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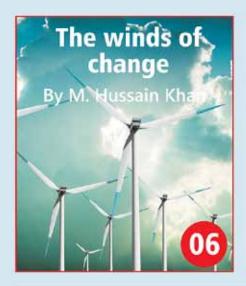
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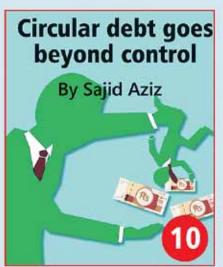
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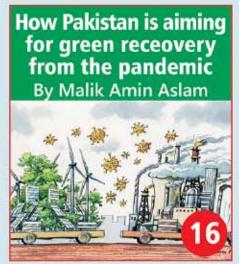
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CONTENTS









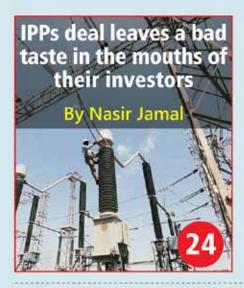
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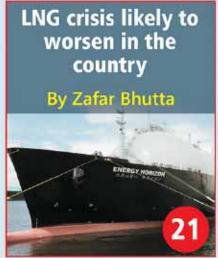
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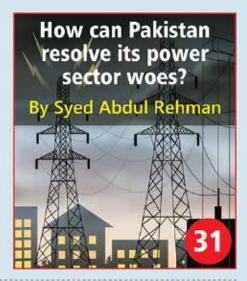
Nadeem Babar Special Assistant to PM on petroleum Govt. of Pakistan We are one of few companies, which have installed microgrids in Pakistan

Waqas Ali Mughal COO, Renewable Power Ltd.









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From the editor's desk...

PTI govt creates records of failures

The PTI government that has given new year gift to people twice by simultaneously increasing the prices of petroleum products and liquefied petroleum gas (LPG) besides allowing K-Electric, a hefty tariff increase of around Rs4.8 per unit on account of quarterly tariff adjustment, has completely exposed that it will not do any reform or even a micro measure that will benefit the country or nation.

The present government never hesitated to over-burden the nation with frequent price increases of essential items and other commodities.

How a government on earth, could be so brutal as it has not withdrawn all the so-called subsidies on energy sector only but it further imposed taxes on POL, etc. As per the notification issued by the government the entire increase in the petroleum product could have been passed on to consumers.

As the increase in petrol price has already been gone up to Rs113.99 per litre to Rs116.60 per litre. Now the government has contemplating another massive increase in the POL prices to further squeeze the poor consumers. In a summary being moved to the Petroleum Division, Oil and Gas Regulatory Authority (Ogra) had proposed an increase of Rs14 per litre in the price of petrol.

From the month of January, the government is already charging 17 per cent general sales tax (GST) on all petroleum products. Apart from this, the government is also collecting so-called petroleum development levy (PL) on the products which is taken from the consumers.

Meanwhile, the government has increased the price of local liquefied petroleum gas (LPG) by Rs277.79 to Rs1,791.48 per 11.8/kg cylinder for January 2020.Ogra notified the new prices, under which LPG price has been increased by 23.54/kg to Rs151.82/kg since December 2019, Ogra had notified LPG price at Rs1,513.69/cylinder or Rs128.27/kg.

The producers' price of LPG (propane 40 per cent and butane 60 per cent) has been determined at Rs90,092.65/ton compared with Rs69,971.31/ton in December 2019. This price included excise duty of Rs85/ton, while excluding the petroleum levy.

Meanwhile, Nepra has allowed K-Electric a hefty tariff increase of around Rs4.8 per unit under the guise of of quarterly tariff adjustment and the company has been allowed to extort Rs106 billion on fake justification.

The revised tariff has now climbed to Rs17.69 per kilowatt-hour (kWh) and its impact would be felt in electricity bills for coming months. "The electricity price has been increased from Rs12.81 to Rs17.69 per unit,

In a summary moved to the Petroleum Division, Oil and Gas Regulatory Authority (Ogra) had proposed an increase of Rs2.61 per litre in the price of petrol and Rs2.25 per litre, high speed diesel (HSD), kerosene by Rs3.10 or 3.2 per cent and Light Diesel Oil (LDO) by Rs2.08.

The present government that is going to establish a world record of failures has already mounted the external debts to the record level while it is curtailing all the educational, health and developmental budget allocations, the government is yet to give any clue that where all the foreign financing, local borrowing, taxes and levies is going to be spent or being siphoned off.

The petrol inquiry report had estimated Rs250 billion worth of oil smuggling from Iran and numerous other controversial operations. So this government has no shortage of scams; wheat, life-saving drugs, sugar, LNG and now the oil scam. All multi-billion dollars scams reflect incompetence, poor decision making and looting. If the Ogra's summary to increase Rs14 per litre increase in POL prices, is approved by the government this would be the 6th increase in petrol prices in 9 weeks. It is shocking that the PTI government had almost doubled its reliance on petroleum levy as a source

of revenue - from Rs260 billion of last year to Rs450 billion budgeted for this fiscal year. All burden is now being passed on to masses. Pakistan's public debt was piling up at an alarming rate of Rs13.2 billion per day under the PTI government. "A whopping Rs11.6 trillion has been added since 2018. The State Bank of Pakistan (SBP) data puts the public debt figure at Rs35.8 trillion. Who is going to pay off this heap of debts?





Managing Editor M. Naeem Qureshi info@energyupdate.com.pk energyupdate@gmail.com

> Editor Sajid Aziz saziz75@gmail.com

Editorial Incharge Mustafa Tahir mustafa mt92@hotmail.com

Director Admin & Accounts Ruqiya Naeem ruqiya.nfeh@gmail.com

Chief Marketing Officer Engr. Nadeem Ashraf marketing@energyupdate.com.pk nadeem.event@gmail.com

> Marketing Consultant Khalid Iqbal khalid.nfeh@gmail.com

G.M. Corporate Communication (Islamabad Office) Halima Khan

mccm.energyupdate@gmail.com

Art Director Rizwan Rathore rathore.rizwan@gmail.com

Advisors
Zafar Sobani
Kalim A. Siddiqui
Sohail Butt
Anwar Shahid Khan
Raziuddin Razi

Circulation & Subscription Zahid Ali Shakeel Qureshi

> Photographers Ahmed Tareen Abdul Haleem

Overseas Correspondents Arif Afzal - USA Kazim Wasti - Canada

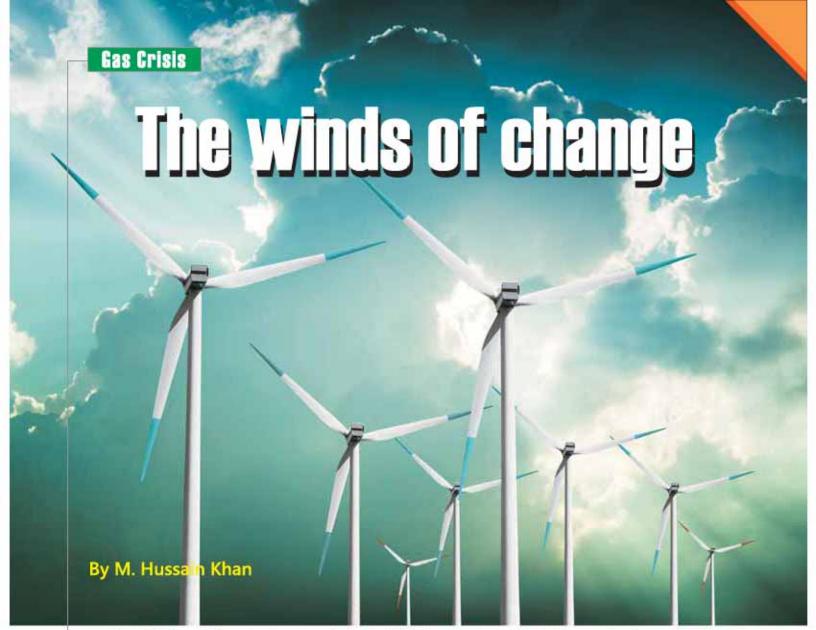
Legal Advisors

M. Nadeem Sheikh Advocate

Monthly Energy Update
#309, Al-Sehat Centre, Hotel Regent Plaza,
Shahrah-e-Faisal, Karachi-Pakistan.
Tel: 021-3565 3676, 3521 3853, 3567 4570
Email: info@energyupdate.com.pk
Web: www.energyupdate.com.pk

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REGISTRATION # DCO/DDO/LAW/CDGK-41/2006 Published by M. Naeem Qureshi for Energy Update & Printed at Print Vision, Karachi Cell: 0333-2244586



BOUT seven kilometres from the Bholari turning point on left side of the Karachi-Hyderabad Motorway (M9), an uneven path leads to a barren land the site of many windmill towers. From M9 I could barely make out the huge windmill towers, or wind turbine towers.

As I reached the site I found some Chinese workers working. Each windmill tower having three long blades was approximately 100 metres high. The blades on the towers were rotating very slowly due to low wind pressure.

This is one of the 10 wind energy projects undertaken by independent power producers (IPPs) in Sindh's Jamshoro district. These projects are currently passing through various phases of execution. Sindh Energy Minister Imtiaz Sheikh, however, says they have been facing delays.

Unlike developed parts of the world where one can find productive

agricultural activity going on underneath the wind turbine towers, this is not the case in this part of the world. Still, with two rows of huge towers dotting the hilly landscape on both sides of a path, the project offers an eye-catching view.

"But this company has used land which has not been allotted to it. The allotted land is somewhere else in the same area," a low-ranking revenue official told me on the site of the 50MW wind energy project.

"Notices have been served on the IPP," an officer confided to me.

Sindh is considered a haven for wind energy, with perfect wind conditions, primarily in Thatta. "Jamshoro is going to be another wind corridor," said an energy ministry official and complained "but we find the federal government to be uncooperative".

Alternative Energy Development Board (AEDB) aims to ensure that five per cent of the total electricity produced in the country is generated through renewable energy technologies by 2030. Being the sole federal agency set up for the purpose, AEDB's task is to facilitate, promote and encourage development of renewable energy in Pakistan.

Two dozen wind projects in Sindh are already contributing 1,235MW of clean energy to the national grid. Another 10 have been approved and are meant to add 610MW to the grid. However, five more wind projects with a total capacity of 275MW are awaiting approval as federal government insists for competitive bidding in line with the Renewal Energy Policy of 2019-20.

"I wonder why there's an insistence on bidding when we have already been granted a generation licence and allowed a tariff of 3.22 cents per kwh by the National Electric Power Regulatory Authority (Nepra)," grumbled Mustafa Abdullah, whose IPP was supposed to produce 25MW at Jhimpir.

GB CM, WAPDA Chairman discuss Rs78.5 billion CBMs for Diamer Basha Dam

Gilgit Baltistan (GB) Chief Minister Muhammad Khalid Khursheed today called on the Pakistan Water and Power Development Authority (WAPDA) Chairman Lt Gen Muzammil Hussain (Retd). The matters relating to hydro development in the region, particularly Diamer Basha Dam Project and the Confidence Building Measures (CBMs) undertaken by WAPDA in the Project area for socioeconomic development of the locals were discussed in detail during the meeting.

Appreciating the continued support of Gilgit Baltistan for Diamer Basha Dam, WAPDA Chairman said that the Project is destined to change the fortune of the country, that of Gilgit Baltistan in particular. Highlighting various facets of CBMs being implemented by WAPDA with a hefty amount of Rs. 78.5 billion in the Project area, he said that development schemes under the CBMs would not only make available modern facilities of health, education and infrastructure to the local populace but also help alleviate poverty by creating employment opportunities for the locals. The Chairman reiterated that the people hailing from the Project area and Gilgit Baltistan would be given priority for jobs as per the criterion laid down for the purpose.

GB Chief Minister appreciated the measures being taken by WAPDA for resettlement of the affectees of Diamer Basha Dam Project, development of the Project area and well being of the people of the region. Expressing satisfaction over implementation of development schemes under the CBMs, he hoped that the schemes would transform the development landscape of the area and bring a positive change in the life of the people. The Chief Minister assured WAPDA Chairman of the support of GB Government for completion of Diamer Basha Dam

It is worth mentioning that Diamer Basha Dam is a super mega project, being constructed on river Indus, 40 kilometres downstream of Chilas town. The Project is of vital importance for water, food and energy security of Pakistan. It has a gross water storage capacity of 8.1 million acre feet (MAF) to mitigate floods and irrigate about 1.2 million acres of land. The Project has an installed capacity of 4500 megawatt (MW) with annual energy generation of 18.1 billion units of low-cost and environment friendly electricity\

"I have been given a lease of 200 acres of land by [Sindh] government, have erected a tower worth Rs50 million to measure wind (pressure), and honoured procedural requirements; yet I end up suffering," he said, expressing apprehension that \$10 million already invested by investors would be lost if the projects were not approved soon.

"It is interesting that we are contributing (only) 1,200MW of wind energy while our neighbouring country India is generating 40,000MW of wind power and another 20,000MW through solar," he added.

The Economic Survey of Pakistan for 2019-20 says that the country has successfully overcome an energy crisis through enhancement in generation and transmission capacity. Turning to the issue of energy-mix, the survey says Pakistan's reliance on imported and local coal, RLNG and natural gas has been decreasing over the last few years.

The country's dependence on natural gas, as seen in the energy mix, is on the decline and reduction of its share in the mix is attributable to the declining gas reserves, it says.

BBC reported in mid-2020 that Britain went without burning coal for a couple of months while coal's share in the energy mix was 40pc about a decade ago.

The UK is not planning to shut down coal-fired plants after having optimum use of coal as fuel, while Pakistan is having a 1pc use of coal fuel that can go up to 2pc in the total energy mix. Therefore, we are still better off in terms of coal. Both India and China are using 60pc coal in their energy mix," said Prof Dr Aslam Ugaili, vice chancellor of the Mehran University of Engineering and Technology.

He believes that promoting alternative and renewable energy (ARE) projects is key to reducing dependence on coal which is undoubtedly an unclean fuel. "We discuss production cost as environmental cost remains secondary," he said.

"Around 106 ARE projects in different provinces are pending government's nod. The federal government intends to go for the cheapest offer for IPPs. As for Sindh's five IPPs, Nepra did its job as regulator," said a Nepra officer.

"Balochistan's wind corridor is perfect but due to infrastructural issues the projects have not been executed there," said the officer over the phone from Islamabad.

Sindh established in November 2019 the Sindh Transmission and Despatch Company (STDC), much like the federal government-run National Transmission and Despatch Company (NTDC), under Nepra's permission for granting transmission licences. STDC aims to act as a provincial grid company in what seems to be an achievement of the provincial energy department.

But Sindh's Energy Minister Sheikh deplored what he called the federal government's indifference towards the province's wind power sector. "Baboos sitting in Islamabad take unilateral decisions. Even the PM is misguided. We have no representation in NTDC which blocks everything on the plea that electricity is a federal subject," he said.

His main contention is that the wind corridor is Sindh's "baby". He wants the federal government to leave matters relating to it to Sindh. "We are the first province to have created a body like STDC and will manage the wind corridor on our own, but the federal government is discouraging us; thus 15 wind power projects have been inordinately delayed. What should be decided in the Council of Common Interests is discussed by the cabinet committee on energy," he said.

He argued that federal government's plans for bidding under the new policy would jeopardise everything as the IPPs would move the courts.

Sindh government faces a financial crunch in the backdrop of below-par transfer of revenues from the divisible pool (NFC Award), with Sindh chief minister and his party's chairman questioning inadequate transfers every now and then. Without the required fiscal transfers, the laying of infrastructure under the STDC would not be viable.

The national grid is too fragile capacity-wise. A technical fault in the 500kV grid station or in any high transmission line plunges Karachi and the rest of Sindh into darkness. Sindh has had to face such problems more than any other province. Is anyone listening?■

Government getting into big trap of circular debt

Umar Ayub comes under fire for making false claim

he mounting circular debt has become the biggest worry for the energy sector's experts and economists that the present government has without realizing the consequences has accumulated the mostrous debt to over 3 trillion well before completing its three years in the power.

The government has, itself confirmed that power sector's circular debt went past Rs2306 trillion as of Nov 30, 2020, up by Rs156 billion over the first five months of the current fiscal year, at a rate of Rs31.2 billion per month. As the circular debt has reached to the most worrying level, the water and power minister, Umar Ayub has come under fire from various sectors who claimed that the circular debt would be fully paid off by the end of 2020. Many experts from power sector firmly believed that this man knows nothing about energy sector and God knows better what influence he got due to which he gets energy in subsequent regimes.

A number of ministers and MNAs have already realised that a bulk share of the increase in circular debt was poor governance in the public sector itself. It was noted that Rs156 billion addition in circular debt included non-payment of budgeted and unbudgeted subsidy, delayed payments on account of interest to independent power producers (IPPs), other mark-ups, pending price adjustment on account of quarterly and monthly adjustments and non-payments by K-Electric.

In a recent meeting of the cabinet committee was informed that on the basis of existing tariff notifications, a total of Rs317 billion subsidy was required, but the Ministry of Finance had budgeted only Rs144 billion, leaving an unbudgeted subsidy gap of Rs177 billion.

The Power Division said that a circular debt management plan was being implemented to minimise its build-up. It said the total circular debt increased by Rs538 billion during the fiscal year 2019-20 at a rate of about Rs45 billion

It is mentioned by the power sector experts that despite many reminders and advises, the present government has done nothing to make a contingency plan to minimize the monstrous debt but all requests gone unheard.

Going forward, he made false claim that the government would bring the circular debt down from Rs450 billion to zero by December 2020, adding that power companies had been able to recover Rs81billion from private defaulters over the past eight months of the current fiscal year and registered 30,000 FIRs for power theft with 4,000 arrests already made. Besides, he said, *stern departmental action" was being taken against officials of power companies for colluding on power losses. The minister said these efforts were required to ensure that electricity tariff was not increased for consumers using 300 units per month. "We will set aside Rs230bn subsidy in upcoming budget to secure these con-



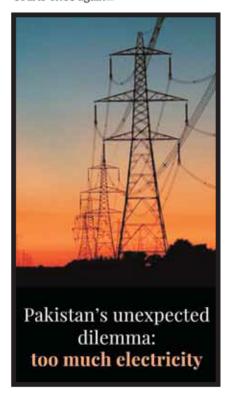
sumers having 300 units or less per month consumption."

He said the National Electric Power Regulatory Authority (Nepra) had recommended an increase of Rs3.84 per unit in tariff. This segment accounted for 75 per cent of total consumers, he said, adding that 95% small commercial consumers were also exempted from tariff increase.

.He said one of the main reasons behind high circular debt was the adverse energy mix as the power sector was dependent on 60pc imported fuels. "We have embarked on a plan to reverse this by 2030," he said, adding that the current share of renewable energy in total mix was just 4pc that would be increased to 20pc by 2025 and to 30pc by 2030.

The minister was also advised by the ministry of IT to start working on introducing new two-way meters that would also be installed at transformers to address the issue of power theft. "The supply of electricity to any consumer involved in power theft will be suspended by pushing one button, but under this minister no mission has been accomplished so far.

It is believed that the present government with this minister and sans no strategy to get rid of circular debt, is going to get into a big trap by the IPPs that drag this government to the international courts once again■



Engro Elengy Terminal sets new industry record



The first Liquified Natural Gas (LNG) terminal of Pakistan operated by Engro Elengy Terminal (EETL), a joint venture between Engro Corporation and Royal Vopak of the Netherlands, has set new industry records during its five years of safe and reliable operations to ensure energy security for Pakistan.

Since the start of its operations in March 2015, EETL has completed the transfer of over 20 million metric tons of LNG by handling over 322 cargoes. This is the highest volume handled by any floating LNG terminal in this time frame. The Terminal has also achieved another milestone through the sendout of more than 1000 Billion Cubic Feet (BCF) of natural gas, equivalent to energy required to generate around 175 million MW. EETL utilizes the Floating Storage and Regasification Unit (FSRU) Exquisite, which is co-owned by Excelerate Energy LP (Excelerate)

Built in a world record time of 332 days, EETL is recognized as one of the fastest built and most utilized regasification terminals in the world. The terminal has a storage capacity of 150,900 cubic meters and peak regasification capacity of up to 690 million cubic feet per day (mmcfd). It currently fulfills as much as 15 percent of Pakistan's domestic daily natural gas requirements. As a result, more than US\$3 billion of savings have been generated for the national exchequer through import substitution of expensive furnace oil. Sharing his thoughts on the achievement of new milestones, Ghias Khan, President and CEO of Engro Corporation, said, "Engro pioneered investment in Pakistan's LNG terminal sector to help solve one of our most pressing issues of energy shortages. Today, we have put Pakistan on the global map of LNG market and paved the way to attract more investment from new entrants in this sector. EETL is committed to continue to play a pivotal role to meet Pakistan's growing energy needs by developing the first open access onshore LNG terminal at Port Qasim to ensure long-term energy security for Pakistan.

Yusuf Siddiqui, CEO of Engro Vopak & Elengy Terminal Ltd, added, "In partnership with Royal Vopak, we remain committed to deliver on our promise of operational excellence and expansion plans to fuel the country's economic growth and prosperity.

Following Economic Coordination Committee's approval, EETL and its partner Excelerate have secured a larger and more technologically-advanced FSRU Sequoia, which is poised to arrive at Port Qasim in 2021 after all regulatory and SSGC approvals. This will increase the terminal's capacity by more than 150 mmcfd and storage capacity by more than 25,000 cubic meters to help reduce the gas supply shortfall. As a result, Pakistan can potentially save more than \$45,000 per day in state-run LNG supply chain costs, with the private sector assuming risks and making investments under a Third-Party Access Framework (TPA). Once the sector opens under the TPA regime, an Onshore LNG asset is the next step towards evolution of the Pakistani gas market. In this regard, Engro and Royal Vopak have already announced a project targeting final investment decisions in the next 12 - 14 months. The investment friendly policies of the PTI government will enable investments of up to US\$600 million by Engro and its joint venture partner Royal Vopak in Engro Elengy Terminal and Engro Vopak Terminal.

Circular debt goes beyond control

By Khaleeq Kiani

he monster of circular debt getting beyond control from the present government. Bad governance is the overwhelming source of the circular debt build-up that is officially projected to cross the Rs2.8 trillion mark by June 30. This is almost half of the country's about Rs5.5tr total tax revenue this year.

This means an addition of Rs500 billion during the current fiscal year at an average rate of almost Rs42bn per month, according to a report submitted by the Power Division to the Cabinet Committee on Energy (CCOE) last week.

The report is based on actual verified data of the circular debt as of Nov 30, 2020 and projected over the remaining period of 2020-21. It contains the breakdown of the circular debt in terms of operational/non-operational, comparison of last and current year's build-up, and paid/unpaid and budget-ed/unbudgeted subsidy payments.

Strikingly, the combination of lopsided decision-making, inaccurate projections, poor management and inefficient operations, non-payment by the

poor management and inefficient operations, non-payment by the public sector and a handicapped regulatory mechanism

emerge as the

root cause

of the

debt

build-up. Simply put, the government is responsible for the mess. The last fiscal year ended with a circular debt of Rs2.15tr, with an annual increase of Rs538bn or a monthly increase of Rs44.8bn. As of Nov 30, 2020, the total circular debt increased to Rs2.3tr, showing an increase of Rs156bn in the first five months or Rs31.2bn per month. During the same five months last fiscal year, the circular debt had increased by Rs179bn at the rate of Rs35.8bn per month.

Of the stock of Rs2.3tr on Nov 30, 2020, Rs1.2tr is payable to independent power producers (IPPs), Rs996bn parked in Power Holding Private Ltd (PHPL) of the Power Division and Rs97bn payable by generation companies to fuel suppliers. The payables to IPPs are estimated to surge beyond Rs1.7tr by the end of the current fiscal year while two other components will remain almost unchanged, making the total circular debt equal to Rs2.8tr.

This means the Power Division projects an increase of Rs500bn in the circular debt from December to June (seven months) at the rate of Rs71.4bn per month. The overall increase in the full fiscal year will be around Rs655bn at an average of almost Rs55bn per month. This addition will be despite the recovery of Rs225bn on account of prior-year adjustments.

Otherwise, the debt addition would have been about Rs880bn.

Based on a template provided by the CCOE, the Power Division has projected that the circular debt will increase by Rs152bn in the current fiscal year due to distribution losses (Rs35bn) and underrecoveries (Rs117bn). A total of Rs317bn subsidy was required on the basis of existing tariffs. But the Ministry of Finance had budgeted only Rs144bn, leaving an unbudgeted subsidy gap of Rs177bn. The interest charges on delayed payments to IPPs and PHPL mark-up are projected to add Rs143bn, including Rs80bn additional mark-up to IPPs in 2020-21. On top of that, the addition of Rs97bn will be on account of nonpayments by K-

Electric and Rs313bn

due to the pending generation cost on account of quarterly tariff adjustments and fuel cost adjustments.

The report also explains contributory factors to the existing Rs2.3tr circular debt. These include Rs212bn of nonpayment by K-Electric (about 11pc), Rs144bn of outstanding amounts of Azad Jammu and Kashmir (7pc), Rs306bn of non-payment by Quetta Electric Supply Company's agriculture tube-wells (15pc), Rs270bn limitations and delays in regulatory approvals (14pc), Rs66bn payment of interest on the power-sector debt held by PHPL (3.3pc), Rs260bn nonpayment of subsidies (14pc) and Rs752bn of operational inefficiencies (37.4pc).

The report noted that the circular debt should have gone up by Rs848bn during the last fiscal year, but it was contained through Rs309bn worth of tariff increases on account of prior-year adjustments, resulting in the debt buildup of Rs538bn. Similar prior-year adjustments in tariff already being charged to consumers will generate Rs225bn in additional revenue and help restrict the debt build-up to about Rs500bn during the current fiscal year.

Some of the biggest challenges to address the build-up of the circular debt remain the controversies around the settlement of outstanding dues with K-Electric along with the untouchable China-Pakistan Economic Corridor (CPEC)related power projects, which could have been absorbed by a growing economy but have become a headache owing to economic depression.

The outcome of renegotiated agreements with IPPs, reduction in the rate of return on equity of government-owned power plants and closure of inefficient Gencos are expected to provide some respite going forward, but the actual impact will be felt in the next fiscal year. Here again, the greater part of breather will accrue only on account of the parking of some losses in other accounts like replacement of ROE on hydropower plants from Wapda to the federal budget.

The outstanding amounts of Azad Jammu and Kashmir (AJK) are being addressed through the removal of the AJK tariff differential for which a summary has already been moved. But this too will require that the financial gap will have to be picked up in the budget. A similar arrangement will have to be put in place in the matter of Quetta Electric. To what extent the provincial government can foot the bill is yet to be seen and hence a large part will fall back on the federal government.

The easiest way out to a limited scale is the tariff increase for consumers that the government already decided to an extent of Rs2 per unit of about Rs200bn per annum. A similar low-hanging fruit appearing on the government radar is the tariff rebasing by the regulator to reduce the impact of delay in tariff determinations and their delayed notifications. An amendment to the Nepra Act to allow the financing of PHPL debt through consumer tariff is already pending approval in parliament.

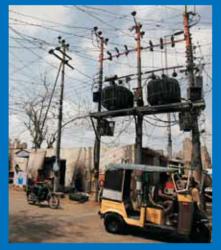
But despite all these additional burdens on consumers, the authorities concerned still appear resisting technological interventions to reduce system losses and improve recoveries. The Ministry of Information Technology has put on the record that a meter-less smart metering system successfully tested and proved on the ground was being resisted by the power sector authorities since November 2018.

KE demands for additional Rs40 billion

K-Electric has sought an increase in electricity rates on account of fuel cost adjustments for seven months and quarterly adjustments for nine months involving an additional revenue generation of about Rs40 billion.

According to tariff petitions filed before the National Electric Power Regulatory Authority (Nepra), the Karachibased private power utility has demanded fuel cost adjustments (FCAs) for seven months from June to December 2020. Of these, consumers have to pay higher adjustments for four months and get relief on account of lower fuel cost in three months.

This is on the basis of KE's claims that its FCA for four months cost an additional about of Rs6.116bn (Rs3.24 per unit) and saved about Rs2.2bn (at the rate of Rs1.53 per unit) in three months due to lower cost than it had actually charged to consumers. The net impact all the seven months works out to be about Rs4bn or an additional charge of Rs1.71 per unit. Separately, the K-Electric has also sought another revenue requirement of about Rs35-38bn for three quarters starting April 2020 to



December 2020. These adjustments are on account of variation in power purchase price (other than fuel), impact of transmission and distribution losses on fuel charges variation under the multiyear tariff (MYT) mechanism.

For the first quarter of April-June 2020, the KE has worked out a reduction of Rs3.9 per unit while it has sought an increase of Rs1.93 per unit for July-September 2020 and Rs1.874 per unit

By Khaleeg Kiani

for Oct-Dec 2020. These adjustments have been sought on the basis of a previous petition on which the regulator in September conducted public hearings for a period up to March 2020 but a final determination is still pending.

The KE has reminded the power regulator that its previous adjustments of over Rs119bn were still outstanding, causing cash flow problems to power utility which needed to be settled at the earliest.

Nepra will be conducting a public hearing on Feb 23 to determine if the fuel price variations and quarterly price adjustments were justified. The regulator would also examine if the KE had followed economic merit order while giving despatch to its power plants as well as power purchases from external sources including the national grid. Earlier, the KE had sought Rs1.54 per unit increase under mid-term tariff review. The regulator had challenged KE over its unmet investment targets and has yet to come up with a determination.■

150 mmcfd RLNG transmission: PGPL seeks pipeline capacity allocation

n a new development, one of the leading private players in the LNG sector, the PGPL (Pakistan Gas Port Limited), has sought allocation of pipeline capacity for transmission of 150mmcfd of RLNG on a three-month rolling basis.

of Inter-User Agreement (IUA) are approved by the government. In the letter, PGPC LNG Terminal clearly says that it has an additional capacity of 150mmcfd, after meeting its contractual obligation to Pakistan LNG Terminals Limited (PLTL), now Pakistan LNG



The PGPL has written a letter to OGRA, seeking the pipeline capacity allocation keeping in view the latest decision taken by the Cabinet Committee on Energy (CCOE) on February 4, 2021. The CCOE decided that in order to provide fair and level playing field to the new LNG terminal, the existing available capacity in the pipeline will be allocated to any applicant, meeting the requisite criteria for three-month rolling basis till such time the new terminals achieve commercial operations date (CoD).

As per the letter to OGRA, the Pakistan GasPort Limited (PGPL), the owner of PGP Consortium Limited (PGPC), has placed the request seeking for the pipeline allocation capacity of 150mmcfd on a three-month rolling and on a take-or-pay basis.

The letter also mentions that the agreement will become operative on 30th day after the Third Party Access (TPA) Rules are finalized and the draft

Limited (PLL).

Interestingly, the government has not so far apprised the LNG players in the private sector about the prerequisites needed to be met by any applicant. However, the PGPCL management says that since it has FSRU (floating storage regasification unit) and LNG terminal, having additional capacity of 150mmcfd and that are the prerequisites it has to meet. That's why it has submitted an application to OGRA for allocation of pipeline capacity.

And more importantly, the government has so far not succeeded in finalizing the Third Party Access (TPA) rules as in the absence of TPA rules it is quite hard for the private sector to play its role in supplying LNG to private consumers at competitive prices.

As far as the Inter-User Agreement (IUA) is concerned, its draft has not

By Khalid Mustafa

been finalized too, showing how lethargic the government or state owned companies are in their decisions. In the absence of TPA rules and Inter User Agreement, the LNG imports by the private sector are simply not possible.

In November 2020, Pakistan LNG Terminal Limited (PLTL) and Pakistan LNG Limited (PLL) had refused to finalize the Inter-User Agreement (IUA), making the private LNG imports impossible knowing the fact that the private sector alone can solve the gas crisis and solve it fast by utilizing the unused capacity of the government and 150mmcfd additional capacity of PGPCL terminal. Since then, there is no positive progress in finalising the IUA.

More importantly, the official said the-then PLTL, which has now merged with Pakistan LNG Limited (PLL), had rather sought a mammoth amount of \$18 million per annum as compensation from the Pakistan Gas Port Company (PGPC) simply for the right to allow the PGPC terminal to bring in private sector LNG imports.

The PGPCL has contracted with PLTL for only 600mmcfd and beyond that is the private excess capacity, which the PGPC is committed to utilize to bring cheaper LNG cargoes than at the prevailing notified OGRA price. However, the red tapism in state-owned companies is hampering the way for the PGP Terminal to become a multi-user terminal, which is a practice globally at LNG import terminals where borrowing and lending of molecules is as per standard international agreements. However, the PLL says it has already floated the advertisement for use of PLL's idle terminal capacity by the private sector, in line with the decision of the ECC and cabinet.■



No curtailment of gas supply across the country - Nadeem Babar

Exclusive interview of Special Assistant to PM on petroleum

No curtailment of gas supply has taken place anywhere in the country during this winter except that the CNG stations were closed by the government for three weeks.", assures the Special Assistant to Prime Minister on Petroleum Nadeem Babar as the Energy Update conducted an exclusive interview session with him while he talked at length about the persisting energy issues of the country. Following are the important excerpts of his interview:

Energy Update (EU): Do tell us about the performance of the present government in fulfilling gas supply needs of the countrymen during winters.

Nadeem Babar (NB): No curtailment of gas supply has taken place anyplace in the country in this winter except that the CNG stations were closed for a period of three weeks under a government decision. Other than this, gas supply to captive power plants was also stopped except those serving the export sector. The export sector in the entire country didn't close even for a single day. There was merely a suspension of their operations for 12 hours in Punjab when there was the countrywide blackout on January 09.

This was the first time in the history of Pakistan that the export sector didn't even close for a single day except those 12 hours. There were issues of low pressure of gas in the residential sector but the gas supply was not stopped to the household consumers for a single day. There is a different reason behind this issue as the haphazard expansion of the gas pipeline is the main cause of this problem. The tail-end of the gas pipeline in many such instances has been pushed too far away. One such simple example is of DHA area in Karachi where a single pipeline is covering all the residential phases of the posh locality. Now we have started the process of laying a new pipeline in the area. This problem has been persisting all over the



By Naeem Qureshi



country. The political reasons came into action to extend the gas pipeline in such a haphazard manner to serve the domestic consumers as funds from the area MNA were often used to do such projects. The residential areas have been experiencing pressure issues exactly for this reason. This pressure issue is going to persist for another two to three years for the consumers at the tail-end of the pipeline. But rest assured that the gas supply to the domestic sector was not curtailed for a single day.

EU: Why Karachi has experienced acute gas supply issues during this winter?

Mr. Babar: The gas supply issue of Karachi is somehow different is this relates to Article-158 of the Constitution. The Sindh government to this day doesn't grant the permission to let us sell LNG in the province. We have been selling LNG to the K-Electric as we also were able to convince the export-oriented industries to get LNG supply for four months. We succeeded in convincing them to get LNG supply for these four months as otherwise they would not be in the position to get sufficient supply of gas. They agreed to our suggestion to get 50 per cent LNG and 50 per cent

Exclusive Interview



natural gas supply for these four months. So we provided them with uninterrupted gas supply for this period as they got as much gas as much they desired. Afterwards, from March 01, they fully reverted back to natural gas supply. There has been much gas supply issues in Karachi because the Sindh government is not ready to accept the reality that there is insufficient gas availability in the country and this shortfall could not be overcome till the time we are allowed to inject LNG into the system. Except K-Electric, the Sindh government flatly refused to let us sell LNG to consumers in the province. This is what we have been trying to explain to everybody including the Sindh government for last one year. We calculate the average gas supply of the entire year as less than 150 MMCFD gas of Sindh is supplied to the consumers outside the province. They used to say that gas supply to the power and fertilizer plants based in Sindh doesn't constitute their own consumption. I gave the presentation in the last CCI (Council of Common Interests) meeting that there is no issue if in case you are not willing to get LNG as I'm ok with this decision. But then I can't support anymore the system of uniform pricing of electricity and petrol in the entire country.

EU: Do tell us the about the benefits the domestic consumers are going to get out of the new LNG supply deal signed by the present government.

Mr. Babar: The domestic sector is going to get the benefit out of this deal that gradually all the industry has to switch over to the LNG supply. Then afterwards the domestic consumers all over the country will get local gas supply. For almost past five-and-half to six years, no new block had been opened in the country for exploration and production.

Whatever happened in the past five years is going to affect us in these five years. For this reason, we have planned to open 40 new blocks in the country as this decision is going to benefit the next government whether that of the PTI or of any other party. Because of this reason, the local production of gas is getting decreased by nine per cent every year. The total local production of gas that goes into the pipeline during the winters is barely sufficient to meet the gas requirement of the residential sector. This supply is more than enough during the summers when local demand comes down. But this situation becomes neck to neck during winters. The ultimate situation would be like that the domestic sector will become the major beneficiary of the local gas supply while rest of the country will get LNG. I told the Sindh Chief Minister and Energy Minister of the province in the CCI meeting that if I instantly get the decision from the CCI that the gas produced in Sindh will not be supplied outside the province then you are going to face shortfall of 200 MMCFD in the next winter. As then afterwards I will not going to supply you with LNG because it is the consumer of Punjab who would going to bear the entire cost of the LNG and that of its infrastructure. When Punjab has been responsible to bear the high cost of the LNG terminal for five years then LNG supply shouldn't go to Sindh.

EU: As Sindh produces 70% of the total gas, why is should face the brunt of gas shortage?

NB: You are bound to face shortage of gas during winters whenever you decide to consume completely your own gas production. But it shouldn't be like the case to stop the LNG supply whenever you need it by virtue of your position at the mouth of this supply system. If you were of the opinion that

there shouldn't be uniform pricing of energy in the country then I would be the happiest person to adopt this idea as I think the present system constitutes a wrong economic approach. The five Discos of Punjab combined subsidize the operating cost of the two Discos each of Sindh and Khyber Pakhtunkhwa, and one that of Balochistan. This is because we have been maintaining the system of uniform pricing in the energy sector. If you want to run the system then you have to deal with it fairly. The Article-158 does speak about priority but I sought advice from the lawyers as well as I have the opinion from two attorney generals of the country on this issue. According to them, priority here is for people of Pakistan. Firstly the rights are vested in the people of Pakistan. Once the people of Pakistan have been given the gas supply according to their need the province is empowered to use on its own the leftover volume of gas. The constitution does state that the natural resources do belong to people or citizens of Pakistan. The Article-158 do tell us about priority of use but the federal government still possesses the right of price setting as it would be a lot more easier for me to make the price of local gas equal to that of the LNG as it would end all this controversy.

EU: Would you give the detail of virtual LNG pipeline project?

NB: It is going to be a good project as we do have suggested to the companies, which came to us, to do it. This project doesn't involve any procurement or commitment by the government as the government's only role is extending approvals and licensing to do it as we have duly performed our role in this regard.

EU: What changes you are going to introduce to reform CSR-related work of the oil and gas companies in the country?

NB: We are going to revise the CSR policy of the oil and gas companies to end the unholy alliance between the area deputy commissioner and MNA to do spending in this regard. More people and representatives of the area would be involved in the process to spend the CSR-related budget of the oil and gas companies more transparently, judicially so to promote the culture of accountability in this regard. The present system of CSR spending is mostly misused in the case of Sindh.

Huge potential for solar and wind in Pakistan

round 3 years ago the general view in the Pakistan electricity sector was that solar and wind power (together termed "variable renewable energy," or VRE)

should not be allowed to go above 5% of Pakistan's installed capacity. This view was in part due to fears of the variability of solar and wind and their impact on the proper functioning of the grid, but underlying it was also a concern that they would further burden the power sector with high generation costs. The result was a reluctance to issue Power Purchase Agreements (PPAs) to new solar and wind projects-with Pakistan falling far behind its huge potential as a renewable energy powerhouse.

Pakistan has huge solar resource potential: According to a recent World Bank study, utilizing just 0.071 percent of the country's area for solar PV would meet Pakistan's current electricity demand! Of course Pakistanis already know this due to the long, hot summers, which until recently were accompanied by regular power cuts due to insufficient supply. Pakistan also has some excellent wind resource potential in the south and west of the country, as highlighted by the Global Wind Atlas.

Considering this, and at the request of the Government, the World Bank team in Pakistan commissioned a study in mid-2018 to help understand how much solar and wind could-and should-be added to the Pakistan grid considering its cost and variability. With the help of a team of consultants from Tractebel (previously Lahmeyer), the study (available via this feature story) determined that increasing solar and wind capacity to at least 30% of total installed capacity by 2030 would represent a "least-cost" expansion scenario, resulting in fuel savings equal to \$5 billion over 20 years, increased energy security, and reduced greenhouse gas emissions. This will require Pakistan to install around 24,000 Megawatts of solar and wind by 2030, up from just over 1,500 Megawatts today. This represents around 150-200 MW per month!

The study has already informed the Government's targets for solar and wind, set at 20% of total capacity by 2025 and 30% by 2030, and has helped dispel

concerns over integrating much higher percentages of variable generation.

Our most recent study, "Variable Renewable Energy Locational Study." goes on to show where all this solar and wind



would be optimally sited, considering the resource potential, transmission system capacity, and constraints such as agriculture, terrain, and population centers. Three conclusions emerge:

Reaching the 20% target for solar and wind can be largely achieved by carefully siting solar and wind projects to make use of surplus substation capacity in the existing system-this is best thought of as "low hanging fruit",

Getting to 30% will require

- By OLIVER KNIGHT

more significant investment, including development of hybrid solar and wind parks which help to make better use of dedicated transmission lines;

 While every province should see significant solar and wind development, Balochistan stands out as the country's "golden goose." Due to the excellent solar, but especially wind resources in the west of the province, it makes economic sense to develop large solar-wind farms and construct a high-voltage DC line over 1,000 kilometers to bring power to the rest of the country.

Now the hard work needs to begin: introducing competitive bidding to bring down costs, investing in new transmission infrastructure, and implementing operational changes such as centralized forecasting to enable a smooth scale-up of solar and wind. Even though the country currently has a supply surplus due to slower economic growth (compounded by the COVID-19 pandemic), this should not hold up an immediate shift to solar and wind-especially considering it will take at least 2-3 years for any new capacity to come online.■

Ground- breaking ceremony of Balakot HPP next month

KP Chief Minister Mahmood Khan decided to hold ground breaking of the 300 megawatt Balakot Hydro Power Project and directed the authorities of Energy and Power Department to finalize all preparations and arrangements. He said, the ground breaking of the mega project is expected to be performed by Prime Minister, Imran Khan.

The decision was taken during a review meeting regarding preparations and arrangements made in connections with ground breaking of Blakot Hydro Power Project at Chief Minister's Secretariat here.

Advisor to Chief Minister for Energy and Power Himayat Ullah Khan, Principal Secretary to Chief Minister Shahab Ali Shah, Secretary Energy and Power Zubair Khan, Chief Executive Officer PEDO and other relevant high ups attended the meeting

The Chief Minister was briefed about the progress so far made on the said project and it was told that contract of project had been awarded while contract agreement would soon be signed with the contractor. The 300 Mega Watt Power project is being set up on Kunhar River in Mansehra district with the assistance of Asian Development Bank with an estimated cost of Rs. 85.00 billion.



SPECIAL OFFER ON 1 YEAR SUBSCRIPTION (12 ISSUES)



How Pakistan is aiming for a green recovery from the pandemic

- The COVID-19 crisis has highlighted the need for humans to nurture a more harmonious, rather than adversarial, relationship with nature.
- Pakistan is committed to the challenge of initiating a green recovery to protect nature and create much needed employment.
- The green stimulus package focuses on innovative financial tools to help build sustainable, responsible economic growth.

he year 2020 was expected to be a "super year for nature", designed to propel the climate and biodiversity agendas onto the global stage. Nature itself, however, had other plans. The two striking lessons emerging out of the ensuing COVID-19 crisis are firstly, that nature operates with limits and thresholds which demand respect, and when

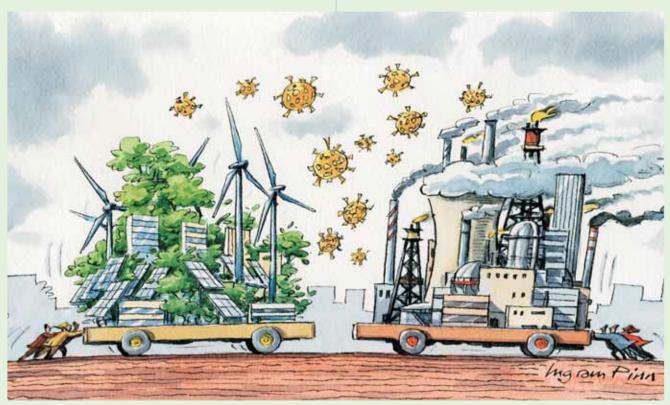
By Malik Amin Aslam Khan

crossed, have consequences. As humans pushed the thresholds of their existence, nature reacted and triggered the zoonotic pandemic which has now engulfed a shocked world.

The second lesson emerged with hope - that a renewed and sustainable relationship with nature is possible, and within reach, but needs to be backed by political commitment and collective action. Both lessons are forcing a rebalancing of our relationship with nature.

Over the past few months, while many countries grappled to come to terms with this new normal, Pakistan was willing to think ahead and act out of the box - sensing a silver lining emerge around this black cloud of confusion and uncertainty. The government's green agenda, built upon the successful implementation of the Billion Tree Tsunami (2014-18), had already accepted the premise that nature based solutions not only protect and preserve nature but also have the potential to spur an alternate green economy. More importantly, it had effectively created the launch pad for a directional shift of the economy towards sustainable growth.

Against this backdrop, the COVID-19 crisis provided an opportunity and Pakistan seized it to break out of the depression and reboot a stressed economy with a "Green Stimulus" focused on two objectives: protecting nature and creating green jobs.



The focal areas for intervention included planting more trees, expanding and reviving our protected areas and improving urban sanitation - all of which could generate quick employment while also allowing the country to come out of the crisis on a nature-positive pathway.

Green jobs creation

In terms of financing, we envisioned three phases, all of which are now in place with specialized funding options. The first ongoing phase is fully funded through "self budgetary provisions" which had to be recalibrated and prioritized towards green job creation. This was necessary to show total government commitment and ownership. As a result, the purely government financed activities, amounting to Rs10 billion have already delivered 85,000 daily wage jobs across the country in nursery raising, plant care, protection of natural forests and fire fighting activities and we have further planned to raise this to 200,000 daily wage jobs within the next few months.

2. Launch of 'Ecosystem Restoration Fund¹

For the second phase, the post-COVID-19 recovery, a new platform "Ecosystem Restoration Fund" was launched to allow willing partners (public and private) to credibly and transparently join Pakistan's green recovery. Substantial support funds of \$180 million have been secured through multi-lateral partners (led by the World Bank) proving that if the right plan is in place with full ownership, the funds can always be generated.

These funds will support the expansion of the tree planting initiative as well as the ecological preservation of the recently announced 15 national parks all of which got announced during the COVID-19 crisis, as the country increased its protected areas coverage by 50%.

Pakistan's first institutional National Parks Service is now underway, targeting 5,000 nature jobs to be generated for youth people who will be trained to become guardians and custodians of nature. All this activity is designed to address the unexpected spike in unemployment across the country and, at the same time, link economic activity with the preservation of nature.

3. 'Debt for Nature' swap scheme In the medium term, an ingeniously designed "Debt for Nature" swap scheme has recently been put in the pipeline, targeting \$1 billion funding. This is subject to a renegotiation of Pakistan's burgeoning debt with countries supporting a green revival of the global economy. There are strong indications of a growing global appetite for supporting this directional shift and Pakistan has been recently chosen to pilot an impact based nature bond linking debt retirement with quantifiable performance on biodiversity protection.

Designing a 'Green Euro Bond' Finally, during the pandemic, the country made a bold announcement to shift away from a coal-based pathway towards renewable energy by announcing a target of achieving 60% clean energy mix by 2030. Pakistan quickly followed up this announcement by shelving 2600MW of imported coal projects and replacing them with 3700MV of hydroelectric projects. Sensing a growing appetite for green and low-carbon investments in the international capital markets, Pakistan is all set to launch its first "Green Euro Bond[®] for \$500 million this month. This will announce the country's entry into an expanding and eco-conscious marketplace.

While treading this pathway, Pakistan also realized very quickly that to preserve nature you need to value nature - in economic terms. Subsequently it has taken the lead by initiating a first of its kind "Natural Capital Valuation" exercise to determine the true value of the natural asset that it is protecting and preserving, not only for itself but also a world besieged by the growing crisis of climate change and biodiversity loss.

This nature-positive pathway to rebuild the economy and stimulate sustainable growth, while employing young people, is a pressing need and will allow the country to not only come out of the economic recession but also build back better and build back green.

Pakistan has carved out an opportunity amidst the crisis, through rebooting the economy with a green stimulus and putting its faith in four diverse nature based financial instruments - all premised on the belief that the economic framework of the 20th century will not get us through the 21stcentury. Nature is demanding a rethink and Pakistan has heeded the call.

The writer is a Advisor to Prime Minister of Pakistan on Climate Change & Global Vice President of IUCN,

Pakistan to produce energy from waste



The concept of utilising waste to generate energy might soon be introduced in Pakistan and the ministries concerned would be educated about Pakistan Chambers of Commerce and Industry (FPCCI) President Mian Nasser Hyatt Maggo. In a meeting with a delegation of Pakistan Plastic Manu-facturers Association, he said Chinese innovation and introduction of waste recycling was gaining traction in Pa-kistan. "Pakistan's exports are concertrated in only a few products and a handful of markets," he said, stressing traditional goods.

The FPCCI chief added that there business further as it was an important factor for promotion of exports. Mem-bers of the Pakistan Plastic Manufac-turers Association delegation said that the association was playing an active role in introducing the country's plastic industry in the international market. The plastic industry had a development of Pakistan, they said.

The sector had been badly impacted by the complicated nature of taxes imposed by the Federal Board of Revenue and Sindh Revenue Board ation, they said. Moreover, the CNIC condition is affecting growth of the sector and creating hurdles to supplies to different cities of Pakistan. The meeting concluded with a proease of doing business.

Sindh to run out of natural gas in 12 years

hile Chief Minister Syed Murad Ali Shah blamed the federal government for an acute gas shortage as well as plundering the province's resources, Energy Minister Imtiaz Shaikh told the Sindh

Assembly recently that the province would run out of natural gas in the next 12 years.

The proceedings witnessed uproar and a chaotic situation when Speaker Agha Siraj Durrani did not allow Pakistan Tehreek-i-Insaf's Firdous Shamim Nagvi to address the lawmakers after the chief minister gave a hardhitting policy statement against the federal government on the ongoing gas crisis in the province. CM Shah came down hard on the centre for "violation" of Article 158 of the Constitution, asking the Muttahida Qaumi Movement-Pakistan and

Grand Democratic Alliance to stand besides people of the province for their rights and raise an "effective" voice in the federal cabinet. He said that injustices were being done with the province's people and asked opposition parties MQM-P and GDA, who were allies of the federal government, to raise concern at the centre. "I know you can't quit the federal government, but at least you can raise the issues of the province," he urged. He said that Sindh produces about 2,500 to 2,600 MMCFD gas and it got only 750 to 800 MMCFD against its requirement of up to 1,600 MMCFD.

Pointing to the representatives of the business community sitting in visitors' gallery in the house, he said they had come to the Sindh Assembly for the issue of gas shortage as their businesses were badly affected.

"The MQM-P thinks the job is done only through writing a dissenting note in the cabinet on the census issue. Even the PTI MPAs belonging to Sindh should ask their bosses in the centre to give Sindh its due share of resources," he said. He recalled that he had written letters to Prime Minister Imran Khan for giving the right to the people of Sindh, but he was 'misguided' by some people.

"In reply to my letters, the federal government maintained that it cannot provide required gas to Sindh as the previous governments had signed MoU with SNGPL," he said, asking the PTI-led federal government to not blame the previous

By Tahir Siddiqui

governments as it had been in power for two and a half years. Following his policy statement, PTI members strongly protested as the speaker did not allow Mr Naqvi to respond. The members from the treasury benches also exchanged hot words with the opposition members.

As the chaotic situation continued, the speaker became irked and told the opposition members that there couldn't be a discussion once the minister completed his statement under Rule 261 of Rules and Procedure of the Sindh Assembly. "You cannot force me," he further told them.

Earlier, during Question Hour, Energy Minister Imtiaz Shaikh said that "we would run out of natural gas in next 12 years as the resources are being reduced". He said that Sindh's resources



were being "stolen" and the province's right was given to Sui Northern Gas Pipelines Limited (SNGPL).

In reply to a question, Mr Shaikh said that the Sindh Engro Coal Mining Company (SECMC) had successfully completed 100 per cent first phase of mining project where it was operating an open-cast lignite mine with an annual capacity of 3.8 million tonnes per annum and supplying coal to 660 MW Mine Mouth IPP operated by Engro Powergen Thar Limited.

"Till date, SECMC had produced more than four million tonnes coal. Moreover, SECMC has recently achieved a financial close to double its mining capacity to 7.6 million tonnes per annum, where it will supply coal to two more power plants of 330 MW each ... resulting in total electricity production of 1.320 MW," he added.

Later during the proceedings, Syed Abdul Rasheed of the Muttahida Majlis-i-Amal withdrew his adjournment motion regarding provision of employment opportunities to the youths of Sindh on the assurance of the government. Parliamentary Affairs Minister Mukesh Kumar Chawla said employment in government sectors from grade 5 to 14 had to be announced in March 2020 but it was delayed due to Covid-19. He said that jobs would be announced soon. Meanwhile, the assembly unanimously passed a private bill - The Sindh Water Management (Amendment) Bill, 2020 - moved by Rana Ansar of the MQM-P.

TPA, competitive gas market issues

Any advance long-term pipeline capacity allocation will be violation of principles

he Cabinet Committee on Energy (CCOE) has rejected a request of liquefied natural gas (LNG) terminal developers for allocating gas transmission and distribution capacity in advance. The Petroleum Division has maintained that it would be allocating capacity for the short term (three-month window) on a first-come-first-served basis. Any advance long-term capacity allocation would be violating market competition principles.

Gas terminal developers are not sure about the availability of adequate pipeline capacity. A dead end seems to have reached. In the following, we propose a framework which may help bring about a competitive gas market system and remove bottlenecks in the way of new LNG terminals.

The government has announced an LNG terminal policy based on open market under which, contrary to the earlier two LNG terminals, no offtake guarantees or sovereign guarantees will be provided. Almost all risks will be borne by the developers and investors.

However, there is a price for every risk. Risks are to be measurable for investors. High risks may discourage or prevent investments or may increase the price of resulting products and services.

Energy markets and commodities are a lot different from other commodities like sugar, flour, metals, etc. The involvement of intervening infrastructure and cross-subsidies make them quite complicated. Hence, often an elaborate set of market rules are provided and requisite adjustments made. Currently, the gas sector is totally regulated and the

whole pricing structure is based on By Syed Akhtar Ali

it. Open market is a totally different ballgame. The open market system cannot be brought about in one go.

There would be a transition period that should ensure constant supplies and reasonable prices until the full market framework prevails. Two LNG terminals are at an advanced stage of planning and there are three more in the planning process. As the project's approach approaches the implementation phase, the

realities

a n d

Gas Market

limitations emerge.

LNG demand is increasing (while local gas production is decreasing and is expected to reach almost zero levels in the next 10 years) which is reassuring and even enticing for the investors, and is perhaps the only positive side of Pakistan's market. Pipeline capacity is limited to 1,200 mmcfd, according to Sui companies. The North-South Gas Pipeline is at the planning stage and may take two to three years to complete. Gas terminals are at an advanced stage of development and can come on line in less than 24 months. Even the North-South pipeline may not be enough beyond 2026-27 and extra gas pipeline capacity may be required. This provides expansion opportunities for the Sui companies and new investors.

Problems provide opportunities, as they say. Sui companies are in the best position to fill the immediate and mid-term gap. However, uncertainties prevent them to do so. The Petroleum Division recently put forward to the CCOE a proposal for gas market reform and restructuring, and ultimate privatisation of the two Sui companies with the request for induction of a transaction adviser.

The roadmap had been earlier prepared by a World Bank group of consultants. Their proposal revolves around a standard recipe of integrating the transportation function and separating the distribution function for which the existing companies have to be reorganised as smaller distribution companies (DISCOs) or provincial DISCOs. The privatisation of Sui companies has long been on the agenda of governments. Political and policy issues have prevented it. Also the debate of restructuring first, privatisation later or vice versa has also prevented progress in this respect.

What to do. There has been a grave LNG crisis and we are still passing through it. In the coming years, the problem would deepen, thus the need for early action. Restructuring and privatisation is uncertain and may consume almost five years for a stabilised operation. Gas reforms would have to be separated from restructuring of transmission and distribution systems. Tariff structure reforms may be brought about without losing much time in the following manner.

- 1. Infrastructure (pipes) may have to be separated from gas supply business. This can be easily done. As such, gas losses are a problem for the T&D companies. Their earnings are based on return on assets and reimbursement of variable costs. They will continue to earn this, despite separating the gas supply business. However, gas contract liabilities would have to be transferred to a third entity.
- Annual revenue requirement of Sui companies may have to be changed to the unit distribution cost (UDC). Ample historical data is available, besides cost-plus arithmetic can continue with some adjustments or can be tied to some inflation index like the Consumer Price Index. UDC can be revised periodically. There is already a mechanism for allowing UFG losses that may remain as it is. There may be several variants of UDC depending on peculiar situations of customer size.
- On third-party access (TPA) to the gas pipelines, a threemonth window on first-come-first-served basis appears to be contradictory with the take-or-pay requirements. It can be one at a time, not both. It can be taken and pay at a lower capacity utilisation rate of 60% which may enhance the pipeline tariff. Take-or-pay rates are usually computed at 80-90% capacity utilisation.
- Local gas may have to be reserved for the residential and commercial sectors and small industry for which pipeline capacity may be reserved and the remaining left for the bulk consumers like industry, electricity, fertiliser, etc. Government

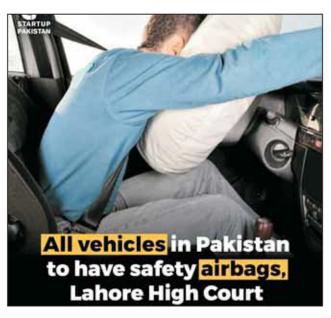
companies may be allowed to retain this business initially. 3. Except for the residential and commercial sectors, cross-subsidy may have to be replaced by a taxation or surcharge system and a balancing fund is to be created to adjust excess surcharge with the deficit. 4. Bulk consumers like industries, power, CNG and fertilisers may be given to private LNG suppliers. Subsidies to the fertiliser/ agriculture sector may have to be separated from the gas sector or financed from the proposed tax fund.

CNG price may be linked to the petrol price and announced in line with the petrol and diesel rates.

Gas terminals should also have a terminal tariff. Fortunately, data from the regulated terminal is available and the same can be charged for the new terminals. The rate of 44 US cents per mmbtu of existing LNG terminals, although regulated, is only notional. Actual rates have varied and have gone up to \$2 in the months when capacity utilisation has been less.

Developers may be allowed to keep 30-50% share for their own gas supplies. The rest should be available to other gas importers and traders.

- Imported LNG can be priced on the basis of the existing oil import price regime. Petroleum product import is open to licensed oil companies and is priced on the relevant price index, Platt or otherwise. Same can be done with LNG import prices. It can be linked with JKM, JERA or a combination of both. Importers can earn profit based on their efficiency and network linkage below the JKM index. There could be free imports under bilateral price agreements for non-regulated sectors like industry.
- 1. Private traders/ gas retailers may be licensed. There may be a last resort supplier government company which may import LNG filling the market gap as it may emerge from time to time. All legacy import contracts may be transferred to this company. Its deficit can be financed by the tax fund. The aforementioned framework would remove many uncertainties in establishing LNG terminals and in the introduction of a competitive gas market. The proposed tax fund replacing cross-subsidies is not something new. Throughout Europe, energy taxes are used for supporting various energy causes such as green taxes. Privatisation, although desirable, is not a prerequisite for such a scheme of things. A simulation of the proposed model would be required to implement it.■



LNG crisis likely to worsen

he liquefied natural gas (LNG) suppliers have refused to give supplies to Pakistan for the month of February in the wake of the recent massive hike in the prices of gas. According to details, Pakistan LNG Ltd (PLL) had advertised a tender on November 28, 2020 for the procurement of two spot LNG cargoes to be delivered in February 2021.

On December 28, 2020 the bids were opened and the results were announced, and in accordance with the Public Procurement Regulatory Authority (PPRA) rules, the award intimation was made 10 days later on January 7, 2021.

The spot cargo scheduled for mid-February was awarded to SOCAR Trading UK Ltd while the second spot cargo planned for the last week of February 2021 was awarded to the lowest bidder as per PPRA rules, who conveyed its inability to deliver as per its bid. The PLL approached the second and third lowest bidders within the bid validity period all of whom regretted to deliver the cargo at the prices they had offered in their bids.

This bid default of the suppliers is associated with the recent supply shortages leading to high price volatility in the spot market coupled with extra buying in North Asia. There are reports about several global companies defaulting on their bids or even contracts in some cases given the supply shortages and extremely volatile prices.

It is worth mentioning that the dealers who have regretted supplying gas after bidding in the PLL tender include state-run entities and major international LNG traders.

The PLL is taking all measures available under the law and PLL's tender process including forfeiture of bid bonds, against the bidder(s) who failed to supply cargo as per their bids. Due to low demand in the next month, Pakistan on an average had imported 7.75 cargoes in February in the last four years. Currently, a total of 8 cargoes are secured.

The Pakistan State Oil will import six cargoes and PLL two cargoes as one contract cargo by Italian firm ENI and one spot cargo of LNG by Azerbaijan firm SOCAR. The PLL is working with the respective users to reconfirm demand at the current prices and exploring alternatives if demand for an additional cargo in February is reconfirmed.

If emergency procurement is done it will be as per the current market rate. The PLL had already advertised unused capacity in its terminal for February 2021 and private sector may bring in additional LNG.

The PLL had received an all-time high bid at 32.48% of Brent to secure cargoes for the month of February. High bids were re-ceived for two LNG cargoes for slots of

Febru-

ary

15-

By Zafar Bhutta

2021 and February 23-24 from four LNG suppliers.

SOCAR had offered bids at 23.4331% of Brent for the slot of February 15-16, 2021 and 22.1142% of Brent for the slot of February 23-24 while Trafigura had offered for two slots of February 15-16 at 32.4888% of Brent and for February 23-24 at 25.9777% of Brent.

Gunvor had quoted 25.5666% of Brent for the slot of February 15-16 and 23.5666% of Brent for February 23-24. Emirate National Oil Company (Enoc) had quoted a price at 20.8483% of Brent for February 23-24 slot. Vitol also submitted its bid for the last time slot at 24.4321% of Brent.

Pakistan was even willing to receive LNG cargoes at all-time high prices but the suppliers refused to give LNG. The PTI government had criticised the PML-N government for signing an LNG contract deal with Qatar. But this deal had rescued Pakistan when prices were all-time high in the global market.

Additionally, the private sector had been trying to import LNG for the last several years but bureaucracy had created hurdles in the process to maintain the monopoly of state-run companies. After failing to secure LNG contracts, the government is now

depending on the private sector to import the

gas.

ENERGY HORIZON エネルギー ホライズン

Biggest enemy of the nation

OGRA should be disbanded for its crimes

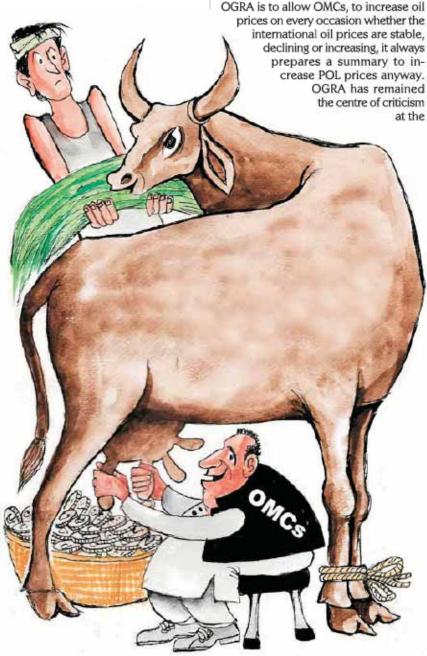
lmost all the cross sector of life have questioned the highly controversial existence of Oil and Gas Regulatory Authority (OGRA) for its consistent negative and anti-nation role in oil and gas sector. It seems that OGRA is neither an organization nor an institution but a group of 'Thugs' that consistently encouraging oil marketing companies to extort the poor masses and indulge in all kind of money minting scams besides massive tax eva-

Very recently OGRA has recommended the government to increase commission of the OMCs. The biggest crime of OGRA is to allow OMCs, to increase oil prices on every occasion whether the international oil prices are stable, declining or increasing, it always prepares a summary to in-

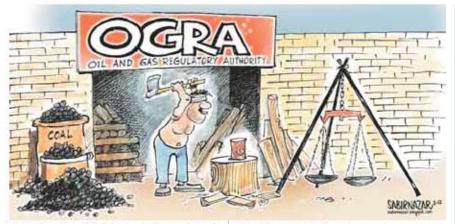


entire oil supply chain, from policymakers to regulators and market players down to retail outlets. Even the 15member Inquiry Commission on the June petroleum crisis has recommended departmental proceedings against top hierarchy of the petroleum division, dissolution of the Oil and Gas Regulatory Authority (Ogra) and a halt to the operations of refinery and oil marketing company Byco. Demand for dissolution of the OGRA is not the first time ever but due to its frequent irregularities, the cross section of society had suggested the previous governments for disbanding this most corrupt public-sector organization. The commission's 163-page report also estimated over Rs250 billion worth of oil smuggling from Iran and noted that a wide range of operations in the oil sector were against law and rules, operating in vacuum and without any check and balance, most probably OGRA has never bothered to take any action against this evil. It is high time that having seen the affairs of OGRA, the commission was also "compelled to recommend" performance audit of all the regulatory bodies (National Electric Power Regulatory Authority, Pakistan Electronic Media Regulatory Authority, Competition Commission of Pakistan and Drug Regulatory Authority of Pakistan) as they are all biggest culprit in the country causing corruption. The report said the petroleum division's decision to impose a ban on petrol import in March was wrong in the first place from strategic and policy perspective, but oil marketing companies (OMCs) violated it. It said that when the ban was imposed. petrol prices were at the lowest ebb in the international market and Pakistan and its consumers were denied its benefit. The petroleum division and DG-oil failed to ensure lifting of stocks by the OMCs from February to April 2020. The OMCs simply refused to lift quotas form local refineries.

The commission put Ogra on top of the blaming list, saying "much of the mess that abounds in the oil industry



Point of View



pertains to OGRA and the related laws/rules". Since its creation in 2002 and given some powers to regulate the oil industry in 2006, the OGRA has become white elephant for the poor masses. "Role of this white elephant was not more than a silent spectator before or during the crisis of shortage of petroleum products", and zero inspections and monitoring, the report revealed. It also blamed OGRA for imposing "ritual fines" on the OMCs for drying out their retail outlets during June this year, issuance of unlawful provisional marketing licenses to the OMCs, no punitive action on illegal joint ventures or hospitalities among the OMCs and no revocation or suspension of license of even a single delinquent OMC. The commission "strongly recommends dissolution of Ogra through an act of parliament within six months".

The commission found that the Ministry of Energy (Petroleum Division) had not fared much better during the last decade and in the June crisis in particular. "The story of MEPD is also rife with apathy, incompetence flavored with malpractices, and disregard to laws/rules," the report said. However, it desired that the petroleum division should work with the law ministry to overhaul all petroleum sector laws and rules within six months.

"The dire straits of oil industry can only be straightened out with a unified authority," it added.

The commission strongly recommended departmental/penal action against the incumbent DG-oil, who was a veterinary doctor by profession, for passing flagrantly illegal orders regarding allocation of import/local quotas. "Strong departmental/penal action is also recommended against Imran Ali Abro and the other associates who had been maneuvering the unlawful affairs in the Petroleum Division," it said. Abro was reportedly the kingpin in the petroleum division and called the shots on behalf of his superiors, even though he was not an employee

of the petroleum division but working without legal cover for six years. The report also identified a series of malpractices, including manipulation of pricing mechanism, adulteration, misrepresentation and evasion of taxes, figure fudging and so on across the supply chain, the OGRA authorities remained silent spectators on each and every occasion.

Very recently the OGRA has caused a hue and cry over extending undue favor to another company like Byco, as it given a benefit of Rs440 million to a company, eGas despite that fact that a case of malpractices against eGas is pending before the court and NAB is also investigating its alleged corruption. OGRA and all such so-called regulatory authorities should be banned and cases against their past and present hierarchy should also be registered.



Pakistan has potential to export electricity

Sindh Chief Minister Syed Murad Ali Shah said that given the vast resources of the province, Pakistan has the potential to become an exporter of electricity.

He expressed this belief while addressing a reception hosted for the heads of foreign delegations visiting Karachi to partake in the seventh edition of Aman-2021 exercise, in which 45 countries are participating. The CM said the province was rich in resources, had one of the largest coal deposits in the world and was home to vast renewable energy corridors, which could be employed to meet the energy requirements of the entire

'If we begin to utilise our fossil fuels and resources of renewable energy, we can become an exporter of electricity, he maintained. He further stated that "Karachi, which is the city of navy, has a long history of [operating] as a port. Welcoming the participants, the CM added, "I invite you to take some time out and visit this city's historical sites." He lauded the efforts of the Pakistan Navy for organisingthe exercise and remarked, "I am glad to receive you [foreign delegations] here, and feel proud that Karachi is hosting the Aman exercise." The CM said the city generated 70 percent of Pakistan's revenue. Though the city did face some law and order problems back in the 1990s, the CM told the delegates, however, adding that peace was restored with the support of its people.

'And now, it is thriving in all sectors, including trade, commerce, education and sports and recreational activities, he remarked. The CM further stated that new industrial estates were being established near Karachi. He expressed hope that participating in Aman-2021 would be a great experience for all 45 countries.

IPPs 'deal' leaves a bad taste in the mouths of their investors

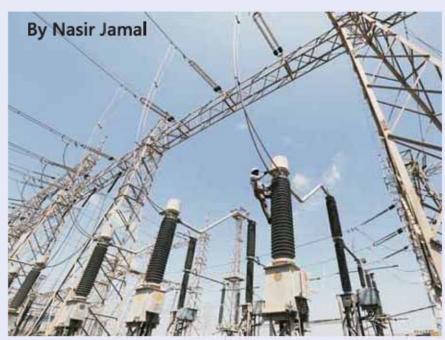
he government has extracted concessions worth several hundred billion rupees in future payments to the 47 independent power producers (IPPs) set up between 1990 and 2013 by forcing their hand but the 'deal' has left a bad taste in the mouths of their investors.

The government has secured the lucrative deal in exchange for promises of payment of Rs403 billion it owes to the IPPs. What makes the bargain sweeter for the government is the fact that it will pay only a third of the amount in cash; the remainder will be disbursed equally in 10-year bond and 5-year Sukuk. The power producers will get 40 per cent of their money upfront after signing 'binding agreements' revising the terms of their original power purchasing agreements and the rest in six months.

This is not all. Instead of paying cash, the government has extended contracts of 12 IPPs in exchange for an award of Rs92bn won by them in an international arbitration a few years ago. "This alone will save us Rs32bn since the extension in contracts will cost the government around Rs60bn," Special Assistant to the Prime Minister on power Tabish Gauhar told Dawn by telephone.

Moreover, the new revised agreements have a binding force for the IPPs, but will not be so much obligatory for the government as it retains the right to order forensic audit of their bills if and when it feels like. "The forensic audit option is there," Mr Gauhar said. "It'll be a major exercise and can have detrimental effects on (future) investments but it is a decision the government can take any time."

Background interviews with senior executives of three power companies suggest that the IPPs may have been coerced into agreeing to new power purchasing agreements. They were unanimous in alleging that the government had used the Mohammad Ali Inquiry Committee report on the IPPs to build a case against the power producers and later force them into signing memorandums of understanding. "The threats of corruption inquiries and public humiliation through media trials are enough for a businessman to give in to the pressure



The government has secured the lucrative deal in exchange for promises of payment of Rs403 billion it owes to the IPPs. What makes the bargain sweeter for the government is the fact that it will pay only a third of the amount in cash; the remainder will be disbursed equally in 10-year bond and 5-year Sukuk.

from the government," one of them said.

Khalid Mansoor, chief executive officer of Hubco, who was part of the process of negotiations, didn't say anything when asked if the government had applied any kind of pressure on them to secure the deal from the IPPs. "This isn't a deal. We have (voluntarily) given the government concessions for the stability of the power sector and the country and demanded nothing in return. The money they've agreed to pay us is ours and has been stuck with the government for the last many years," he told.

"We've given up Rs836bn in our profits (over a period of next 20 years) and we are still labelled as thieves and plun-

derers," he said, pointing to the local arbitration ordered (under the agreement) on an amount of Rs53bn, which the government insists the 12 IPPs have received in excess payments. He said the concessions given by the IPPs would have an impact of Rs1.5 per unit of electricity.

Conversations with energy sector analysts suggest new contracts will significantly shrink future earnings of the IPPs after the removal of the dollar indexation from their returns (on equity), which was one of the main attractions for investors, and downward revision of their returns. "I see earnings of these IPPs shrinking at worst or stagnating at best," one analyst said.

"The agreed changes in their power purchasing agreements will have a negative impact on the IPPs. The only positive for these companies is the settlement of their long overdue, unpaid bills, which are expected to alleviate liquidity pressures on them and reduce their reliance on borrowings to fund their operations."

The agreements will cover 53 IPPs with a total capacity of around 8,000 megawatts or nearly 23pc of the installed generation in the country. "The agreements with the remaining six IPPs, including Kapco and Uch, will be signed

in a few days as their foreign sponsors are not available at the moment," Mr Gauhar said. The government owes them nearly Rs90bn in unpaid bills.

"Without going into a debate whether the agreements with the IPPs are fair or not, expensive or not, these are contractual dues of the power companies we are paying them. We have not given them an NRO. We have swallowed a 'bitter pill' but secured relief in return," he argued

The agreements are part of the government strategy to resolve the issue of power sector circular debt. Mr Gauhar said the agreements with the IPPs would help reduce the existing circular debt stocks of Rs2.3 trillion - which includes Rs1tr parked with the state-owned power holding company and part of the public debt - down to Rs1.9 trillion.

'So once IPPs' dues are paid, we will be left with circular debt stock of about Rs900bn with about Rs600bn to be paid to state-owned Gencos and around Rs200bn to the CPEC projects," the SAPM added. He also listed various measures the government is taking for the resolution of the power debt build-up in future by reforming the Discos to reduce their losses, encouraging electricity consumption to use large idle generation to cut capacity payments and so on.

He agreed that the power projects set up under the 2015 policy under or outside of the CPEC initiative were the bigger elephant in the room and said: "If we somehow succeed in convincing these companies to agree to the same terms we have offered the older IPPs, it will result in savings of Rs6,500bn-7.000bn over a period of 30 years." But, he added, it was a sensitive matter (because it involved Chinese power companies and banks) and had to be settled by governments of Pakistan and China."

The management of the IPPs and sector analysts are unanimous that the way the government has forced the power producers to agree to revise their contracts will have a long-term impact on investments in the power sector. "It will have negative fallout on future investments. The future investors might not find investments in future power projects economically viable after all (since the governments here cannot stick to the original agreements)," Khalid Mansoor argued. If the past experience is anything to go by, the risk premium on energy projects will increase after this deal. But, of course, that will be in future. For now, the government appears to be in a celebratory mood.

■

Sindh seeks federal approval for five wind power projects

By M. Hussain Khan

Sindh Minister for Energy Imtiaz <u>Ahm</u>ed Sheikh has urged his federal counterpart Omar Ayub to ensure issuance of notification for five wind power projects, to be installed by independent power producers (IPPs) in the province, to encourage investors and promote clean power industry

The minister said in a letter to the federal minister on Thursday that tariffs of the five wind power projects in Sindh had not been notified yet in the Gazette of Pakistan. He said that a delegation of local and foreign investors had contacted Sindh's department of energy for investment in wind power generation but this delay in procedural issues might discourage investment.

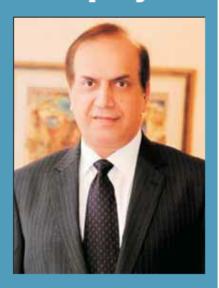
He said the wind power projects awaiting tariff included; Norinco International Thatta Power, Iran-Pak Wind Power, Sino Well, Shafi Energy and Moro Power Company. He pointed out that it was clearly mentioned in Alter-native Renewable Energy (ARE) Policy 2019 that the share of renewable energy resources in the country's electricity resources should be 20 per cent by 2025 and 30pc by 2030

He said that under the policy, it was important to encourage renewable energy projects to achieve targets set by the policy as it would generate cheap electricity.

He urged the power division of the federal ministry of energy to notify tariffs of the five projects to facilitate power generation from alternative and renewable sources and encourage in-

These five IPPs will cumulatively contribute 275MW of clean energy to Pakistan's overall energy mix. "Alternate Energy Board (AEBD) is likely to meet in the days to come and I think the board should discuss the issue of our projects pending publication of notification in the gazette for our tariff of 3.22 cent," said the owner of an IPP.

The five IPPs are to be established in Jhimpir while around 10 IPPs are being set up in Jhimpir area of Thatta and Jamshoro districts which will add 610MW of energy to the national grid.



The 24 wind power projects - set up during Musharraf's government and successive regimes - were contributing around 1,235MW of energy to the national grid. Their tariffs were said to have been approved at the rate of 17 cents and eight cents per unit cost. And tariffs of these five pending IPPs were approved at the cost of 3.22 cents

Sheikh said that he failed to understand when power tariff had been approved by National Electric Power Regulatory Authority (Nepra) what was the reason to withhold publication of its notification in the gazette.

When there is a shortage of power these IPPs are to contribute inexpensive energy to the national grid, therefore, it should be done as soon as possible. said the minister. He said that when tariff of the IPPs was cheap and covered as per new policy for renewal energy then why was it being inordinately delayed. "It is a matter of just one notification now when everything else has been settled by AEDB and Nepra,"

The IPP owners had already made an appeal to the prime minister in this regard. "We are trying to meet the prime minister but it is unfortunate that we are not yet able to have an audience with him on this issue," said the IPP owner from Karachi. His IPP is to be established in Jhimpir.

Pakistan offers China partnership in \$9 bn PARCO coastal refinery

he government has decided to seek investment from China for becoming a shareholder in the state-of-art PARCO coastal refinery and petrochemical complex of \$8-9 billion, to be built at Hub, Balochistan.

In addition, Islamabad has also asked Beijing to invest in projects, including upgradation of existing refineries, setting up of underground gas storages, exploration and production activities and national seismic surveys in frontiers and hard areas, such as some pockets of Balochistan and bordering areas of Pakistan and Afghanistan.

And now in the next 10th Pak-China JCC meeting, the PARCO coastal refinery project among others is the main project on part of Pakistan that will be included in the agenda. More importantly, projects like LNG storages and exploration and production projects will also be offered to China in the 10th JCC meeting. "Pakistan wants the investment in refinery, exploration & production activities and LNG storages projects from China under the CPEC umbrella and seismic surveys in frontiers and hard areas."

Earlier, Special Assistant to Prime Minister Nadeem Babar also wrote a letter to Ambassador of Kingdom of Saudi Arabia in Pakistan Nawaf Saeed Al-Maliky on September 2020, inviting Saudi Arabia to become a partner with PARCO in installing the PARCO coastal refinery of 2,500,000 BPD. It is worth mentioning that the Saudi envoy, some days back in a meeting with SAPM on Petroleum, responded to the letter saying that his country Saudi Arabia will positively consider the offer.

Meanwhile, in a positive development, the Government of Balochistan has granted NOC for development of 1,811 acres of land on 27 September 2020 and to this effect, a 30-year lease agreement has been signed by PARCO and PERAC for the project. And further discussions are underway regarding acquisition of additional land of 1,000 acres near Hub, Baluchistan. To a question, the official said that a feasibility report about the PARCO refinery and petrochemical complex is nearing completion. Prime Minister Imran Khan is likely to inaugurate in April-May, 2021 initiation



of work on the oil terminal, worth \$700-800 million, at site of the proposed PAR-CO refinery at Hub. The official said that the Petroleum Division is working to make the POL tariff regime attractive enough to ensure maximum investment in the refining sector as currently the tariff of crude oil is at higher side and finishing products have no competitive tariff structure.

More importantly, PARCO Coastal Refinery Limited (PCRL) has been incorporated as a 100pc subsidiary of PARCO. And the Government of Pakistan has announced various incentives for development of green field refinery projects, including exemption from all taxes for a period of 20 years from the date of commercial production.

The refinery configuration study has been completed by Honeywell (UOP, USA) and the feasibility study updation done by Jacobs Consultancy.

More importantly, the execution strategy and governance structure has been approved and the Government of Pakistan has already accorded approval to incentives for new refinery projects and the project site studies have been completed, including land survey. Hydrology study, geotechnical offshore investigation, offshore data acquisition have also been completed.

The official said that Technip FMC has been appointed as the Project Management Consultant and project organization has been developed and relevant human resources engaged. Allen & Overy has been appointed as International Legal Adviser and the revised market study has been updated and project cost update has been finalized. Also, the International Financial Advisers have been shortlisted. The Front End Engineering Design (FEED) contractors have also been shortlisted. The Invitation to Bid (ITB) is under preparation for issuance to the shortlisted contractors.

The Environmental Impact Assessment (EIA) contractors were also short-listed. The Invitation to Bid is ready for issuance to the shortlisted contractors.

MORC®

INTRODUCTION



MORC Controls Ltd is a leading manufacturer of valve accessories in Canada. It is mainly engaged in the research and development of valve accessories such as valve positioners, solenoid valves. limit switches and actuators.

Our product range involves in valve positioner, solenoid valve, limit switch, air filter regulator and so on, which are widely used in petrochemical, natural gas, power, metallurgy, paper-making, foodstuff, pharmaceutical, water treatment industries. We are also capable of providing complete set of control valve and on off valve solution as we have a very close relationship with with valve manufacturer.

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Event Report

13th International CSR Summit & Awards-2021

Role of charities, CSR work to lessen miseries of underprivileged people during lockdown eulogized



President AJK Sardar Masood Khan and Governor Punjab Chaudhry Muhammad Sarwar addressing at 13th Annual CSR Summit & Awards 2021

The role of the bona fide charities and corporate sector to mitigate the sufferings of the deprived communities in Pakistan during the anti-coronavirus lockdown last year was highlighted and eulogized by the speakers of 13th International CSR Summit & Awards.

The National Forum for Environment and Health (NFEH) organised the summit and awards at a hotel of Islamabad on 25th February, 2021. The speakers of the conference said on the occasion that the importance of the corporate social responsibility had increased manifold in the country during

the lockdown as the underprivileged people at that time had no means to earn their livelihood.

Special Assistant to Prime Minister on Poverty Alleviation and Social Protection inaugurated the summit.



Secretary General NFEH Ruqiya Naeem presenting memento to Special Assistant to Prime Minister on Poverty & Social Protection Dr. Sania Nishtar

She said on the occasion that the successful execution of Ehsaas emergency cash assistance programme helped Pakistan to successfully avert any civil war-like situation last year in the wake of anti-coronavirus lockdown imposed in the country rendering almost two-third part of its population jobless.

She said that the Ehsaas emergency cash assistance pro-



Group photo of 13th Annual CSR Award winners with President AJK Sardar Masood Khan and Governor Punjab Ch. Muhammad Sarwar

Event Report



Glimpses of session 2 include MNA Syma Nadeem, Dr. Shafaqat Munir from SDPI, Atif uddin Khan, M. Zakir Ali, Azra Masood, Arif Nomani and others

gramme had been rolled out in the country to save the two-third part of its population from utter crash.

Also speaking at the inaugural ceremony, Chairman of National Electric Power Regulatory Authority, Tauseef H Farooqui, said the NEPRA had strictly adopted standard operating procedures last year against the coronavirus due to which no fatality was reported among the employees of the power sector regulator.

He said the NEPRA regulated the affairs of some 300 power sector companies in the country as since last year the power sector regulator had encouraged them to adopt CSR initiatives to help out the needy population in the country.

He said that different energy companies after being motivated by the NEPRA had introduced their CSR programmes mainly to benefit the deprived people around the areas where their operations are based.

Later at the concluding ceremony, Punjab Governor Chaudhry Muhammad Sarwar and Azad Kashmir President Sardar Masood Khan conferred 13th CSR Awards on 75 different companies and organisations for showing excellence in

present government assured fullest support to the corporate entities doing philanthropic work.

Speaking on the occasion, AJK President appreciated the role of the CSR work in alleviating the miseries of the needy people.



the field of corporate social responsibility during last one year.

Speaking on the occasion, Punjab Governor Chaudhry on behalf of the

He said the CSR projects played an important role in providing health, education, and livelihood services to the deprived people in the country.



Glimpses of Panelists include Fajar Rabia Pasha, Huma Zafar, Todd Shea, Salim Baz Khan, Maria Qadri, Sohail Awan, Dr. Wagar Ahmed Niaz and others also seen in the picture

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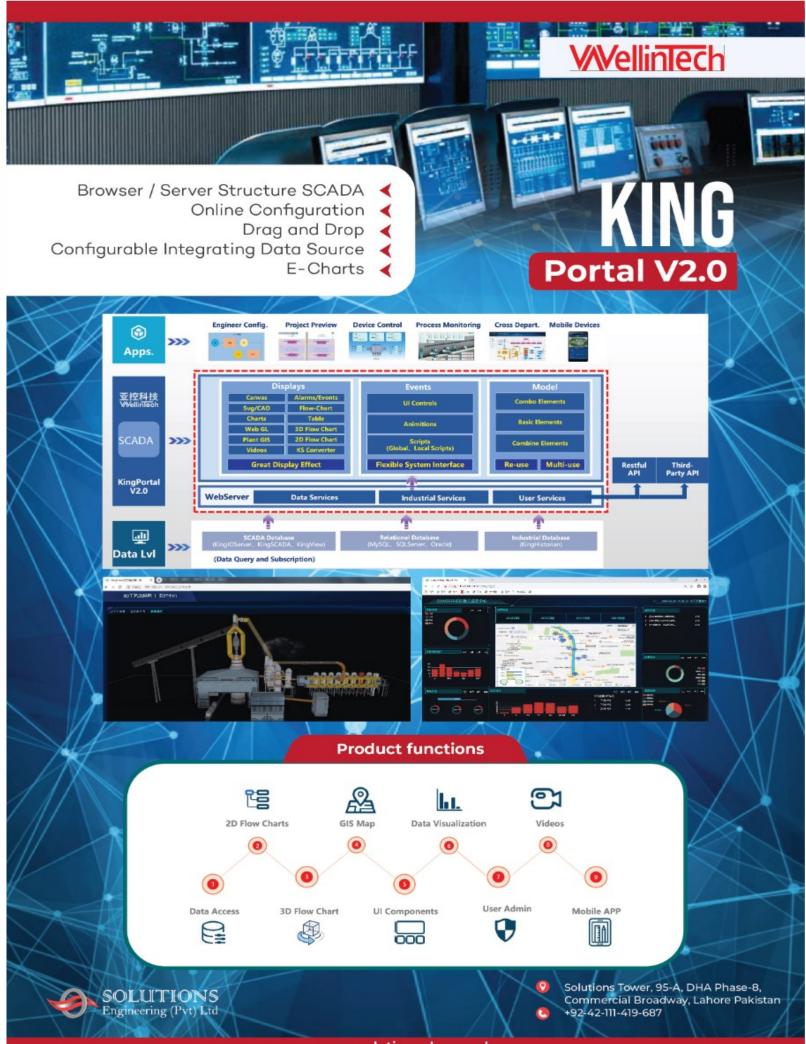












How can Pakistan resolve its power sector woes?

mongst the plethora of challenges inherited at the time of assuming power, one of the pressing challenges that the incumbent government had to deal with was a burgeoning circular debt in the power sector. Fast forward two and half-years, the issue has further aggravated to an extent that the national exchequer is at risk of losing billions of dollars in case of default of capacity payments to IPP's.

The recently announced hike in electricity tariffs by Rs1.95 per unit poses a significant threat to Pakistan's economy at a time when the textile exports were gradually picking up after a hiatus owing to the global Covid-19 lockdown. The inflated electricity costs will scale up input costs making the exports noncompetitive in international markets. It is perturbing to observe that in the last eighteen months alone, NEPRA has revised power tariffs twenty times citing monthly fuel and quarterly adjustments. Though in its official statements, the incumbent government blames "landmines" left by the previous administration for the power sector's perennial issues yet the origins of this crisis are deeply embedded in the reckless and uncoordinated energy policies followed for the last twenty-six

Pakistan's first energy policy was formulated in 1994 (almost 47 years after independence) which is a clear testament that energy conservation was under no circumstances a priority of its policymakers. Owing to poor governance and a short-sighted approach, Pakistan's energy resources have been squandered for decades due to which the nation is confronted with a serious power crisis that has crippled the growth of the manufacturing and services sector and disrupted power supplies in communities and households across the nation. From an economic perspective. it is completely unnerving to witness that the circular debt that stood at Rs.1.2 trillion in 2018 presently stand at a giant Rs.2.3 trillion (as of December 2020),

primarily due to the massive subsidies doled out by the government equating to Rs.477 billion during FY-20 alone and an ever-increasing capacity payments that continue to haunt the cause of costeffective energy production.

As per a study conducted last year by an Australia-based Institute for Energy Economics and Financial Analysis, the capacity payments to power generators could touch Rs. 1.5 billion (\$9 billion) by June 2022 due to massive investments

By Syed Abdul Rahman

indexation to induce investors, ultimately created grounds for the massive increase in electricity tariffs and circular debt due to currency exchange rate fluctuations. The Energy Policy of 2009 was again short-sighted in acquiring rental power plants which still evaporate billions of rupees from the national exchequer without producing a single unit of electricity. As per the State Bank of Pakistan's (SBP) report published in July 2019, the capacity payments to IPP's



in Thar Coal Power Project and CPEC projects. As per the report submitted by the Committee for Power Sector Audit. Circular Debt Reservation, and Future Roadmap in March 2020 over the state of the power sector in Pakistan, the IPP's have been earning 50% to 70% of the annual profits in contravention to the 15% limit set by NEPRA. The IPP's established under the 1994 power policy comprising a pay-back period of two to four years reaped profits averaging 18.26 times the initial investment. The energy policy of 2002 that guaranteed capacity payments and unlimited dollar

were 60% higher than FY 2018 which kept the electricity tariffs on a higher side for end consumers, despite the substantial decline in fuel costs.

In the same way, at a time when the economists are urging to improve Pakistan's ranking in the Ease of Doing Business index, a study by the World Bank reveals, 66.7% of the businesses in Pakistan consider electricity shortages as a more significant impediment to sustainability than corruption (11.7%) and crime/terrorism (5.5 %). As per estimates, the country loses 2% of its GDP due to the existing energy crisis.

Energy Crisis

The Pakistan Economic Survey 2019-20 reveals a 64% increase in electricity generation capacity which spiked from 22,812 MW in June 2013 to 37,402 MW in June 2020. Despite this increase, the country is confronted with an average shortfall of 4000-5000MW which is an offshoot of poor governance as the IPP's are unable to generate electricity as per their generation capacity. The electricity demand did not scale up as it was expected to do even before the Covid-19 lockdown. Keeping in view these pertinent factors, there is a dire need to induce reforms into the energy sector to scour the country of this looming energy

Holistically, to subside the issue to circular debt the policymakers need to take pertinent steps to minimise transmission and distribution losses. In this regard a key solution is to upgrade the fragile transmission and distribution networks through public-private partnerships as adopted by China.

Though the government needs a complete privatisation of DISCO's, yet it will not remain a feasible option in Pakistan as the private investors will seek a neo-liberal profit maximisation model to garner more profits and will be least interested in minimising the electricity tariffs. Inducing private investors to reduce the pilferage and losses in transmission and distribution networks through gradual up-gradation of infrastructure and more rigorous enforcement for bill collection may help reduce the burden of spiraling circular debt. The corporatisation of WAPDA remains another solution to these woes. but it will take some time for the restructuring of WAPDA as a corporate entity and the question remains whether the government will risk their votes by taking over this hard decision expected to invite public resentment.

To counter the upcoming debt trap in the power sector the policymakers need to renegotiate the loan terms for the \$35 billion CPEC energy projects which currently stand at LIBOR +4.5% to LIBOR +2%, and also restructure the maturity of loans from the existing tenure of 10 years to 20 years. The question remains whether the Chinese investors will give this interest rate concession to Pakistan at a time when hate-mongering is on the rise against Chinese products causing a significant dent in its economy. It is plausible to induce the latest technology into the sector to enhance the energy produced to generate maximum energy output at minimum input costs. Paradoxically, energy efficiency can be used as a tool to minimize both the consumption and generation of energy needed to fuel the economy. There is a dire need that those at the helm of affairs devise and implement policies and mechanisms to counter this power crisis, and regularly monitor the repercussions of these policies to control any unsolicited diversion.■

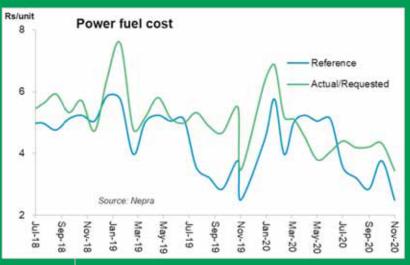
Power tariffs: Merit keeps missing

For the fifth month running in FY21, the monthly Fuel Cost Adjustment (FCA) allowed by the regulator has fallen short of what was requested by the Central Power Purchasing Agency (CPPA). On the surface, this totals to a disallowance of Rs15 billion in five months and may not look a great deal. But as is the case with most things in the power sector, there is more problem beneath the surface than on it.

The disallowance has by and large been on account of disregard to the Economic Merit Order as stipulated by the NTDC. While the power generation mix has visibly changed for the better over the last three years, thanks largely to the power plants conceived by the previous government, the same has not necessarily led to higher compliance in terms of merit order generation.

Case in point is 40 percent share of hydel generation in November 2020 which was referenced at 46 percent in tariffs, or 17 percent share of natural gas in October, when it was referenced at 18 percent. This is what has been going on for months, and while there is provision in the tariff mechanism for changes in actual fuel prices, much of the impact is instead forced by deviation from the referenced power generation mix - and little is due to changes in fuel base price.

Furnace oil-based power generation will make its way out as the winters take over, as evident from almost negligible FO based generation in November. The trend will likely continue till March, and then it will be back. It will be back not because of merit, but mostly because of the way the system has been



built and run. There will be multiple excuses offered for the furnace oil to be back in the mix, of which the transmission constraints to cater and evacuate more power from the more efficient plants based on cheaper fuel sources, will be the first. No less than Rs65 billion worth of FO has been burnt for power generation in the last 12 months, of which very little sits on merit. Nepra has time and again asked for adequate response from the CPPA and NPCC, which has been short of satisfactory. Mind you, even the adjusted allowance for all FO and HSD based generation is subject to adjustment based on the final outcome of the ongoing suo moto proceedings against RFO based IPPs. Winters will once again put this to the backburner, with another storm brewing, which could hit hard, should the court decision sway the other way.

ABB revolutionizes LV switchgear with breakthrough technology for next generation of electricity distribution

NeoGearTM low-voltage switchgear - a technological breakthrough by ABB is safer, smarter and more sustainable. maximizing efficiency and reducing costs for tomorrow's digitalized industries

- ABB has reimagined switchgear essential technology for safe energy distribution and motor control.
- NeoGearTM is a future-proof, digital solution that brings new functionality, productivity and efficiencies to industrial infrastructure in an electrified future.
- Breakthrough laminated bus plate technology, which until now could be found in aircraft, automobiles and on space stations.

ABB is a leading global technology company that energizes the transformation of society and industry to achieve a more productive, sustainable future. By connecting software to its electrification, robotics, automation and motion portfolio, ABB pushes the boundaries of technology to drive performance to new levels. With a history of excellence stretching back more than 130 years, ABB's success is driven by about 110,000 talented employees in over 100 countries.

ABB's Electrification Business Area is a global leader in electrical products and solutions, operating in more than 100 countries, with over 200 manufacturing sites. Our 50,000+ employees are dedicated to delivering safe, smart and sustainable electrification. With ABB AbilityTM enabled digital solutions at its core, our portfolio protects, connects and



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ABB's low-voltage switchgear has been the product of choice since 1972. With NeoGearTM ABB introduces the next innovation leap in switchgear technology for safe, smart and sustainable electrification.

NeoGearTM is ready to help customers across process industries to manage changing external dynamics and realize new opportunities in their working environments. Central to NeoGearTM is its laminated bus plate technology. which replaces traditional horizontal and vertical busbar systems. This innovative bus plate technology provides e.g. arc safety by inherent design. Combined with the connectivity and intelligence of the ABB AbilityTM platform, NeoGearTM is an unrivalled solution for industry.

Committed to writing the future of safe, smart and sustainable electrification, during 2020 ABB Electrification Innovation Week, ABB launched NeoGear in China: a revolution in low-voltage switchgear and the first the electrification industry has seen for more than three decades.

Successfully trialed at sites across Switzerland and China, NeoGear deploys ABB's laminated bus plate technology, which replaces traditional horizontal and vertical busbar systems.

The innovative bus plate technology combined with the connectivity and digital capabilities of the ABB Ability™ platform, make it an unrivalled solution. NeoGear is the safest option for operators with no exposure to live parts. It reduces the physical switchgear footprint by up to 25 percent, increases cooling efficiency to reduce heat losses by up to 20 percent, and reduces overall operational costs by up to 30 percent, due to more efficient condition monitoring.

This hardware development is complemented by advanced digital capabilities. Digitalization is changing



Corporate Corridor

how industries use electricity in their machinery, factories and operations: driving them to extend the lifecycle of their assets; modernize equipment to improve safety and efficiency; and to shift towards more sustainable and responsible business

Against this backdrop, the ABB AbilityTM enabled NeoGear provides a complete and scalable solution for new projects, system upgrades or migration from legacy systems, to innovate and prepare for the future of electricity distribution and motor

NeoGear's digital capabilities include real-time condition monitoring and predictive maintenance, remote assistance, fault and solutions diagnostics and data analytics for Industry 4.0. ABB Ability™ Condition Monitoring for on-site electrical systems is included, helping customers gain operational efficiency and bring unprecedented flexibility.

Key benefits

- Revolutionary design eliminates hazardous exposure to live busbar parts (Arc ignition protected zones) and keeps maintenance personnel safe
- Reduced risk of arcs caused by mechanical failures slashes maintenance down time
- Up to 92% fewer busbar parts compared to traditional busbar systems
- Up to 25% shorter switchgear footprint due to higher module stacking density reduces CAPEX cost for switchgear
- Up to 20% less heat dissipated saves energy and lowers cost thanks to excellent cooling efficiency
- State of the art module contact system design for high performance and durability

Key features

- Modular low voltage switchgear with performance options up to 400/415 V, 3200 A and 80 kA
- Certified type tested design according to the IEC 61439-1/-2 and IEC 61641 Ed.3
- Passive arc protection criteria 1 to 7, tested acc. IEC TR 61641 Ed.3 up to 400V, 80kA, 500ms
- Laminated bus plate technology for busbar system up to 3200 A/80kA 1s
- Withdrawable and plug in functional units for motor protection or energy distribution
- Future release phase will cover higher ratings and increased functionalities

Digital option

- Integration of temperature sensors for critical busbar joints at air circuit breaker (ACB) incomer termination and power contacts of functional units
- Current and voltage sensing through ABB's smart electrical devices such as motor controller M10x or UMC100.3 and circuit breaker Emax 2 and Tmax XT and more
- Integrated data collection and data analysis with ABB Ability™ Condition monitoring for electrical systems for onsite access through secure browser technology
- Connectivity to your plant monitoring and control systems using Serial (Modbus RTU, Profibus DP) and Ethernetbased protocol (Modbus TCP, Profinet, IEC 61850)
- Cloud-based monitoring option with ABB Ability™ Asset Health for electrical systems

For more information visit https://go.abb/electrification

PPAF and Taragee Foundation plant 80,000 trees in Balochistan



Taragee Foundation with the support of United Nations Development Program (UNDP Pakistan), Pakistan Poverty Alleviation Fund - PPAF, Forest and

Wildlife Department and Government of Balochistan,

initiated a mass tree plantation campaign called "Chand Meri Zameen - Phool Mera Watan" The drive targets multiple cities of Balochistan including Quetta, Pishin and Nushki. As part of the campaign close to 15,000 plants will be planted in Quetta, 35,000 in Maseelakh,

Band Khushdil Khan and 10,000 plants each in Pishin and Nushki. The campaign aims to bring together various stakeholders including Government of Balochistan, local and International NGOs, agencies, student body and general public to carry forward the vision of Prime Minister Imran Khan of a Clean and Green Pakistan.

Pakistan Poverty Alleviation Fund supported Taraqee
Foundation in their ambition to transform the deserted
locations of Balochistan into hub of greenery. PPAF provided
gardening equipment and logistical support to its partner
organization for the effective implementation of this program. Through the tree plantation drive PPAF has tried to reinforce the fact that trees are in fact a natural capital. Currently the tree plantation drives are active in three targeted districts and to officially mark the beginning of this campaign, an inauguration ceremony was arranged by

The inauguration ceremony was attended by government officials/community members; including Ms. Adnana Rao Manager ESMU PPAF, DIG police Rakshan Division Mr.Javed Jaskani, Commandant Noshki Malatia Col.Asif, Ex.Minister Haji Ghulam Dastigir Bedini, President Pakistan Union of Journalists Shehzada Zulfigar, Mr. Qurban Gharsheen Social Activist/ Deputy Secretary Sports & Comp.; Culture PTI/CEO BEEJ organization, local community mem-

bers and members of Hindu Business community in order to provide support to the noble cause.

The Mass Tree Plantation Campaign "Chand Meri Zameen - Phool Mera Watan" will be executed with complete zeal and the responsibly for the maintenance of these 10,000 planted saplings has been undertaken by SP Police Noshki, Javed Gharsheen■

Environment

Pakistan set to complete one billion trees plantation by mid year

Pakistan is set to achieve one billion tree plantation target of its Ten Billion Tree Tsunami initiative by the middle of the current year, a meeting of the Committee on Climate Change chaired by Prime Minister Imran Khan was informed on Monday.

The meeting was also informed that emission growth was nine percent below Business as Usual baseline and also below the NDC (Nationally Determined Commitments).

Foreign Minister Makhdoom Shah Mahmood Qureshi, Minister for Planning Asad Umar, Minister for Power Omar Ayub Khan, Minister for Water Resources Muhammad Faisal Vawda, Chief Minister Punjab Sardar Usman Buzdar, Chief Minister Khyber Pakhtunkhwa Mahmood Khan, Chief Minister Balochistan Jam Kamal Khan, SAPM Malik Amin Aslam, Minister of State Zartaj Gul, SAPM Dr. Moeed Yousaf, and senior officials were present during the meeting.

Prime Minister Imran Khan while appreciating the efforts of Ministry of Climate Change directed to actively look into the possibility of net zero emissions for Pakistan which may become possible with enhancement of the carbon sequestration potential.

Underscoring the need for putting in place Early Warning System to mitigate impacts of erratic climate change, the Prime Minister also stressed upon the need for water treatment plants to purify contaminated surface water of the rivers.

The Prime Minister expressed satisfaction over the progress of phase wise Ten Billion Tree Tsunami Programme and directed for ensuring complete transparency, including



actively engaging SUPARCO, for satellite imagery in the execution of Ten Billion Tree Tsunami Programme across the country.

The meeting reviewed the latest inventory reserves of Green House Gases (GHG) and progress made on Ten Billion Tree Tsunami Programme.

It was informed that the climate friendly shift had been made possible due to increased forest cover as a result of successful Billion Tree Tsunami project in Khyber Pakhtunkhwa and the ongoing Ten Billion Tree Tsunami Programme across the country.

SAPM on Climate Change Malik Amin Aslam informed the meeting that the



deforestation rate had significantly been reduced from 12000 hectares/year to 8000 ha/y from 2012-2016 and will further fall with 10BTT success.

The meeting was informed that Pakistan was contributing less than one percent in global emission. The overall ranking of the country vis-à-vis total emissions has shifted from 135 in 2015 to 133 in 2018 on Per Capita ranking.

Highlighting other successes, SAPM informed the meeting that Pakistan has increased its mangrove cover by 300 percent during 1990-2020 which is a strong carbon sequestering tool.

It is the largest mangrove cover increase in the world.

The meeting was informed that the country is ranked as 8th in terms of Climate Vulnerability Ranking and is faced with threats of rain variability, urban flooding, increased temperature and formation of glacial lakes.

SAPM Malik Amin Aslam also updated the Prime Minister about the progress of 10 Billion Tree Tsunami.

The Committee was also briefed that the Consortium of three international agencies, including WWF, IUCN and FAO have already started their work for Third Party monitoring of Ten Billion Tree Tsunami Programme.

The meeting was informed that 80,000 jobs were offered during the COVID-19 under 10 BTT project.■

Pakistani student achieves highest score in ACCA exam

Pakistani student Zara Naeem achieved the highest score globally in the exam for Financial Reporting for the Association of Chartered Certified Accountants examinations held in December 2020.

A student at the SKANS School of Accounting in Lahore, Zara was among the 527,000 students who undertook the examination from 179 countries.

Thanking the nation for the encouragement and appreciation she received, the ACCA student also thanked her father for the education, training and motivation he provided that eventually ensured her success.

As for future aspirations, Zara wishes to embark on her own business journey by taking this success as a stepping stone to winning the trust of international businesses and clients.

Wooing Pakistan

had great expectations but Pakistan is always more than what I expect," said the Italian ambassador Andreas Ferrarese in a recent meeting at Dawn's office. Amid the usual flowery words of Pakistan being a country with great traditions and a young population with positive energy, the ambassador expressed interest in deepening ties between the two countries.

At \$1.5 billion, Pakistan-Italy trade is a below its potential. "I was in Lebanon and with its population of four million people, trade was \$1.2bn. So there is a lot of room for bilateral trade to grow."

Pakistan's main exports are of textile, leather, rice and ethanol. They stood at \$731m in the last fiscal year. Imports were \$521m. They were mostly of machinery, petroleum products, vehicles, iron and steel and pharmaceuticals.

"We have a community of 200,000 Pakistanis in Italy. About 140,000 are documented and 60,000 are being documented," said the ambassador. With families back at home, Pakistanis in Italy sent remittances of \$452.8m in 2020, accounting for a fifth of inflows from the European Union, according to data from the State Bank of Pakistan (SBP).

So why is Italy with an economy roughly seven times of Pakistan wooing us? The answer lies in Pakistan's potential to modernise its industry, particularly the textile sector, great scope for green energy, big and growing consumer market and its cadre of the wealthy.

Two-way tourism

Speaking from his experience as the person who used to write the official travel advisory of Italy, he spoke of the ways Pakistan can attract tourists.

Pakistan is not for the middle man. Keeping in mind certain behaviours that may offend local sensibilities, we do not pose major limits for Italians wanting to travel here," he said. Italians have extreme tourists such as those wanting to climb the Himalayas. Outlining how the middle class can be attracted, the ambassador spoke of the need for infrastructure.

'Twenty years ago, the salary in Pakistan was 10pc of the Italian salary - now it is 45pc, 'says Italian ambassador Andreas Ferrarese

"People want a comfortable hotel in a scenic spot with English speaking staff and transport available to buy your Pashmina shawls. Even those who are not very rich can then come."

But it is not a one-way street.

Italy wants to attract rich Pakistanis who spend their summers abroad as well.

"You have 30m people that are rich," he said, speaking about the competition among European countries that vie for Pakistani tourists - leisure as well as health. Well-off people go to foreign hospitals. "Why should someone go to London for an operation and not Milano," he queried.

"About 5,000-6,000 Pakistani tourists visit Italy every year. Most go to other countries and that is not positive for us."

The student outflow

Given that about 30,000-35,000 students go abroad to study every six months, countries are interested in attracting students from Pakistan. Until recent times, Italian universities taught in the national language, which was a bottleneck.

But now more courses are being offered in English. Italy offers good public-sector universities that cost roughly as much as a degree from the Lahore University of Management

— By Fatima S Attarwala

Sciences or the Indus Valley School of Arts and Architecture.

However, Italy is still working on developing an infrastructure to process large volumes of students coming in. Sifting through actual students and those using education as a ploy to find a way into the country to settle and flip pizzas is an arduous labour-intensive task, the ambassador explained. While a foreign student is allowed to work 18 hours a week, they are not allowed to enter the job market on a student visa.

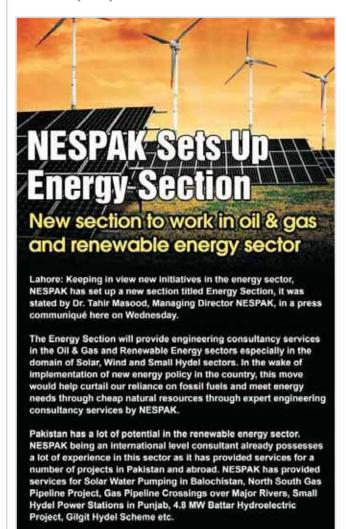
An image problem

In the ambassador's view, Pakistan's real problem is its image. "Italy has the mafia but it is not like if you went into a restaurant someone will shoot you. The mafia is 20,000 people while the rest of 60m people are normal".

Positive messages would strengthen your image, he explained. "There are more dangerous countries that I have worked in but their image is an exotic one."

Nor is the salary difference as marked as one would assume. "Twenty years ago, the salary in Pakistan was 10pc of the Italian salary - now it is 45pc," said the ambassador, much to our surprise. "If you want a quality worker, you have to pay. At the same level of skills, the salary is not so much different." Add to that the fact more people speak English here than in, say, Vietnam, he added.■

Courtesy: Daily Dawn



Pakistan PM Imran Khan launches urban forest project to cool down Lahore's concrete jungle

Prime Minister Imran Khan inaugurated the urban forest at Jilani Park in Lahore - one of the most densely populated cities of Pakistan. The government announced the development of 51 urban forests based on the Miyawaki method as part of efforts to restore biodiversity and fight the climate crisis.

Reverse the ecological disaster

Lahore, which was once known as the city of gardens, has been turned into a concrete jungle and "it is now time to reverse this ecological disaster", said special assistant to premier on Climate Change, Malik Amin Aslam. Trees are vital to cool down the urban heat island effect in Lahore as recent researches revealed that temperature in Pakistan's urban hubs was one degree higher as compared to the rest of the country, he said.

PM Imran Khan said that urban trees could help cut air pollution in the city where the silent killer smog and air pollution poses serious health risks and reduces average life expectancy. "Lahore's forest cover has been reduced by 70 per cent in the last 12-13 years" which is causing the smog and other health issues, he said. The government aims to reverse the effects of environmental neglect during Lahore's urban development, the premier vowed. He also urged the city authorities to involve school children in the plantation project to boost awareness.

Lahore's Parks and Horticulture Authority (PHA) is heading the project under which 51 urban forests will be developed in the city over 153 kanal land.

PM Khan said the selection of 51 mini-forest sites for the Miyawaki urban forestry project is an "impressive effort" as the forests could be grown in 10 years instead of 50 years. The prime minister also inaugurated the 2021 spring plantation drive in Lahore as the country aims to plant 10 billion trees countrywide by 2023 to increase the forest cover, create new



green jobs and tackle climate change.

What is Miyawaki method?

The Miyawaki method of plantation is based on the work of a Japanese botanist Akira Miyawaki. Under this afforestation technique, the miniature forests can grow 10 times faster, become 30 times denser and 100 times more biodiverse than those planted by conventional method plantation techniques. Miyawaki forests can grow into mature ecosystems in just 20 years as compared to the 200 years it can take a forest to regenerate on its own, studies suggest. Urban forests can help to improve people's health, reduce the harmful effects of air pollution, and are integral to climate change mitigation, experts

NFEH, Naya Nazimabad join hands to do spring plantation campaign

The National Forum for Environment and Health (NFEH) and Nava Nazimabad have jointly commenced the spring tree plantation drive.

A special ceremony was held in this connection here at Naya Nazimabad.

Before formally commencing the plantation drive, Ali Habib Medical Centre was also inaugurated at the project's site where deserving patients were given free of charge treatment.

Some 5,000 sapling of vegetable and fruit trees will be planted in Naya Nazimabad. An urban forest area has been developed for the purpose.

Speaking on the occasion, Cricketer Sarfraz Ahmed said that every citizen was under solemn obligation to plant trees and take care of them so to beautify Karachi by promoting greenery. He said that tree plantation could save the people from any future heat wave. He said that everyone was under obligation to improve the environment and take care of the sanitation.



Speaking on the occasion, NFEH President Naeem Qureshi appreciated the decision of the administration of Naya Nazimabad to do tree plantation on a large scale.

He said that over 10,000 tree saplings would be planted in the city under the spring plantation campaign as due care

> He said that in this regard the NFEH would render all out support to every organisation taking part in the drive to promote green cover

would be taken for nurturing them.

On the occasion, Chief of Naya Nazimabad Project Samad Habib presented shields to Naeem Qureshi and other guests of the event. Plantation of mango, pomegranate, Jamun, Cheeko, jujube trees was done.

Others who were present on the occasion include Cricketer Anwar Ali, Finance Director of Naya

Nazimabad Muhammad Talha, Senior Manager Ahmar Rizvi, NFEH Vice-President Engineer Nadeem Ashraf, Secretary-General Ruqiya Naeem, Mustafa Tahir, Ghulam Kabria, CSR Club President

Interview

The State of Steel

In conversation with Hadi Akberali, COO Strategy, Amreli Steels



Would you agree that even before Covid-19 struck, steel as an industry was already experiencing difficulties?

HADI AKBERALI: The period between 2014 and 2017/2018 was a good one for steel and we experienced increases in both margins and revenues. A lot of construction was going on and many CPEC projects really got going then. During this period, there was a lot of interest in steel, be it from current players who were expanding or new players entering the market. This was also a period when a lot of the macroeconomic indicators were being fuelled, such as pegging the dollar to Rs 100 and keeping interest rates low, all of which ultimately resulted in a very high deficit. When the new government assumed power, Pakistan had to go back to the IMF, which insisted that all the remedial measures be taken upfront before releasing any money, and as a consequence, the economy crash landed. The rupee was devalued by 50%, interest rates doubled, imports were curtailed. All this put a tremendous amount of pressure on steel (as well as other industries) and reduced our margins. Steel is a highly leveraged, high fixed cost industry. Most steel manufacturers have a lot of loans which they use as working capital, and the doubling of interest rates really affected us. All our raw material is imported and the devaluation of the rupee brought on huge cost increases and because the economy had ground to a halt, we could not pass them on to the consumer. So we went from doing really well for three to four years to nose diving, as our margins pretty much disappeared. In fact, last year we made a loss.

By Mariam Ali Baig

Did you have to lay off people?

HA: No; in steel the payroll cost is not a very high percentage of the total cost. We were grateful that we did not have to lay off people either due to the economic downturn or Covid-19.

Do you think the current government's emphasis on the construction industry as a way to boost the economy is a step in the right direction?

HA: Yes, because construction employs a lot of people and has a lot of allied industries. Boosting construction is a tried and tested way to revive an economy. China did it and so have Brazil and India. However, those economies had big government spending programmes to back them. Unfortunately, our government does not have that kind of money, so they decided to put together an incentive package for the private sector to incentivise construction.

Has the government announced any incentives for the steel industry?

HA: No. The thinking here is to incentivise builders and this will generate demand for all allied industries. The incentives are targeted towards people who are building or buying.

What is Amreli's market share?

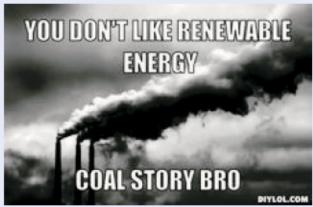
HA: About 13%. Steel is a very fragmented market. Our main competitor would be Mughal Steel which have a similar market share. The rest are smaller players; from a revenue perspective, Amreli and Mughal are at the top and everything that follows is 50% or lower. One of the problems with having so many small players is meeting quality standards.

Is Amreli involved with CPEC?

HA: Yes, we are the largest suppliers to Chinese contractors as CPEC is mostly carried out by Chinese firms.

Is there a Steel Association to look out for the interests of the industry?

HA: There are several. We are a very fragmented industry and a lot of the smaller players do not share the same vision we do in terms of how the industry should develop and how we can become globally competitive. We broke away from these associations and created the Pakistan Association of Large Steel Producers which represents about 60% of Pakistan's primary steel capacity and is made up of like-minded companies that want to go beyond just talking about their own benefits and discuss where the industry is heading and the policies and frameworks the government should devise to implement a 10-year vision for the industry.■



By Nasir Jamal

The upward spiral of the energy bill

akistan's electricity sector is in deep trouble. The recent nationwide blackout on the night of January 9 is just another reminder of the crisis facing the collapsing power sector. But for an average consumer, the most visible impact of this crisis has been their everincreasing electricity bill.

A report published last week suggested that the government had decided to raise the base electricity tariff by Rs1.90 per unit from this month. The announcement, it is said, has been delayed in view of the increase in the fuel prices. The power price increase is agreed to bring the International Monetary Fund back on the table for the revival of the suspended \$6 billion economic stabilisation deal with the multilateral lender.

The power-sector regulator, National Electric Power Regulatory Authority (Nepra), had recommended a base tariff hike of Rs3.30 per unit and the prime minister had agreed – as if he had a choice - last month to implement it and pass it on to the consumers in phases. Thus the differential will be passed on to the households in the next quarter.

Indeed, the present government cannot be blamed for the current situation. The previous governments since the 1990s should share most of the blame. Likewise, no single factor or policy or decision can be held responsible for the electricity prices we are forced to endure today; it is rather an outcome of many different policies, pressures and decisions at every step of the power supply chain. Some like to selectively blame the expensive agreements with independent power producers as others look for the devil in the imported fuel used for generation. Still others link the ever-increasing prices to the combination of massive transmission and distribution losses and widespread theft and so on. But the question is: do we have what it takes to reduce the exorbitant costs of power generation, transmission and distribution to make electricity affordable for the households and industry, as well as stop

Pakistan's electricity sector is in deep trouble. The recent nationwide blackout on the night of January 9 is just another reminder of the crisis facing the collapsing power sector. But for an average consumer, the most visible impact of this crisis has been their ever-increasing electricity bill.

plan by Australia's Institute for Energy Economics and Financial Analysis (IEEFA) warned that Pakistan would "risk locking" itself into expensive, long-term overcapacity as a result of overoptimistic energy demand growth forecasts.

"The government's principle of affordability cannot be met if the power system is locked into long-term overcapacity. Capacity payments to plants lying idle are already an issue and will become even more unsustainable if more overcapacity is locked in," the IEEFA study argued. In other words, the consumers will end up paying higher prices if the plan was implemented.

The IGCEP 2047 has been the cause of much debate over the past months with stakeholders concerned about locking in unsustainable forms of generation capacity based on dirty fuels like indigenous coal and liquefied natural gas without taking into account their impacts on the environment or human health. The provinces had also cited concerns that the plan undermined the



the build-up of the circular debt, which has already crossed the Rs2.3 trillion mark? Apparently, the planners appear devoid of this capacity.

Take the example of the Indicative Generation Capacity Expansion Plan (IGCEP) 2047 developed by the National Transmission and Despatch Company back in April last year. A review of the environment-friendly cheaper generation technologies such as hydro, solar and wind power.

The model assumptions and methodology of demand forecasting was also widely questioned by many. Nepra returned the report to the National Transmission & Despatch Company (NTDC) with a list of directives for its revision that would be needed for its approval. However, NTDC is yet to return with the revised version. Sources say the Grid Code requires the submission of a new long-term electricity plan every year. "So even if a revised document is submitted now its value will be very short-lived," a former NTDC official says.

The energy mix proposed in the IGCEP is heavily skewed towards expensive thermal sources of generation such as Thar coal, imported gas etc. Not only are these sources heavily polluting but are also economically unfeasible. IGCEP's power demand growth forecasts are too high when the overcapacity in the power sector is already a big issue, which is getting worse amid Covid-19 economic downturn. IGCEP forecasts assumed that the "gross domestic product (GDP) growth would increase to 5.5pc by 2025 and remain at that level until 2047"

"The IGCEP plans for very significant levels of stranded (RLNG and coal-fired) assets by overestimating power demand growth," the IEEFA study reads as it criticises the plan's declining contribution of renewables in the generation mix. "While IGCEP includes additions of renewable energy to meet the government's renewables target by 2030, renewable energy is neglected in its model after 2030. The overall contribution of renewables to power capacity drops from 31 per cent in 2030 to 23pc in 2047 according to the model. Modelling the declining contribution from renewables post-2030 makes the IGCEP look very out of touch with current power trends," the study observes.

Pakistan has excellent renewable energy resources - wind and solar, which are already the cheapest sources of new power generation and will be even cheaper throughout the 2030s and 2040s. IGCEP, however, instead of utilising these sources to reduce reliance on fossil fuel imports, focuses on more expensive domestic coal-fired power. "The Pakistan government's assertions that the power plan is based on the principles of sustainability and affordability have largely failed to live up to the principles," the study's authors argue.

Unless NTDC revises its future projections and focuses more on cheaper and sustainable renewables, the chances of reduction in electricity prices will likely remain low even in future.

■

Zero-rated sector seeks increase in grid ceiling

By Hamid Waleed

The zero-rated sector sought an increase in grid ceiling from 5MW to 6.5 MW for B3 Industrial Consumers as it would help boosting up exports, augmenting foreign exchange earnings and creating additional employment opportunities, said Power Division

They said the request for increase in grid ceiling has been made in the backdrop of Jan 21 decision of Cabinet Committee on Energy (CCOE) to discontinue gas supply to the Captive Power Plants from 01.02.2021 to nonexport industry from 15.03.2021 to the export industry and finally the industry having cogeneration facility. The whole process is likely to be completed by December 2022.

Meanwhile, a notification dated 01-02-2022 from Power Division has directed the Chief Executive Officers (CEOs) of the distribution companies (DISCOs) to continue supply to CPPs during the period of closure of gas supply in accordance with the CCOE decision. If required, the notification added, the DISCOs would ensure timely arrangements to supply the requisite power to the captive power consumers and also to those requiring enhancement in the sanctioned load by revising the sanctioned load and infrastructure immediately under rules and as per the CCOE enclosed decision with full facilitation, Also, DISCOs would proactively coordinate with National Power Construction Corporation (NPCC) to arrange for the demand enhanced demand. The DISCOs and NPCC would chalk out the contingency plan in this regard in case of sudden increase in demand of the respective DISCOs, besides ensuring smooth supply of electricity.

When contacted, Aamir Sh, a leading exporter, said although the Power Division has tried to cover the supply issues of the sector through this notification, however, the present capping of 5 MW for B3 industrial consumers and requirement for separate grid connection for load beyond 5 MW is obstructing further investment. Even meagre additional load of 500 kW to 1 MW entails heavy investment and financial cost, he added. According to him, such initiatives are frustrated due to enormous investments involved in getting additional load. Pecuniary constraints not only stall production capacity enhancement but also discourage the industry to switch over from gas to grid based electricity.

It may be noted that the government has undertaken a series of measures to upsurge exports of the country. These initiatives have largely contributed to uplifting exports of textile products by about 23% in December 2020 as compared to the corresponding period of the preceding year. Many industries are currently undertaking new investment initiatives by expanding their existing capacities, reviving closed units and setting up new plants.■

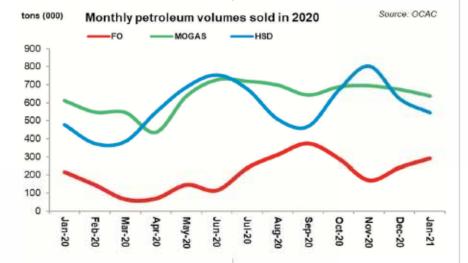


Black oil is back

he power generation mix has been made to shift away from furnace oil as coal and RLNG sources were added to the mix over the last few years. The share of furnace oil in power generation fell from 7.4 percent in FY19 to 3.4 percent in FY20; and the same fell from 5 percent in CY19 to 4 percent in CY20. However, the use of furnace oil by the power sector has again picked up and FY21 so far has seen significant increase in the use of

improvements in COVID-19 situation.

Furnace oil consumption could continue to pick pace as summers approach. Analysts at S&P Global Platts have also highlighted this shift to furnace oil: "A sharp squeeze in domestic gas availability and the surge in LNG prices that has pushed up the cost of gas-based power generation have prompted Pakistan to turn to oil for power, a trend that could result in robust fuel oil consumption in coming months." They have also estimat-



fuel. This is also apparent from the growth in furnace oil sales by the oil marketing companies, which is primarily to the power generation sector.

Furnace oil monthly volumes touched their bottom in March and April 2020 last year, after which they have been rising steadily. The increase is primarily due to increase in demand from the power sector. It is also partly because refineries continue to produce it. And then it is the ongoing gas shortage and the RLNG crisis that has brought it back into the mix. In 7MFY21, furnace oil sales have increased by 38 percent year-onyear. In January 2021, furnace oil sales increased by 35 percent year-on-year, and by 21 percent month-on-month. Higher demand from the power sector despite winters has been due to the shortage of gas. And then the growth in the fuels volumetric sales by the OMCs is also partially being attributed to overall pick-up in economic activity following

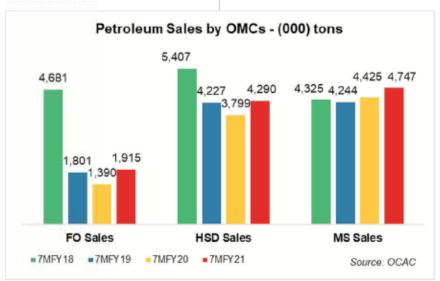
ed that furnace oil consumption could increase by 20 percent year-on-year in FY21 as the gas supply situation was expected to tighten further and the industrial sector's demand to go up. On

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PSO	7MFY21	7MFY20
FO	51%	5196
HSD	48%	45%
MOGAS	42%	40%
Total	46%	45%
APL		
FO	18%	18%
HSD	7%	10%
MOGAS	7%	9%
Total	9%	10%
HASCOL		
FO	0%	3%
HSD	5%	7%
MOGAS	7%	7%
Total	5%	6%
SHELL		
FO	8%	8%
HSD	10%	12%
HOBC	18%	30%
Total	8%	8%

Source: AKD Securities

the price side as well, the coming months could see higher FO imports due to higher cost of RLNG relative to fuel oil.

Other key fuels - diesel and petrol witnessed 13 and 7 percent year-on-year growth in 7MFY21. Sales of the two fuels - diesel and petrol - grew by 14 and 4 percent in January 2021, year-on-year respectively - though the growth was negative month-on-month due to winter months. According to a research note by AKD Securities, one major reason for uptick in diesel (HSD) volumes apart from improved economic activity could be increased use in power generation coupled with the ongoing crackdown against smuggled products which predominantly has been HSD.



Energy Crisis

Chronic energy crisis persists By Salman Siddiqui

he energy crisis has continued to persist in Pakistan at a time when demand for oil and gas is on a rise following a rebound in industrial production and exports in the middle

drocarbons for over a decade now. In the absence of a major discovery for a long time, Pakistan's reliance on imported energy is on the rise particularly



of the Covid-19 pandemic.

"The oil and gas production fell 6% and 4%, respectively, in the second quarter (Oct-Dec) of fiscal year 2021 despite new productions from five oil fields and four gas fields was added in the system." according to a Topline Research report. Earlier, gas shortfall peaked following a drop in temperature to freezing levels in different parts of the country as demand for fuel surpassed supplies by a wide gap. This triggered prolonged CNG fuel crisis for the transport sector and sparked announced and unannounced gas load-shedding in industrial and residential areas.

Besides, the country saw a nationwide power blackout on Saturday January 9 for several hours following a technical fault at Guddu power plant. The additional production from the new oil and gas fields remained insignificant, which was why they failed to offset drop in production from old fields. The situation demanded the government to create an enabling environment for oil and gas exploration firms to expedite efforts to find new oil and gas deposits. The country has seen no big discovery of the

for gas. Industrialists have held the government responsible for the growing gas shortfall in the country. They have requested the government to make arrangement for import of gas during the summer season when the power crisis is likely to re-emerge and cripple industrial production.

They have also demanded the government to develop a policy which would enable the private sector to set up new gas (RLNG/regasified liquefied natural gas) import terminals.

The other day, the government invited bids from oil and gas exploration firms for 20 blocks for finding new oil and gas deposits. However, domestic exploration firms bid for only 15 blocks. This is the second time when the government received a poor response from the exploration firm. Pakistan's oil production during the second quarter of the current fiscal year fell by 6% on a yearon-year basis to 76,331 barrels of oil per day (bopd) due to decline in production from Tal block fields like Mardankhel and Makori Deep by 27% and 31%, respectively.

Oil production during the first half

of FY21 fell at the same rate of 6% on a year-on-year basis. Production from Chanda, Maramzai, and Makori East increased in the range of 5-46%. "Chanda's production increased due to induction of Chanda-5 well. Production from Nashpa increased 7% on a quarter-on-quarter basis as field was on an annual turnaround in the last quarter (September 3-9, 2020)."

"As per PPIS data, five new fields were inducted to production line during the second quarter under view namely Baga (300+ bond; operated by UEP), Saand (100+ bopd; operated by OGDC), Tando Allay Yar SW (90+ bopd; operated by OGDC), Bolan East (800+bopd; operated by MARI) and Mangrio (200+bopd; operated by OGDC)," the research house said.

Pakistan gas production declined by 4% year-on-year to 3,409 mmcfd (million cubic feet per day) as flows from KPD, Kandhkot and Qadirpur fell in the range of 6-18%.

During the first half of the fiscal year, production declined 3% on a year-onyear basis. "During the second quarter, Kandkhkot field's production declined due to lesser offtake from power generation companies. Mari field filled those Kandhkot field's flows as depicted from 12% increase in its production." "Four new fields were added to the production line, namely Saand (7+ mmcfd; operated by OGDC), Tando Allah Yar SW (9+ mmcfd; operated by OGDC) and Mangrio (3+ mmcfd; operated by OGDC) and Baqa (1mmcfd, operated by UEPL), it said.



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Exclusive Interview

We are one of few companies, which have installed micro-grids in Pakistan

Exclusive interview of Waqas Ali Mughal, COO, Renewable Power Pvt Ltd

"We are one of the few companies in Pakistan, who will be installing microgrids in real time with energy storage backup."

Mr. Waqas Ali Mughal, Chief Operating Officer of Renewable Power Private Ltd, said this in an exclusive interview session with the Energy Update in which he talked about the distinguishing work and services of his company in the field of alternative energy in Pakistan.

Energy Update: Do tell our readers about your company?

Wagas Ali Mughal: We RPPL team started the venture with the name of Renewable Power Private Ltd in 2010. Right now, we have been doing a lot of work up north KPK and in SINDH. In Karachi, right now we have signed EPC contracts of 28 MWs of solar energy project. Same way, we have 8 to 10 MWs of solar projects in up north. These projects include solarization of schools, hospitals, and mosques. Apart from this, we also manage micro-grids. We are one of the few companies, which installed micro-grids in the real time with the facility of energy storage backup in Waziristan. One grid is of 700 KWs capacity as we are installing 13 of them. It is a project of PEDO (Pakhtunkhwa Energy Development Organization). We are also doing a 5 MWs project of World Bank that is called Sindh Solar Energy Project. We have also been doing business with the K-Electric being its vendor for solar power.

We are also working on different EPC contracts. We have been working with different companies. Up North, we are working with the Frontier Corps. It is a very unique project as we are going to solarize their headquarters housed in the centuries-old castle that is called Qila Bala Hisar. Earlier, we did a similar project for the 11th Corps.

We have a diversified portfolio as we have also been doing projects related to solar irrigation system including tube wells and drainage system. Overall, we have been doing well as being one of the oldest companies in Pakistan in the renewable energy sector. By Mustafa Tahir



EU: How you ensure quality in the services of your company?

Mughal: As a renewable energy firm, our focus is on QA / QC. We have a proper quality control department that checks everything from start till the end of the project. We have our audit team that audits the system before handing it over to client. In Khyber Pakhtunkhwa, we have associated with a consultancy firm named Barg Engineering. In Karachi, we have been using the consultancy services of Energy Futures Consultant as they also check our systems. So we just hired the best to do the job.

EU: What are your expectations from the government?

Mughal: We need tariff protections from the government. A lot depends on as how the wheeling works in the energy sector of Pakistan. It will be a new game changer in this field.

EU: What is your recommendation to the government about use of solar energy products in Pakistan?

Mughal: Just use the quality products. I would like to recommend to the government to make stringent its policy about the solar products being imported from abroad. This is necessary to promote the tier one products in the country. So everyone will get the chance to buy quality solar products in the

We do everything in a renewable energy project on our own from start till end as we don't outsource anything as against the practice of other EPC contractors.

EU: Do tell us about your other exclusive work in the field of renewable energy?

Mughal: We have also been working with the Meezan Bank, Bank Al-Habib, Sindh Bank for their energy needs.

We do a lot work with the NGOs. We have a diversified portfolio of Rs 03 billion. Right now, we are the only company, which has been able to do a solar energy project in areas of Sindh other than Karachi. One of such project is associated with Benazir Housing Cell in which solar energy systems were provided to 6,000 homes.

We have also just completed the project of solarization of the basic health units in Sindh. We have also been exploring the option of setting up electric vehicles recharging stations in the country and to run them with use of renewable energy.

EU: Do tell us about the CSRrelated work of your company?

Mughal: We are supporting the NED University of Engineering & Technology for establishing the lab on the campus to conduct advanced studies in renewable energy. We also did several solar lantern projects in Thar also as part of our CSR obligations. Up north, we are installing a lot of water pumps to pursue our goals in this regard. We also do solarization of the RO water filtration plants and tube wells. We have also been associated with various educational and religious institutions to support them.

Unloading of potentially harmful cargoes without SOPs under way at port, Sepa tells SHC

By Ishaq Tanoli

The Sindh Environmental Protection Agency (Sepa) on Thursday informed the Sindh High Court that soybean and pet coke consignments were being unloaded at Karachi Port Trust without standard operating procedures (SOPs) and in the absence of any monitoring system for ambient air on the KPT premises and adjacent areas.

In its report, filed on a set of petitions regarding the deaths of people due to suspected leakage of gas in Keamari in February last year, Sepa further submitted that its monitoring and lab analysis indicated that the parameters of particulate matter (MP2.5 & MP10) were exceeding the limits of ambient air quality standards regarding handling of soybean and pet coke.

The two-judge SHC bench headed by Justice Mohammad Ali Mazhar expressed resentment with the police for filing the A-class report (accused persons are unknown or untraceable) in the trial court and not giving any consideration to the statements of affected people. The bench directed the SSP concerned to take action in the light of report submitted by Sepa.

The Department of Plant Protection (DPP) also placed its report before the bench and said that its team did not find any smell or sign of any poisonous gas during inspection of KPT terminal and sampling.

When the bench took up a set of petitions for hearing on Thursday, the director general of Sepa filed the report which said that its team had inspected the ship loaded with soybean imported from the US and observed high intensity of dust emission during the process of unloading.

The team also noted that several containers loaded with hazardous chemicals were also stored on the premises of KPT for last three to four years unclaimed by the consignees as informed by the management of KPT while surrounding area of oil terminal were found untidy and highly polluted with waste generated from oil tankers,

The report further maintained that the main threat to the urban population of the vicinity was from soybean dust and pet-coke piles and also fugitive dust emission in the form of particulate

'Considering the situation and on the observation of the team of Sepa and also lab results of Environmental Certified Laboratory namely Sustainable Environmental Services (SES) Laboratory which indicates the parameters of Carbon mono Oxide, Particulate Matters (PM 2.5) were exceeding the prescribed parameters of Sindh Environmental Quality Standards (SEQS)", it

Sepa in its report also recommended that marine pollution board of KPT should play its proactive role to prevent and control ambient air quality of ports premises and surrounding areas and all oil companies and terminals must prepare environmental management plan/environmental audit report for their operational activities and submit it for review and approval of Sepa.

KPT must handle soybean and pet coke only under strict international standards and regulations at specified places, it further suggested and requested the bench to call final reports from commissioner of Karachi and HEJ Research Institute of Chemistry, University of Karachi, to reach a conclusion.

The DPP in its report said that its four-member team had inspected the ship carrying soybean in order to detect insect pest and disease symptoms injurious to domestic agriculture while sampling for aflatoxin level detection was also made.

Since no insect pest was detected on arrival and the aflatoxin level as per HEJ lab of University of Karachi was in admissible limit, the department issued plant protection release order, it added.

The petitioners approached the SHC seeking directives for the authorities concerned to investigate the incident, take remedial measures and give compensation to the families of those that had died in the incident.■

Sindh alarmed by oil, gas shortage — By Razzak Abro

akistan is facing an oil and natural gas shortage due to a considerable decrease in local production this year. The official data revealed that the commercial supply of oil decreased by 19.8 per cent in the financial year 2018-19 compared to the past years.

The Hydrocarbon Development Institute of Pakistan, under the Ministry of Energy has published the Pakistan Energy Yearbook 2019. It states that the country has seen a 6.7 per cent increase in total energy consumption during the last six years. An increase in consumption of over 130 per cent was witnessed in the government sector, while the increase recorded for the domestic sector was 4.8 per cent during the same period.

The report has noted that Sindh is still the largest contributor of oil and gas in the country. According to the Sindh energy department, the province contributed 60 per cent of the total oil production in the country in 2009.

The Sindh energy department states that a few districts of the province are rich in the production of gas. These include Khairpur Mirs, Kashmore, Ghotki, Dadu, Hyderabad, Sanghar, Sukkur, and Badin. The report said that industries have the highest consumption of energy in the country at 37.1 per cent, while transport is second with 31 per cent. In continuation of the downward trend, the commercial supply of Liquified Petroleum Gas (LPG) declined by 9.5 per cent in the financial year 2018-19 while its import grew by 18.9 per cent. Likewise, natural gas production declined by 1.5 per cent. However, the drilling of new wells in search of fresh reserves and an increase in the domestic production of coal has led to hope for the future.

Natural gas is still a major source of commercial energy supply in the country. It constitutes 35 per cent of the total commercial energy supply. Whereas, oil meets 25.7 per cent of the total energy needs.

According to the 2018-19 statistics, the country has 21.4 trillion cubic feet recoverable reserves of natural gas. However, its production was 3,936 MCF per day. According to the Sindh energy department data, the cumulative produc-



tion of gas was 21,403 BCF, while the balance recoverable reserves stood at 12,746 BCF.

According to the department, the balance oil reserves till June 2019 were 361.76 million barrels. Districts Badin, Hyderabad, Tando Muhammad Khan and Sanghar have sufficient reserves of oil.

The Sindh government and civil society have been expressing serious concern over the rapid depletion of oil and gas reserves.

The common grievance is that the 18th Amendment introduced landmark provisions related to the oil and gas sectors of the provinces but these were not implemented. The Sindh Energy Department wrote to the Sindh Assembly that Article 172 (3) should be implemented in letter and spirit. The Article envisages the vesting of oil and gas equally between the federal government and the provinces. However, oil and gas exploration is being controlled solely by the federal government, which is in contradiction of the Constitution. Sindh Energy Minister Imtiaz Shaikh also voiced similar concerns, saying the Sindh government has no role in regulating oil and gas exploration and development. "The provinces should have representation in the oil and gas-related bodies of the federal government including the Oil and Gas Regulatory Authority (OGRA)",

Sindh govt to set up 200MW power plant

The Sindh government has decided to set up a 200-megawatt power plant based on solid civic waste as primary fuel in Karachi as the city of ports generates around 8,000 tons of waste every day.

The decision was taken at a meeting chaired by Sindh Minister for Local Government, Information, Religious Affairs and Forests Syed Nasir Hussain Shah and Sindh Minister for Energy Imtiaz Ahmed Sheikh on Wednesday.

The meeting decided to develop the project at a fast pace and make it "operational as soon as possible", said a statement issued by the Ministry of Energy. During the meeting, it was highlighted that about 8,000 tons of solid waste was generated daily in Karachi which could produce up to 200MW of electricity.

The ministers said the plan to generate electricity from waste was necessary and through the project, the waste of Karachi could be disposed of in an environmentally friendly manner and electricity could also be produced, the statement added.

Officials present in the meeting said work on the project should be expedited and tariff for the electricity generated from waste should be determined under the alternative energy policy.

Sheikh said work should be done to implement the project in order to generate electricity as soon as possible so that Sindh could be the first province to implement the ecofriendly project. In the meeting, instructions were issued that the scope of project should be extended to other cities of the province so that waste from those cities could also be used in an environmentally friendly manner.

It was highlighted that the landfill site was the most suitable place for the project and "some companies have expressed interest in generating electricity from waste".

Open access in power market

he National Electric Power Regulatory Authority (Nepra) has recently issued its determination on the applicability of open access charges to consumers and has rejected a petition of the Central Power Purchasing Agency-Guarantee (CPPA-G) in this respect connected with wheeling charges.

Buyers or consumer's choice and competition are the basic tenets of capitalist markets. Under open access, the consumer has a choice of procuring or generating his own electricity.

Open access is one of the key instruments for fostering competition, promoting new investments and power supplies, improving capacity utilisation, reducing cost and prices for large customers - industries in particular.

It is achieved through consumer choice of the source of electricity - he can use his own electricity generated at one location and get its surplus transmitted to another location to be used in his own enterprise or elsewhere. However, this is what one may call classical open access.

In competitive markets of industrial countries, the whole power and gas sector is under open access, even for small residential consumers. In regulated markets of developing countries, it is available under certain regulated terms and conditions.

It is these terms and conditions (monetary) of open access that are under contention, which we will focus on in the following.

However, power distribution companies (DISCOs) argue, in technical regulatory jargon, that the buyer pays what they call cross-subsidy, stranded costs and other incidentals such as emergency power.

One would readily understand that there are cross-subsidies in electricity tariff - small residential consumers may pay as low as Rs5 per unit and large residential ones may be paying in excess of Rs22 per unit.

In terms of stranded costs, DISCOs argue that they have made infrastructural investments, which will remain underBy SYED AKHTAR AL



utilised if open access gets on its way and a significant number of large goodpaying and low-loss consumers shifts to this system. This appears to be a genuine argument as well. One may like to support such initiatives as open access but the issue is who pays the burden of this incentive. If DISCOs are not paid for these heads, this will be passed on to other customers - may be poor man's tariff increases, may be subsidies and circular debt increase.

CPPA-G estimates that a reduction of 1% in sales from its system would have an impact, or cause loss, of Rs14 billion. Nepra maintains that the wheeling charge of Rs8 per kilowatt-hour (kWh) is too high, but does not tell what ought to be the correct figure. Instead, it rejects the issue of two main components of wheeling charges altogether.

In India, the corresponding wheeling charges range between INR2 (PKR4) and INR5 (PKR10). A recent regulatory determination for wheeling charges for Maharashtra DISCOM (MSEDCL) allows INR1.31 for stranded cost and INR1.71 for cross-subsidy, with total wheeling charges of INR3.02 (PKR6.04).

Keeping in view a traditional higher cost differential in Pakistan vis-a-vis India, the wheeling charge of PKR8 does not appear to be outlandish, which could be rejected outright.

Nepra's determination has not brought any solid argument to reject cross-subsidy claims except that it will not be feasible for open access, neither have the consequences or impact considered.

In other jurisdictions, eg India, these claims (cross-subsidy and stranded cost) have been provided in open access regulations and we quote: "... a surcharge is to be levied on switching consumer ... under open access ... to compensate for the loss of cross-subsidy built into the tariff of such consumers. An additional charge (stranded cost and others) may also be levied for meeting any additional fixed cost of the distribution licensee ... " (Section 5.8.3. Open Access Policy, India).

Actually, unless there is sunk cost and open access consumer benefit from marginal cost, there does not appear to be much rationale for any economic advantage. Captive power plants are smaller and less efficient. They cannot compete with the efficiency of large coal (42% efficiency) or gas plants (60% efficiency). Competitive markets and tariffs depend on the economies of scale and not on some niche situations. Perhaps, India is not a good example for success of open access. On the other hand, there aren't many examples available in this case. India has been



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playing with the idea for many years. The share of open access in India remains very small in this long period. There are other non-monetary operational issues there, which may have marred the success of the scheme. Open access has resulted in frequent switching between regular and open access tariff, causing operational difficulties for a DISCO in planning and scheduling operations. Long-term wheeling agreements haven't been in majority. The same may happen here.

Competition requires a level playing field. Exploiting market inadequacies is no competition. With a difference of Rs6 per unit, a class of inefficient producers or free riders may be brought into the market and a class of privileged industrial users will unbalance the product market. Such incentive schemes have not worked in the past e.g. Gadoon Amazai during the tenure of Benazir Bhutto government. Unless and until an alternative system of subsidies replaces the current crosssubsidy system, loading one party with cross-subsidy and relieving the other of it would not promote efficiency and genuine competition.

We are suffering from power surplus with circular debt poised to increase from Rs2.3 trillion to Rs3.3 trillion in a matter of a few years. Classical open access appears to be a matter of the past when there was a power shortage and even bad economics of open access was good enough. However, open access will be required for a competitive power market.

That will require doing away with the electricity sales business by DISCOs, when there will be no issue of either cross-subsidy or stranded costs associated with DISCOs. Such a promised land has yet to be there. Until such a power market comes into effect, the discussion on the subject is rather premature. A moderate and compromise solution may have to be worked out that may not cause unaffordable consequences. Perhaps, a case can be made for not considering stranded cost (or dealing with it in a different way, eg on actual basis, etc), which may not be substantial initially or may not be there in initial stages. Can a case be made for special industrial zones or private sector hydroelectric power production in Khyber-Pakhtunkhwa, one may think about it?■

Ogra grants RLNG marketing licences to Tabeer, Energas

By Khaleeq Kiani

Overriding all objections from some private companies, the Oil & Gas Regulatory Authority (Ogra) granted marketing licences to Energas and Tabeer Energy for sale of regasified-liquefied natural gas (RLNG) to their customers.

The licences would be valid for 10 years, starting Jan 8, 2021. Both applicants are stated to have their own customers in the private sector and would arrange LNG imports without any liability to the government by utilising pipeline network of gas utilities. Initially, they plan to also utilise spare capacity of the LNG re-gasification terminals.

The regulator said that after scrutiny of the application, hearing the arguments of the applicant and the participants at length and information on record, it had arrived at the conclusion that applicants fulfill the legal requirements and are "entitled to the requisite licence". Therefore, it granted marketing licences to the two companies - Energas and Tabeer Energy - to carry out regulated activity of sale of natural gas/RLNG to the consumers for a period of 10 years.

The Ogra rejected objections raised by Pakistan LNG Ltd (PLL), Pakistan Gas Port, GEI Pakistan, OTO Gas, Gresham Eastern and Bilal Akbar Leghari against the two companies on various grounds. Both the licences are subject to completion of four agreements by the licence holders within a year, These include execution of Gas Transportation Agreement (GTA) and Gas Service Agreements (GSA) with Sui Southern and Sui Northern Gas Companies, execution of natural gas/LNG supplies agreements and agreements with LNG terminal operator.

Energas Marketing is a consortium of Pakistani shareholding largest business groups in Pakistan including Sapphire, Younas Brothers and Halmore with combined total assets estimated at \$5.7bn having annual turnover of \$3.2bn along with construction and operational experience of operating over 2,000MW of energy projects.

It is a sister organisation of Energas Terminal Ltd and had LNG supply letters from ExxonMobile for LNG supply. Energas Terminal is in the process of setting up its own LNG terminal at Port Qasim from which the RLNG would be supplied to customers.

Likewise, Mitsubishi Corporation of Japan is the parent company of Tabeer Energy Marketing. Mitsubishi has handled LNG operations around the globe. It is also setting up LNG terminal at Port Qasim. Mitsubishi has integrated business enterprises with offices in over 200 countries and has more than 65,000 employees.

The Ogra had held the public hearing on two applications about a month ago.

According to Energas's Anser Khan, the company had secured the lincence, land allocation and related regulatory approvals for setting up of LNG terminal of its own by 2022, but initially it could import 200-250 million cubic feet per day of LNG by April 2021 using government-owned Pakistan LNG Ltd's terminal capacity.

The Ogra said the company claimed that its licence would help the PLL to share a part of its surplus terminal capacity and help provide cheaper LNG to customers of group companies since it would not involve any middleman.

Tabeer Energy is reported to have assured Ogra that it had an integrated plan of LNG for uninterrupted supply of gas to different sectors especially CNG and power who faced gas shortages and disconnections. Tabeer was also targeting to make its terminal operational in first quarter of 2023 and claimed to have arrangements with world class terminal providers and SNGPL and SSGCL to operate in the gas sector.

Tabeer claims that its terminal would be the first fully integrated terminal where LNG import, regasifications and sales would be handled by the company itself and provide massive savings in foreign exchange to the government without any off-take guarantees. RLNG would be transported to the customers using the new North-South Pipeline being undertaken by the government in collaboration with Russia.

Pakistan, Qatar sign cheaper LNG contract

Pakistan and Qatar have signed another long-term Liquefied Natural Gas (LNG) supply contract for additional 200 million cubic feet a day (MMCFD) at around 31 per cent lower rate than the 2015 contract for 500MMCFD.

The 10-year agreement entailed the "lowest-ever publicly disclosed price under a long-term contract in the world" and was achieved through joint efforts of the political and military leaderships, said Special Assistant to the Prime Minister on Petroleum Nadeem Babar while speaking at a news conference after the signing ceremony.

The Pakistan Tehreek-e-Insaf government had at the outset of its term tried to renegotiate the long-term contracts with Qatar signed by the Pakistan Muslim League-Nawaz government in 2015-16 with similar assertions that it had secured the lowest long-term price and no major LNG purchasers - much larger than Pakistan - had until then got such a price.

Qatar had plainly declined even to discuss the existing contract, saying it had dozens of similar long-term contracts with other countries and did not want to set a precedent, but had offered to provide 20-25pc price discounts for the additional 200MMCFD LNG supplies considering the close friendly relations between the two countries.

However, the offer did not materialise then, as Pakistan did not have a capacity beyond 100MMCFD additional quantities at the time and also due to a disagreement within the cabinet for political reasons.



Babar told the presser that the supply under new Qatar deal would replace demand of the two existing and expiring long-term deals.

Under the new agreement, which will be effective from January 2022, Qatar will initially deliver two ships (containing a total of around 200MMCFD of LNG) a month. Later, the supplies will be enhanced up to four ships (400MMCFD) at the rate of 10.2pc of Brent.

In contrast, the first Pak-Qatar LNG contract had been signed for 15 years. beginning with 100MMCFD (one ship each month) and later going up to 500MMCFD (five ships a month) at the rate of 13.37pc of Brent.

The new contract has a price renegotiation option after four years rather than 10 years that had been fixed in the

previously signed con-

The PM's aide said the total spot purchases as of December 2020 averaged at 11.90pc of Brent compared to 13.37pc of Brent in initial three long-term contracts signed about five years ago. The new Qatar price at 10.2pc of Brent is also 15-16pc lower than average spot purchases of 11.90pc of Brent and would ensure price stability and affordability along with supply secu-

Based on the volume of the new contract, Pakistan would pay about \$316 million lower cost when compared to the same volume under the existing contract, Mr Babar said. "In 10 years, this works out to be \$3 billion," he added.

"Pakistan is providing \$170m letter of credit (LCs) under the past contract compared to \$84m under the new contract, which is also almost half," he said. Total supplies under the fresh contract could touch 3m tonnes compared to about 3.75m tonnes of contracted quantities.

Mr Babar said the new contract would become operational in January 2022 but also provided for at least one additional ship in December this year if needed. He said Pakistan State Oil would import the LNG from Qatar under the new deal as well, but flexibility terms had been incorporated in the contract in case import order was to be assigned to Pakistan LNG Limited (PLL).

The PM's aide recalled that talks with Qatar had been initiated about two years ago when Prime Minister Imran Khan had visited Doha for the first time and then had three more engagements with the Emir of Qatar.

Responding to a question, he said Pakistan's military leadership also had dynamic relations with Qatar that had been facilitating talks between the United States and Taliban for peace in Afghanistan. He said both the military leadership and political leadership had the common interest to work in the larger interest of all and the deal was one such joint effort.

Earlier, Mr Khan witnessed the signing of the agreement by Minister for Energy Omar Ayub Khan and his visiting counterpart from Qatar Saad Sherida al-Kaabi.



NFEH, CSR Club, NUST sign MoU to collectively do nation-building activities

The National University of Sciences & Technology (NUST) and the National Forum for Environment & Health (NFEH) entered into a Memorandum of Understanding to formalise the long-standing bilateral partnership between the two organisations. The MoU was signed at NUST main campus here on February 26, 2021. At the ceremony, Engr Javed Mahmood Bukhari, Rector NUST, and Mr Naeem Qureshi, President NFEH, expressed their resolve to collectively





contribute to nation-building initiatives. Prominent among others present on the occasion were Mr Anis H Younus, President CSR Club Pakistan, and some notable members from the corporate sector. A guided tour of the campus was

also arranged for the guests, including National Science & Technology Park and N-ovative Health Technologies. The team NFEH also did tree plantation on the occasion in its resolve to increase green cover in the country.

Pakistan has only 30 days carry over capacity of water

A delegation of the PAF Air War College, Karachi, visited WAPDA House recently. During the visit, WAPDA General Manager (Hydrology and Water Management) Shahid Hameed briefed the delegation about the water scenario, development plans and future challenges in water and hydropower sectors.

The delegation was apprised that per capita water availability in Pakistan has come down from 5650 cubic meter in 1951 to an alarming level of 908 cubic meter per annum, pushing us to the stage of a water-scarce country. Pakistan can store only 10 percent of its annual river flows against the world average of 40 percent. Ironically, instead of increasing water storage capacity, Pakistan has lost about one-fourth storage of the dams. The live water storage capacity that used to be 16.26 million acre feet (MAF) in 1976 has reduced to 13.68 MAF, which equals to only 30 days carry over capacity. India has a carrying capacity of 170 days, Egypt 700 days and America 900 days. The carry over water storage capacity has to be increased from 30 days to 120 days. Likewise, the ratio of lowcost hydel electricity also requires to be drastically improved.

The delegation was briefed that WAP-DA has been expeditiously working on a number of projects to improve water situation in the country and add a sizable quantum of hydel electricity to the National Grid. Mohmand Dam, Diamer Basha Dam and Dasu Hydropower Project are to name a few. A comprehensive strategy has been devised through which various projects will be completed in a phased manner. On completion from

2025 to 2029, Mohmand Dam, Diamer Basha Dam and Dasu Hydropower Project (Stage-I) will add gross water storage capacity of 9.3 MAF and about 7500 MW low-cost and environment friendly hydel electricity to the National Grid. Later, PAF War College delegation head.

FPIP celebrates International Civil Defence Day

President of FPIP, Mr. Muhammad Imran Taj announced full support towards Civil defence authority, Federal Civil Defence Training School, Civil Defense Volunteers for advocacy, consultancy and training. Civil Defence was endorsed and appreciated at the event, their efforts towards the COVID19 were applauded.

FPIP announced the On Call Firefighter program, which will develop voluntary Firefighters across Pakistan. These volunteers will work with Civil Defence and Fire authorities, in times of emergencies and disasters. The secretary General of FPIP, Muhammad Ovais spoke on Strong civil protection and preserving the national economy. The commander of Civil Defence, Mr. Arif Moin said the Civil Defence supports the initiative of On Call Firefighters put forward by FPIP and also emphasised on the importance of the International Civil Defence Day.

Chief Guest from Civil Defence, Mr. Shahid Masroor said that FPIP initiatives are welcomed, and would be willing to work together. He also emphasised that the Civil Defence not only works on fire but on other emergencies and disasters as well.

To appreciate services shields were presented to all speakers and FPIP HSE Wing Head Madam Zulekha, Mr. Azmat Ali and Mr. Asadullah and Saeed Jadoon.

Zero carbon race

N a desperate move to give a new lease of life to the Paris Agreement, the United Nations Framework Convention on Climate Change has launched the Race to Zero, described as a campaign aimed at rallying support from some 'real economy' actors - businesses, cities, regions, and investors for a resilient, zero carbon recovery that unlocks inclusive growth.

This coalition represents 454 cities, 23 regions, 1,397 businesses, 74 of the biggest investors, and 569 universities from 120 countries. Collectively, these actors now cover nearly 25 per cent global CO2 emissions and over 50 per cent GDP. Since the purpose of this large alliance is to achieve net zero carbon emissions by 2050, this coalition opens the second track of non-state actors to meet the Paris Agreement's target of stabilising global temperatures at less than two degrees Celsius.

Already, 40 countries have adopted a net-zero target that represents 14.4pc of global greenhouse gas emissions. Yet, the real story is dismal whereby more than 100 countries, including Pakistan, have failed to submit their national commitments to cut emissions within the December 2020 deadline. Further, only a handful of 71 Nationally Determined Contributions, or NDCs, were meaningfully ambitious. From the major economies, only the European Union and UK have taken the lead on deeper cuts on their GHG emissions by 2030: EU by 55pc and the UK by 68pc.

China and India have not submitted, but are presumably waiting to reach a prior understanding with the new American administration. Australia, Canada and Japan have simply fallen behind. China, in the meanwhile, has unveiled ambitious 2030 targets: lowering carbon dioxide emissions per unit of GDP by 65pc from 2005 level, increasing the share of non-fossil fuels in primary energy consumption to around 25pc, and bringing the installed renewable energy capacity to more than 1,200GW. Likewise, India has committed to increase renewable energy capacity to 450GW by 2030 - a remarkable increase in five years when it was very comparable to Pakistan.

These commitments are significant to regain the momentum killed by the Trump administration. The outcome of the American elections as well as a global emphasis to design climate-smart stimulus packages for economic recovery has given a new window of opportunity for climate action. As one of the most vulnerable countries, fewer countries have stakes higher than Pakistan in stabilising global temperatures at less than

At the Climate Ambitions Summit held in December 2020 to commemorate the fifth anniversary of the Paris Agreement, Prime Minister Imran Khan made three commitments. Pakistan will a) generate 60pc of her energy from renewable resources, b) ensure that 30pc of vehicles in the country will be electric vehicles (EV), and c) not pursue coal plants and there will be no coal power plants in Pakistan. The prime minister has an opportunity to demonstrate Pakistan's commitment and credibility by bringing specificity to these pronouncements. The revised NDC that is due for submission to UNFCC provides an opportunity. It is also time to address four omissions and assumptions.

First, Pakistan in its first NDC in 2016 had committed to reducing GHG emissions by up to 20pc from its 2030 projected levels, subject to availability of international finances to meet the abatement costs amounting to about \$40 billion. The projected emissions assumed an economic growth rate of 7pc. The anticipation was that at this growth rate Pakistan's emissions by 2025 would increase to 7pc and even higher by at least 1pc afterwards, because of CPEC. In reality, Pakistan's actual GDP growth rate touched 5pc only once, in 2018. According to recent World Bank estimates, Pakistan will now reach a 5pc growth rate in 2025. GHG emissions projected an increase of 300pc during 2015-2030 and that needs revisiting.

Second, the first NDC had envisioned a rapid growth in emissions because of about a dozen coal power plants, planned under CPEC. This planning was against the global current of phasing out coal. A campaign spearheaded by UN

By Ali Taugeer Sheikh

secretary general seeks an embargo on new coal power plants and phasing out by 2040. Already power generation of which coal including Thar coal is a major part is resulting in mounting circular debt of Rs 2.3 trillion. Pakistan is now wriggling out of bilateral coal power deals with China. It will be important to see how projects - 8,000 MW under implementation and 20,000 MW in planning - are reflected in the revised NDC. It will also show the future scope and lifespan of Thar coal, managed by the private sector in partnership with the government of

Third, the first NDC had not envisioned any progress on EVs. The EV policy approved in November 2019, envisions EVs to capture, by 2030, 30pc of new cars, 50pc of two- and threewheelers, 50pc of buses, and 30pc of trucks - and this number will increase to 90pc by 2040. No specific targets are set to phase out the older fleets, but it will still be an important contribution in reducing carbon emissions. How much exactly? While the actual policy awaits clearance from the inter-ministerial committee, the revised NDC will reveal, for the first time, the actual pace of action.

Fourth, the first NDC declared that Pakistan will focus only on adaptation. A closer look at the carbon emissions shows that compared to an estimated 45.5pc emissions from energy and 5.4pc from industrial processes, almost half of all emissions are from other sectors: 42.7pc from agriculture, 6.2pc from land use and land-use change, and 3.8pc from waste. In other words, almost half of the country's emissions can be targeted by undertaking climate-smart development policies. This includes not allowing housing societies to encroach on agricultural lands. The revised NDC will show how far the prime minister's initiative for five million affordable low-cost housing units or flagship projects such as the Ravi riverfront urban development addresses land use and land-use change.

The economies that have initiated a move towards net-zero emissions record a faster growth rate. The prime minister's economic advisers could brief him that the growth can be decarbonised, and jobs created in a post-pandemic world.■



SPECIAL OFFER ON 1 YEAR SUBSCRIPTION (12 ISSUES)



CPEC's Thar Coal Block-1 project progressing quickly, says top official

Chief Operating Officer of the Sino Sindh Resources Private Limited (SSRL) Li Jigen said Monday that the Thar Coal Block-1 project, which is an important part of China Pakistan Economic Corridor (CPEC), is making rapid progress.

"Despite the COVID-19 pandemic and other obstacles, the mega project in Thar has picked up pace in recent times," he said according to a statement issued.

Tariq Shah, Sindh Energy Secretary and Meng Donghai, CEO of Thar Coal Block-1 Power Generation Co and Li Jigen shared more details about the project.

Tariq Shah lauded the progress made in the Thar Block-1 project which comprises a 7.8-million-tonne-per-annum (Mtpa) open-pit coal mine and installation of a 1.3 GW ultra-supercritical coal-fired power plant.



Almost 40% of work related to coal mining has been completed while construction work is also in progress on the power plant. Mining work would be completed by the end of 2021 and the first unit of the power plant would also start working from 2022. The entire project would be completed by 2023.■

Pakistan and Germany should explore new avenues of bilateral trade - Magoo



Germany is the largest trading partner of Pakistan and the healthiest economy in the European Union has long ties with Pakistan. Pakistani people love the quality products and perceive that Made in Germany means quality and reliability. The automotive sector of Germany is the symbol of status. This was stated by Mian Nasser Hyatt Maggo, President FPC-CI in a meeting with the Ambassador of Federal Republic of Germany, Bernhard Schlagheck who visited FPCCI Capital Office, Islamabad. The meeting was attended by a large number of business people from different sectors prominently Anjum Nisar, Immediate Past President FPCCI, Shahzeb Akram, Sr. Vice President and Vice Presidents of FPCCI, Zahid

Shah, Hanif Lakhani, Athar Chawla, Head of Capital Office Qurban Ali and coordinator Mirza Abdul Rehman. Qaiser Khan Daudzai, Ex-Vice President of FPCCI.

Nasser Hyat Maggo gave a brief overview of the activities of FPCCI and its importance not only in Pakistan's economy but also in the international economy. While talking about the bilateral trade of Pakistan with Germany, he said that Germany is the biggest trading partner of Pakistan in the EU with a trade balance in favour of Pakistan.

Umer Khokhar wins 3rd Chairman WAPDA Golf Tournament

Umer Khokhar from Rawalpindi Golf Club won the 3rd Chairman WAPDA Amateur Golf Tournament after leading the board on all three days at Lahore Gymkhana Golf Club.

Governor Punjab Chaudhry Muhammad Sarwar was the chief guest at the concluding ceremony who gave away prizes to the winners. H.E. Sakib Foriq, Ambassador Bosnia Herzegovina, H.E. Nicolaus Keller,

Ambassador Austria, H.E. Mthuthuzeli Madikiza, High Commissioner South Africa and a number of golfers also attended the ceremony.■

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Main Offices and Factory (Unit I)

- +92-042-359-20151-59
- +92-42-359-20191, 359-20195
- mktgpdpvt@pel.com.pk mktgpd@pel.com.pk
- 9 14-KM Ferozepur Road, Lahore-54760

Factory (Unit II)

- +92-42-35935207-21
- +92-42-35935228
- 34-KM, Ferozepur Road, Lahore-55110

Regional Office (South)

- +92-21-322-00951-4
- +92-21-323-10330
- infopd-khi@pel.com.pk
- Baig Tower, Near Baloch Colony Bridge, Main Shahrah-e-Faisal, Karachi

Regional Office (North)

- +92-51-281-3021-22, 24
- # +92-51-281-3023
- mktgpdpvt@pel.com.pk
- 301, 3rd Floor, Green Trust Tower, Blue Area, Islamabad



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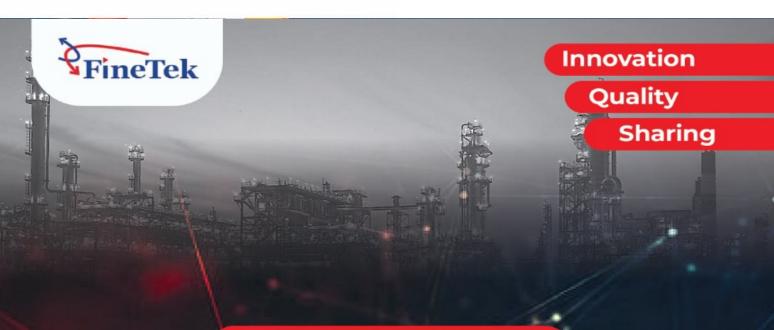




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