

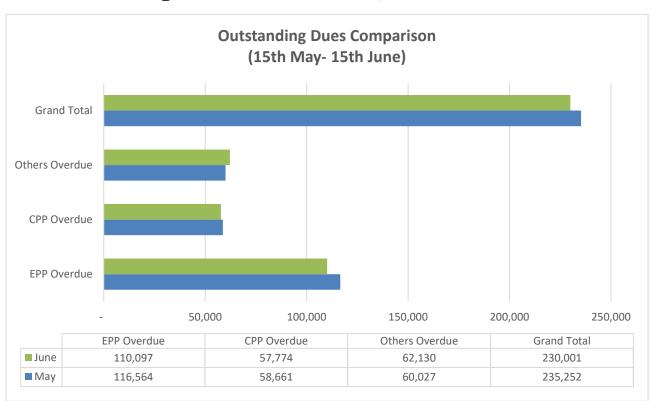
INDEPENDENT POWER PRODUCERS ASSOCIATION

MONTHLY NEWSLETTER

Welcome to the sixteenth edition of Independent Power Producers Association (IPPA) Newsletter. The newsletter is published on a monthly basis to ensure regular dissemination of information to Member IPPs and other stakeholders, and also to provide a platform to discuss issues pertinent to the energy sector of Pakistan. We would like you to send us your feedback and comments on how to improve the monthly newsletter.

Monthly Infographics

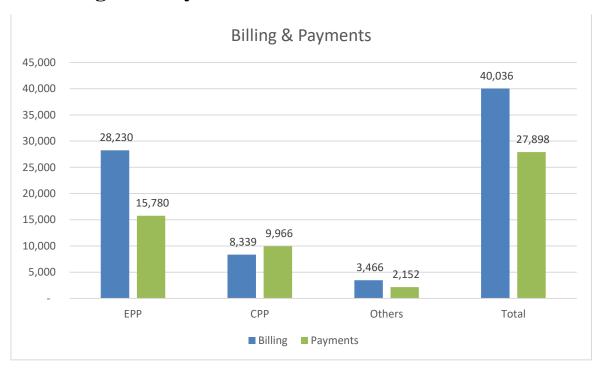
Outstanding Dues as of 15th June, 2018 in PKR Millions



Source: Member and Subsidiary IPPs

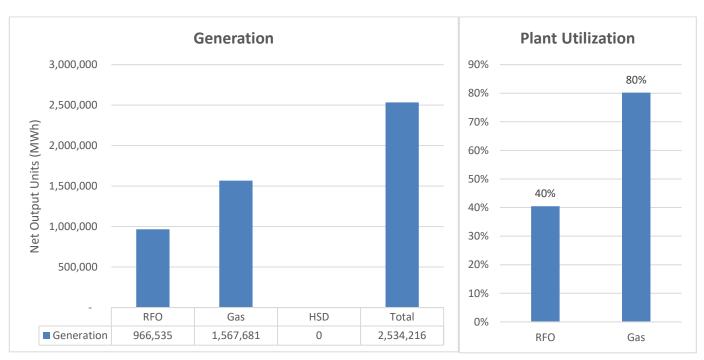
Monthly Infographics

Billing and Payments in June 2018 in PKR Millions



Source: Member and Subsidiary IPPs

Net Generation and Plant Utilization in June 2018



Source: Member and Subsidiary IPPs

Local News

Banks refuse to lend further for circular debt reduction

ISLAMABAD: The caretaker government has failed to secure Rs50 billion in commercial financing for reducing the debt of energy companies as banks are reluctant to extend further credit because of heavy loans taken by the previous Pakistan Muslim League-Nawaz (PML-N) government.

In a meeting of the Economic Coordination Committee held in May, the Ministry of Energy (Power Division) suggested borrowing of Rs50 billion from commercial banks in a fresh financing facility to be arranged by the Power Holding Private Limited (PHPL). The ECC endorsed the suggestion.

However, a senior government official told The Express Tribune that the government could not press ahead with the plan as banks were unwilling to extend more financing to PHPL, which already had huge debts in its books.

Source: The Express Tribune

Nepra upholds Rs10m penalty on NTDC

LAHORE: The National Electric Power Regulatory Authority (Nepra) has rejected a review petition challenging imposition of a hefty fine of Rs10 million on the National Transmission and Despatch Company (NTDC) for supplying of 650MW electricity to K-Electric without execution of the power purchase agreement and approval of tariff from the authority.

Earlier on Jan 25 this year, the regulator had issued show-cause notice besides imposing a fine of Rs10m on the NTDC. However, the company challenged the authority's decision during first week of February and later submitted additional grounds/arguments for incorporating these in the main review petition on March 19.

"The authority considered the submissions of the petitioner company which were advanced in the hearing as well as in the review application. The authority noted that the submissions made by the petitioner do not fulfil the requirement of regulations 3(2) of Nepra (Review Procedure) Regulations, 2009, as the petitioner has failed to point out discovery of new and important matter of evidence or point out any mistake or error apparent on the face of the record in the impugned decision and no other sufficient reasons have been submitted, which warrant review of the impugned decision," read Nepra's decision announced on July 17.

Source: Dawn

Cash-starved Hesco's receivables shoots up to Rs56.6bn

ISLAMABAD: The federal and provincial government as well as private consumers owe Rs 56.6 billion to Hyderabad Electric Company Limited (Hesco), which is already facing financial crunch due to higher than Nepra allowed transmission and distribution losses, less recovery of billed amount and insufficient tariff differential subsidy.

A meeting of the Senate Special Committee on Energy was provided details of Hesco's financial problems and a copy obtained by Business Recorder revealed that transmission and distribution losses of Hesco are as high as to 29.1 percent. The gap between billed amount and recovery amount stands at Rs 6.4 billion as opposed to Rs 2.6 billion in 2012-13.

Source: Business Recorder

1,320MW power plant connected to national grid

LAHORE: The 1,320MW coal-fired Hubco Power Plant has been connected with the national grid after the National Transmission and Despatch Company completed a new 500kV transmission line.

The line will also enable the company to evacuate power from its existing plant to the national grid, according to an official source.

The new coal-fired plant is being constructed under China-Pakistan Economic Corridor. Since the work on the project was launched last year, its first unit of over 400MW is set to start generation in December.

Source: Dawn

NEPRA likely to revise tariffs for renewable energy projects

ISLAMABAD: The National Electric Power Regulatory Authority (Nepra) is reviewing for potential revision the upfront tariff of 49 renewable energy projects that are eligible for financing under a revised scheme of the State Bank of Pakistan (SBP), an official says.

The central bank has designed the revised scheme in an attempt to promote green banking to tackle the challenge of energy shortage and climate change being faced by Pakistan's economy.

The power-sector regulator has undertaken a review of the upfront tariff determination for renewable energy projects and may change that if a company secures full or certain portion of debt under the revised financing scheme. Its tariff will be adjusted on the terms and conditions provided in the revised scheme.

Source: The Express Tribune

PEPCO begins inquiry into Rs350m scam

ISLAMABAD: Pakistan Electric Power Company (Private) Limited (Pepco) has initiated an inquiry into the conduct of Islamabad Electric Supply Company (Iesco) officials who are allegedly involved in embezzlement of Rs350 million by making excessive payments to contractors in two dozen contracts.

Auditors had held responsible Iesco Project Director Chaudhry Shoukat Ali along with five other officials for the scam. They all were electrical engineers, but they dealt with civil works and caused a heavy loss to the company by providing benefit to the contractors.

Source: The Express Tribune

Germany to help Pakistan increase renewable energy share

ISLAMABAD: Pakistan and Germany have signed a memorandum of understanding (MoU) for establishing a renewable energy platform which is expected to solidify Islamabad's efforts aimed at capitalising on the available potential for clean and green energy.

Highlighting its importance, the energy minister said, "this Renewable Energy Forum will serve as a hub for renewable energy and energy-efficient business networking, customer outreach and business development in Pakistan and Germany."

Source: Business Recorder

Pakistan's first waste-to-energy plant gets licence

ISLAMABAD: In line with efforts to promote renewable and domestic resources of energy, the National Electric Power Regulatory Authority (Nepra) has approved the grant of power generation licence to Lahore Xingzhong Renewable Energy Company Limited.

The company will set up Pakistan's first waste-toenergy plant with 40-megawatt production capacity in Lakhodair, Lahore district. It will deploy a stateof-the-art incineration-type generation facility and the most suitable waste-to-energy technology.

Source: The Express Tribune

Senate panel for making Discos 'autonomous'

ISLAMABAD: A Senate panel headed by Senator Nauman Wazir Khattak directed the Power Division to make Distribution Companies (Discos) autonomous in real terms, allowing them to enforce loadshedding in proportion to losses and stop supply to those who steal electricity.

These recommendations of a single-member panel came during a meeting convened to discuss line losses, theft of electricity, and to suggest technical and administrative measures to eliminate theft in various Discos and viability of outsourcing of high loss feeders; and as a test case Pesco be handed over to KPK.

Source: Business Recorder

International News

South Korea to raise coal tax; lower LNG tax for power generation

SEOUL: South Korea plans to increase its tax on thermal coal, while lowering the tax on liquefied natural gas (LNG) to support the use of cleaner fuels for power generation, the finance ministry said.

The ministry said in a statement that it will increase the tax on thermal coal by 10 won to 46 won (\$0.0412) per kilogram reflecting environmental costs of using the fossil fuel.

Meanwhile, the government plans to lower the tax on LNG to 23 won per kg from 91.4 won per kg.

The revised tax is expected to go into effect from April 1, 2019, should the government plan be approved by parliament.

Source: The Economic Times

Modi Pledges Electricity for All Indian Homes by March 2019

INDIA: All Indian homes will be connected with electricity by March 2019, Prime Minister Narendra Modi said at an event in the northern state of Uttar Pradesh.

Focus of the government will be on clean energy and rural development, Modi said on Sunday after laying foundation for 81 projects worth 600 billion rupees (\$8.7 billion) in the state.

The nation's energy deficit has fallen to 1 percent from 4.3 percent in 2013-14, while light-emitting diode lamps have saved electricity consumption worth 500 billion rupees in the last three years, he said.

Source: Bloomberg

Total buys two gas power plants in France to strengthen its generation capacity

PARIS: French oil and gas major Total said it had

signed an agreement with KKR-Energas to acquire its two gas-fired power plants in the north and east of France, to strengthen its power generation capacity.

The two plants represent an electricity generation capacity of about 825 megawatts.

The group, which is expanding in the French electricity market after its \$1.7 billion acquisition of French alternative electricity provider Direct Energie, has said it plans to have a global power generation capacity of 10 gigawatts within five years.

Source: The Economic Times

World's largest combined cycle power plants completed

In collaboration with the Egyptian Ministry of Electricity and Renewable Energy, Siemens and its consortium partners, Orascom Construction and Elsewedy Electric, announced the completion of the Egypt megaproject in record time.

The parties celebrated the combined cycle commissioning and the start of operations at the BeniSuef, Burullus and New Capital power plants. The stations will add a total of 14.4 gigawatts (GW) of power generation capacity to Egypt's national grid, enough power to supply up to 40 million people with reliable electricity.

Source: Times of Oman

UAE's first nuclear reactor gets electricity generation licence

The Department of Energy has issued an electricity generation licence to Barakah One Company, the joint venture subsidiary company owned by the Emirates Nuclear Energy Corporation (ENEC) and the Korea Electric Power Corporation (KEPCO).

The licence is a key regulatory requirement before operation of the first of four reactors at Al Dhafra, Abu Dhabi, a statement said.

It added that the licence is an important milestone in advance of Nawah, the operating and maintenance subsidiary of ENEC and KEPCO, obtaining the operating licence from the Federal Authority for Nuclear Regulation (FANR).

Source: Arabian Business

India Strengthens its Position as an Electricity Exporter

India has gradually strengthened its position as an electricity exporting nation. India is now exporting power to Bangladesh, Nepal, and Myanmar.

Replying to a question in Lok Sabha, the minister for Power, R.K. Singh, stated, "India is currently supplying around 660 MW power to Bangladesh and it would increase by 840 MW after completion of additional transmission links."

Singh also added, "India is currently supplying around 490 MW power to Nepal and it would further increase by 300 – 400 MW with the operation of 132 kV D/c Dhalkebar – Muzzafarpur line at 400 kV. India is also supplying about 2 – 3 MW of power from Manipur to Myanmar through 11 kV transmission line from Moreh in Manipur to Tomu town in Myanmar.

Source: Mercom India

Albania plans to diversify electricity generation with floating solar power plants

TIRANA – Albania's state-run power utility KESH says it is planning to build the country's first floating solar power plant on the northern Drin River cascade where it generates about two-thirds of the country's domestic electricity from three hydropower plants built in the 1970s and 80s under communism.

The ambitious project would diversify the country's current wholly hydro dependent electricity generation through new technology that has been revolutionizing renewable energy in the past decade.

KESH says the floating plant will be an 118,000m2 floating system with a capacity of 12.9 MWp that will be built on the Vau i Dejes reservoir where the country's third largest hydropower plant is situated

and that OST transmission operator has in principle agreed to link the floating power plant to the transmission grid once it is completed.

Source: Tirana Times

Ethiopia to bridge electricity connectivity gap with new substations

Although the grid covers about 60% of the towns in Ethiopia, over 70% of people still have no access to electricity.

This gap necessitates for the government to seek various partnerships that will assist in connecting this number of people to the national grid.

Global power firm, GE Grid Solutions announced it has completed a \$40 million electricity transmission system improvement turnkey project in collaboration with the Ethiopian Electric Power.

The project will raise access to electricity by transferring bulk electric power to the southern and south-western parts of the country.

The company noted that new substations will also help reduce technical losses in the transmission system in the medium term.

Source: ESI Africa

Renewable energy surpass coal in German electricity production

BERLIN – The share of electricity generated with renewable energy sources has surpassed that of the coal power for the first time in Germany, a study published on Tuesday by the Federal Association of the German Energy and Water Industries (BDEW) shows.

According to the study, the amount of electricity generated by wind-, solar-, biomass power and other renewable sources rose by more than 10 percent to nearly 118 billion kilowatt hours between January and June 2018. During the same period, coal power plants generated 114 billion kilowatt hours of electricity while natural gas and nuclear power both contributed less than 40 billion kilowatt hours to total output.

Source: Xinhua

Transmission and Distribution

Over the past five years, 8000 MW of generation capacity has been added to the grid¹. However, despite this, the citizens of Pakistan continue to suffer from load shedding. The persistence of energy crisis should not come as a surprise to policy makers, as merely adding generation capacity is not sufficient to deal with this issue. To reap benefit from investment in additional generation capacity, it is important to ensure that an efficient and effective Transmission and Distribution (T&D) network is in place. However, in case of Pakistan, the state of the T&D network is deplorable and inadequate attention has been given to its overhaul and expansion in past few years. In order to address remedial measures, it is inevitable to identify the problems within the T&D system.

Load shedding

One of the key reasons behind load shedding is underutilization of generation capacity due to inadequacy of the T&D system to transmit additional volumes of electricity. Although the power plants are equipped to produce electricity but the system constraints do not allow for the transmission of additional electricity, the power producers are still entitled to capacity payments. Therefore, not only does the of lack T&D capacity lead to load shedding but also feeds in to the problem of liquidity crunch in the power sector and raises the cost of electricity for the consumers.

National Transmission and Dispatch Company's (NTDC) attracts severe criticism due to its failure to expand T&D network. Moreover, National Electric Power Regulatory Authority (NEPRA) has penalized NTDC for delaying an important transmission lines project by six years². The transmission line project was necessary to transmit more than 1500 MW of electricity³. The regulator has also asserted that during fiscal years 2014-17, an investment of Rs. 96.63 billion has been sanctioned to NTDC yet the latter has been unable to exhibit improvement in the system⁴.

In essence, due to the lack of upgradation and maintainance, the system often suffers from overload and resultantly power distribution feeders are shut down during peak hours causing load shedding⁵.

Power Sector Losses

Another issue faced by the ailing T&D sector is losses due to technical and governance shortcomings. T&D system is not only outdated but also poorly maintained resulting in alarming levels of technical losses. Roughly 17.8% of the electricity is lost in the form of T&D losses.⁶ A closer look at individual performance of Distribution Compnaies (DISCOs) paints a more horrific picture. For instance, Sukkur Electric Power Company (SEPCO), Hyderabad Electric Supply Company (HESCO) and Quetta Electric Supply Company (QESCO) reported 35%, 29% and 22% T&D losses respectively⁷. This percentage is considerably high in comparison to countries such as Japan (3%), Sri Lanka (11%), China

¹ 'PML-N added 8,000MW to national grid since 2013: Abid Sher Ali'- Dawn (11th January, 2018)

² 'NTDC fined for delays in building transmission lines'- Dawn (16th February,2018)

³ 'NTDC fined for delays in building transmission lines'- Dawn (16th February,2018)

⁴ 'Nepra blames network failure for outages' - Dawn (9th June, 2018)

⁵ 'Forced loadshedding for system not upgraded by NTDC'- Dawn (8th June, 2018)

⁶ 'Loadshedding may return as losses have tripled, warns minister' - Dawn (23rd February, 2018)

⁷ Pakistan Economic Survey 2017-18

(5%), Iran (13%) and Indonesia (9%)⁸. These losses have to be borne by the consumers in the form of higher tariffs leading to un-affordable and expensive electricity for the consumers.

In addition to technical losses there is a huge issue of default on payments. As the price of electricity increases, it becomes increasingly difficult for the consumers to pay the bills. Resultantly the risk of non-payment also increases. However, there is a more severe issue of non-payment of bills by influential people. Influential defaulters do not face legal repercussions and continue to receive electricity supply despite default on payments. According to the Power Division, such running defaulters have caused a loss of Rs. 348 billion to the power sector⁹. In addition to this, the power sector also suffers from theft of electricity. From July 2017 to March 2018, nine DISCOs incurred a loss of Rs. 59.174 billion due to power theft¹⁰.

In nutshell, with the increase in volume of electricity supplied, magnitude of losses is also increasing i.e. the sector loss is expected to inflate to Rs. 360 billion this year¹¹. Higher losses widen the gap in net cash flow, resulting in increased liquidity crunch and aggravating the circular debt issue.

Lack of Accountability and Transparency

Transparency and accountability issues are plaguing the T&D sector. First, there has been a consistent issue of misreporting by DISCOs. The data submitted to NEPRA on T&D losses, System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI), is inaccurate¹². Effective policy making is not possible without access to reliable and timely data. Second, there is a prevalent issue of overbilling by DISCOs to cover their losses. Annually consumers are charged an additional Rs. 30 billion due to systematic overbilling by DISCOs¹³. Third, there is lack of transparency in projects related to T&D infrastructure. Recently, officials of Islamabad Electric Supply Company (IESCO) were accused by auditors of being involved in a scam of Rs.350 million pertaining to purchase of poor-quality material for rehabilitating and expanding infrastructure¹⁴. This essentially means that the investment channeled to T&D sector is not being properly utilized due to poor accountability and transparency.

Recommendations

Given the state of T&D sector, it is inevitable to take drastic measures. First, there is a dire need for investment in T&D infrastructure. According to Managing Director of Pakistan Electric Power Company (PEPCO), an investment of \$40-50 billion in the T&D system is required to eliminate load shedding¹⁵. Second, there is a need to ensure that such investments strictly adhere to set timelines. The power sector is already under liquidity crunch therefore, it cannot afford to continue to pay capacity payments without utilizing the generation capacity i.e. any delays in building T&D network cannot be tolerated. Third, there is a need to improve the accountability of the T&D sector by strictly enforcing rules and regulations. Given the huge amount of investment required to revamp the T&D system, it is

⁸ 'Govt urged to take steps for reducing power sector losses'- The News (26th February, 2018)

⁹ 'Circular debt at Rs573 billion, influential people major defaulters'- The Express Tribune (30th May, 2018)

¹⁰ 'Rs59.174b power theft in 9 Discos in 9 months'- The News (14th May, 2018)

¹¹ 'Loadshedding may return as losses have tripled, warns minister'- Dawn (23rd February, 2018)

¹² NEPRA State of Industry Report 2016

¹³ 'Discos manipulate units: Consumers face overbilling of Rs30 bn a year'- The News (5th March, 2018)

¹⁴ 'IESCO management trying to save officials involved in scam'- The Express Tribune (11th July, 2018)

¹⁵ 'Power generation hits all-time peak, transmission and distribution constraints weigh'- Dawn (30th May, 2018)

absolutely essential to ensure that every penny of the investment is used in a transparent manner. No amount of investment can fix the T&D network if it continues to operate outside the bounds of laws and regulations. In nutshell, there is an urgent need to take sincere, transparent and effective measures to upgrade the transmission and distribution network of Pakistan.

Our Members

	Member IPPs	Primary Fuel	Alternate Fuel	Gross Capacity (MW)	Net Capacity (MW)
1	The Hub Power Company (Tehsil Hub)	RFO	HSD	1292	1200
2	Pakgen Private Limited	RFO	-	365	350
3	Lalpir Private Limited	RFO	-	362	350
4	Kohinoor Energy Limited	RFO	-	131	126
5	TNB Liberty Power Limited	GAS	HSD	235	211
6	Uch Power (Private) Limited	GAS	-	586	551
7	Rousch (Pakistan) Power Limited	GAS	HSD	412	395
8	Habibullah Coastal Power (Pvt.) Co.	GAS	HSD	140	126
9	Attock Gen Limited	RFO	HSD	165	156
10	Atlas Power Limited	RFO	HSD	225	214
11	Nishat Power Limited	RFO	HSD	200	195
12	Nishat Chunain Limited	RFO	HSD	200	195.6
13	Liberty Power Tech. Limited	RFO	HSD	200	195
14	Orient Power Company Limited	GAS	HSD	229	213
15	Saif Power Limited	GAS	HSD	229	209
16	Sapphire Electric Company Limited	GAS	HSD	225	209
17	Halmore Power Generation Co. Ltd.	GAS	HSD	225	209
18	Engro Powergen Qadirpur Limited	GAS	HSD	227	217
Subsidiary IPPs					
19	Hub Power Company Ltd (Narowal)	RFO	-	220	214
20	Uch-II Power (Pvt) Ltd	GAS	-	404	375.2
21	Saba Power Company (Private) Limited	RFO	-	134	125.5

Upcoming Topics

August

Electricity Act

Established in 2010, IPPA serves as an advisory body for Independent Power Producers (IPPs) in Pakistan. IPPA liaises with the government and related departments such as NEPRA, SECP, WAPDA, CPPA-G, NTDC and PPIB and also serves as a facilitator between various IPPs and stakeholders within the power sector.

If you have any suggestions or feedback, kindly write to us at feedback@ippa.com.pk