renewable resources," he added.

"The Government of Punjab is committed to resolve the energy crisis which has adversely impacted the agriculture and industrial sectors. The vast potential of biogas should be explored further to provide an alternative to 122 million people in Punjab without a reliable source of energy," the Minister said. "With the help of USAID and DRDF, this biogas unit will serve as a model for investors and rural communities to replicate, and reduce reliance on firewood or dung cakes for cooking and heating," he further added.

Speaking on the occasion, DRDF chief executive officer, Ahmed Sajjad said that his organization through the dairy project has been transforming the dairy sector by promoting breed improvement and dairy farming skill development.

"In addition, we are addressing the energy needs of rural communities through our biogas plant initiative. This plant is a continuation of the dairy project's successful pilot intervention of 50 cubic meter biogas unit constructed for a dairy cooperative at district Vehari."

USAID's five-year, \$21 million dairy project has improved the lives of more than 50,000 small dairy farmers in Punjab by improving livestock productivity and increasing dairy farmer incomes by at least 10 percent.

Also joining in the Lollywood fun at the ceremony were Chairman Nestle Pakistan Ltd, Syed Yawar Ali, DCO Okara, Soqrat Aman, DPO Okara, Faisal Rana, Assistant Commissioner Okara, and Senior Development Advisor USAID/Lahore Sajjad Moghal. Other attendees included Chief of Party, Jack Moser, the District Coordination Officer for Okara, and representatives from the academia and dairy industry.—PR

http://epaper.brecorder.com/2016/12/06/13-page/825827-news.html

MEETING ENERGY NEEDS: PETROLEUM MINISTER INAUGURATES MAKORI GAS PROCESSING PLANT The Express Tribune, December 7th, 2016.

Karak: The government is well aware of the requirement of industrial and domestic sectors and is taking every possible measure to meet their gas needs for a stable and progressive economy, said Petroleum and Natural Resources Minister Shahid Khaqan Abbasi on Tuesday.

He was speaking at the inauguration of Makori gas processing plant where lawmakers, local government representatives, senior officials of the Ministry of Petroleum and MOL Pakistan Oil and Gas Company as well as local elders were present.

The plant will produce 305 million cubic feet of natural gas per day (mmcfd), 520 tons of liquefied petroleum gas (LPG) per day and 25,000 barrels per day of condensate/crude that will play a vital role in development of the oil and gas industry.

Hitting out at the previous government, he said no proper planning was done to cope with the rising gas demand, adding the current government accorded the highest priority to energy supplies soon after coming to power to cater to the domestic and industrial sectors.

Abbasi said the government was working on several gas search projects to meet the country's requirement. The federal government has initiated gas-related projects worth Rs800 billion including the setting up of LNG terminals and laying of gas pipelines.

"Pakistan will have energy surplus due to effective policies of the government by 2018," declared Abbasi.

The minister said special focus had been given to energy schemes in the China-Pakistan Economic Corridor and these projects would end load-shedding forever.

He boasted that uninterrupted gas supply was being ensured to industrial and domestic sectors of Khyber-Pakhtunkhwa despite its shortage and urged people to save gas, especially during peak hours. Fifty per cent of electricity used by the domestic and industrial sectors was being produced from different gas-based power units, said the minister, adding the problem of gas shortage would be addressed with the completion of energy projects.

"Energy is the engine of growth and no economy can develop without the promotion of business and industry. The government is seriously working to confront all the challenges facing the country." Abbasi said Karak was very rich in

gas and the Makori gas facility like projects would help generate job opportunities besides eradicating poverty in the area.

The minister congratulated MOL at the inauguration of the Makori gas processing plant and expressed hope that they would continue to invest and build the gas exploration and production sector of the country.

Earlier, the minister was briefed by MOL executives about salient features of the Makori plant.

http://tribune.com.pk/story/1255629/meeting-energy-needs-petroleum-minister-inaugurates-makori-gas-processing-plant/

# PAKISTAN, IRAN LOOK TO REVISIT GAS PIPELINE AGREEMENT Dawn, December 9th, 2016

Khaleeq Kiani

ISLAMABAD: Pakistan has shared with Iran amendments to gas sale and purchase agreement (GSPA) to extend implementation schedule and revise pricing under the \$1.35-billion gas pipeline project.

A senior government official on Thursday told Dawn that the Economic Coordination Committee (ECC) of the Cabinet hasn't yet allowed the Ministry of Petroleum and Natural Resources to start formal negotiations with Iran over fresh pricing.

He said the ministry requested the ECC in July this year to revive a committee to start formal talks and "we are still waiting for the approval".

The petroleum ministry told parliament a few days ago that for the Iran-Pakistan (IP) project to be implemented in the extended period, "amendment to the GSPA was required". It said a draft amendment had been shared with Tehran that agreed to negotiate it along with some other changes.

The official explained that the two key amendments were required to be made in the GSPA that had been "under suspension" for a few years. These proposed changes related to extension in timelines under the original agreement Pakistan should have completed the pipeline on its side by Dec 31, 2014 and gas flows should have started with effect from Jan 1, 2015.

Secondly, the pricing formula has to be revised based on latest market situation, prevailing prices from competitive sources and international best practices. Both Tehran and Islamabad wanted extension in dates and prices that would trigger a series of actions in line with best international practices.

The talks on the project were revived after a few years of suspension in March this year during the Iranian president visit to Pakistan. The two sides agreed to GSPA amendment for extension of time to finalise workable implementation schedule, price negotiation as per review clause in GSPA and Iranian proposal regarding amendments to the GSPA.

Since the project could not be completed due to unilateral withdrawal from government-to-government cooperation agreement by Iran, the Pakistani side proposed to extend the time for completion of the project for which proposed amendments to the GSPA were shared with Iran. The Iranian side also verbally suggested making some amendments to the GSPA. It, however, did not share any draft despite repeated requests.

The federal cabinet approved signing of the Iran-Pakistan GSPA on June 3, 2009. The petroleum ministry also sought permission to constitute a price negotiation committee led by the secretary petroleum and comprising secretaries or their nominees of the ministries of finance, law, foreign affairs and managing directors of the Sui Southern Gas Company, Sui Northern Gas Pipelines Ltd and Interstate Gas Company.

The sources said Pakistan discussed the issue of "snap back" of sanctions besides setting realistic time frame for achieving financial closure and construction timelines. Iran assured alternative preparations to the sanctions issue through contractual frameworks.

Iran has told Pakistan that the pipeline segment on the Iranian side will take about one-and-a-half years to complete. Pakistan has stressed the need for setting the right timelines targeting early completion yet adequate provisions and flexibility for long-term measures and all eventualities towards achieving an amiable financial closure and construction.

On the matter of price review, Pakistan has referred to new and transformed gas market dynamics, including the availability of liquefied natural gas as a cheaper alternative fuel to the Iranian gas. Iran has officially conveyed that there was no difficulty in reviewing the price mechanism under the price review trigger.

To satisfy Iran over payments and banking arrangements, Pakistan has already taken a few steps in lifting restrictions on banking transactions with Iran, including a notification by the State Bank of Pakistan a few months ago. Iran has already indicated revisiting the price formula indexation from Japan Crude Cocktail to Brent and a discount for peak off-takes in summer.

Pakistan is currently building the 700-kilometre Gwadar-Nawabshah gas pipeline through Chinese assistance.

http://www.dawn.com/news/1301271

NISHAT ENERGY FINDS CHINESE PARTNER TO SET UP POWER PLANT ON IMPORTED COAL The Express Tribune, December 11th, 2016.

Salman Siddiqui

KARACHI: Nishat Energy Limited (NEL) has found a foreign partner to go ahead with its plan of setting up a 660-megawatt power plant on "imported coal" by December 2020.

"TBEA Xinjiang Sun Oasis Company Limited (a Chinese firm) has shown interest in participating in the project as a co-sponsor to provide technical and project financing proficiencies," NEL Chief Financial Officer Norez Abdullah said in an application seeking power generation licence from the regulator.

A couple of months ago, the government placed a ban on firms with 100% local ownership to set up power plants to be operated on imported coal. The ban was not applicable on local firms that had arranged financing for their projects till October 14, 2016.

The government gave an option to those local firms that introduced their projects on imported coal, but did not meet financial close by October, to either arrange foreign financing or convert their projects on local (Thar) coal.

Lucky Cement Limited's 660-megawatt project was among those that opted to convert on local coal.

NEL is setting up the 660-megawatt coal fired power plant at Rahim Yar Khan, Punjab, at a cost of \$956 million. The cost is a mix of 25% equity (\$239 million) and 75% debt (\$717 million), documents said.

"The sheer size of debt financing (greater than \$600 million) required to fund the project was not possible to manage from local banking channels. Therefore, there was a need for induction of a capable Chinese partner to drive the financing process forward. It is strongly believed that the current sponsor's experience and balance sheet strength will make the new consortium more formidable and capable," Abdullah said.

The application documents said TBEA would hold 70% stakes in the power project. Nishat Power Limited and Nishat Mills Limited would hold remaining 25% and 5% stakes, respectively.

Earlier, Nishat Power Limited, Lalpir Power Limited, Pakgen Power Limited and Nishat Mills Limited; each of them had 25% stakes in the project.

"The change of consortium was necessitated after engaging with multiple large banks that emphasised the need for a Chinese sponsor in order to prioritise and fast track the financial close process with Chinese financial institutes," the application said.

The project is intended to be financed by Chinese banks under the China-Pakistan Economic Corridor (CPEC) government-to-government agreed framework as provided in the CPEC Agreement.

"The sponsor intends to procure 100% of project debt (\$717 million) from Chinese banks with support from a reputable Chinese equity partner as an Overseas Investment Loan or an ECA tied financing package or any other financing program which the sponsor deem fit," it said.

After having secured the approval from Punjab Power Development Board on the induction of the Chinese equity partner, significant progress has been made in completing the feasibility study, securing Letter of Intent from Chinese Development Bank and finalisation of a detailed Joint Venture Agreement between Nishat Group companies and TBEA, it said.

TBEA, as per the consortium agreement, has taken a lead role in procuring Chinese financing, which will also ease the burden on Nishat from seeking project financing from local banking channel with visible foreign exchange liquidity constraints imposed by the State Bank of Pakistan, stated the application.

"The sponsor has undertaken to provide foreign non-existent man power and expertise in coal plant operation, which is lacked by Nishat for large coal-fired operations," it said.

The main sponsor has entered into agreement with ENERGEN Infra (Mauritius) Limited for the latter to act as an advisor in negotiating the EPC contract with potential EPC contractor from China.

A preliminary EPC proposal was also gathered by Nishat from SEPCO to set up 600-megawatt project to assess the interests of EPC players and budgeted EPC costs, timelines and financing support from the Chinese banks before entering into a consortium agreement with TBEA.

http://tribune.com.pk/story/1259777/collaboration-nishat-energy-finds-chinese-partner-set-power-plant-imported-coal/