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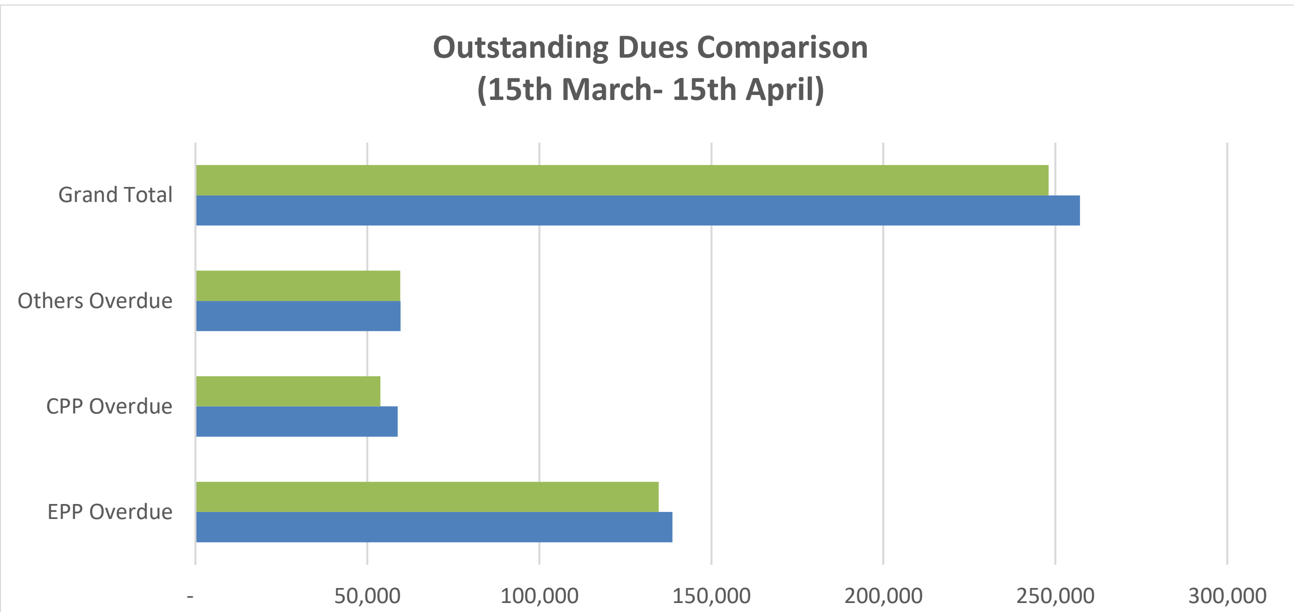
INDEPENDENT POWER PRODUCERS ASSOCIATION

MONTHLY NEWSLETTER

Welcome to the fourteenth 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 April, 2018 in PKR Millions

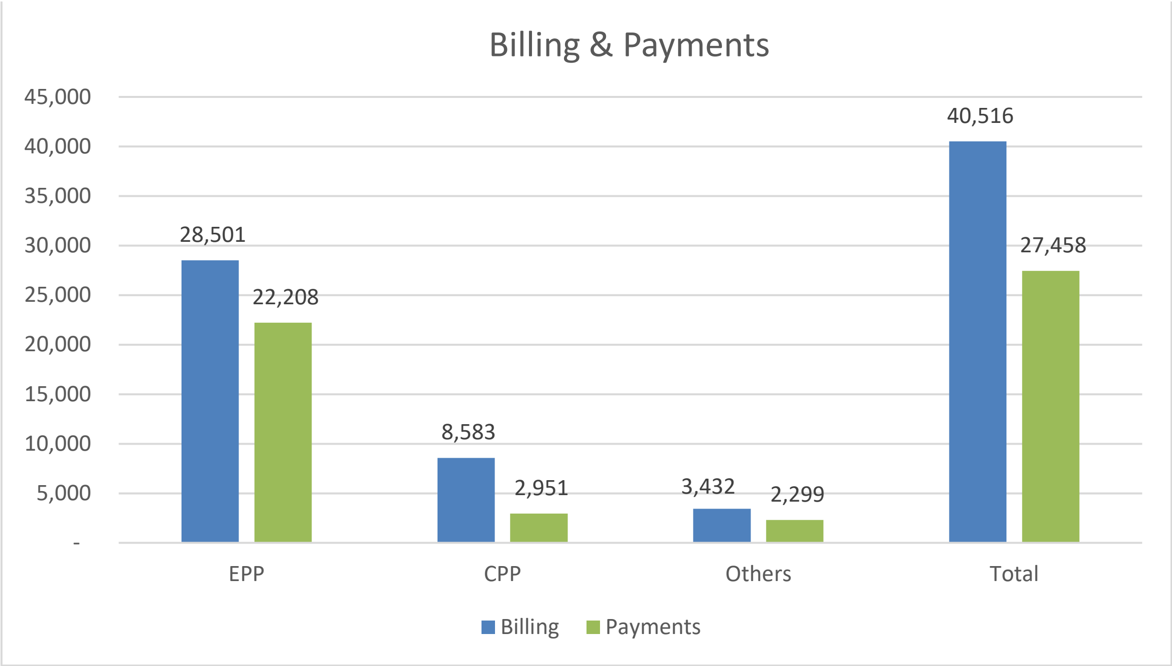


	EPP Overdue	CPP Overdue	Others Overdue	Grand Total
April	134,735	53,801	59,563	248,098
March	138,711	58,790	59,655	257,156

Source: Member and Subsidiary IPPs

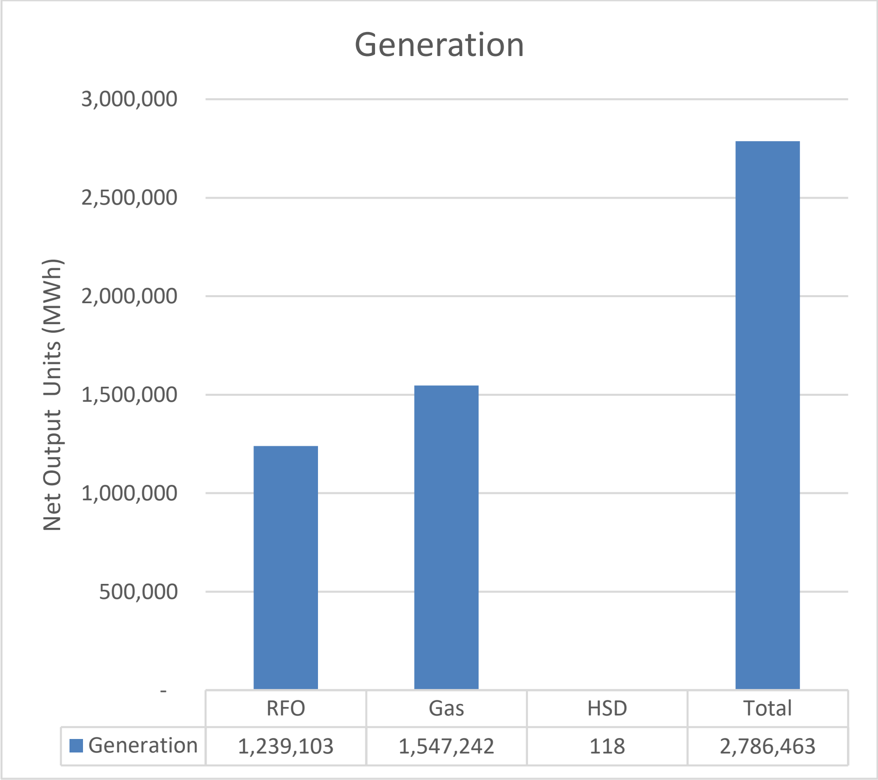
Monthly Infographics

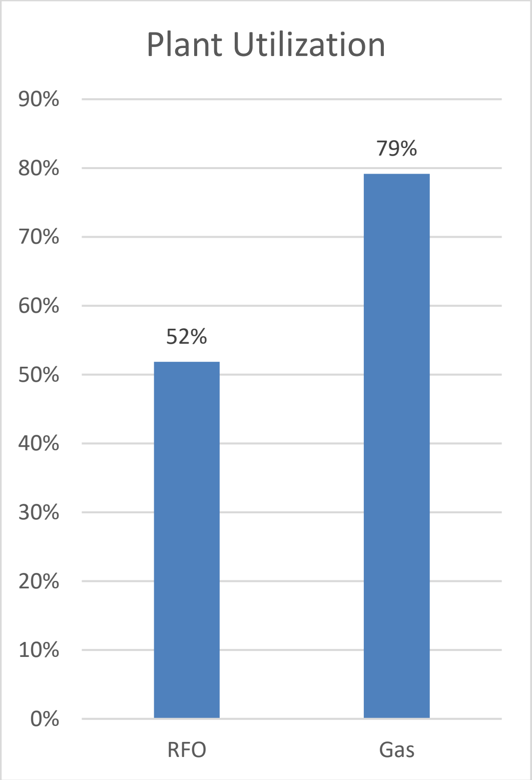
Billing and Payments in April 2018 in PKR Millions



Source: Member and Subsidiary IPPs

Net Generation and Plant Utilization in April 2018





Source: Member and Subsidiary IPPs

Banks refuse to extend further loans

ISLAMABAD: A syndicate of seven commercial banks has reportedly refused to extend further loans to the "unsustainable" power sector if overdue principal portion of loans is not cleared prior to seeking a new facility of Rs 40 billion, well informed sources told.

The Economic Coordination Committee (ECC) of the Cabinet on March 7, 2018 approved the proposal of raising fresh funds amounting to Rs.80 billion through syndicated term finance facility for power sector liquidity. The ECC also approved to pay-off the overdue principal till March 2018 amounting to Rs 26.666 billion in respect of existing facilities of: (i) Rs 15.00 billion; (ii) Rs. 40.00 billion; and (iii) Rs25.00 billion respectively by utilizing proceeds from the Rs 80.00 billion finance facility and transfer the remaining funds of Rs 53.333 billion to CPPA-G to discharge its liabilities against power sector entities.

Source: Business Recorder

CCOP again fails to develop consensus on K-Electric's sale

ISLAMABAD: With only few days left in the current government's tenure, the issue of sale of majority stake in K-Electric – Pakistan's largest integrated power utility – to a Chinese company remains far from settlement.

The Cabinet Committee on Privatisation (CCOP) on 25th May again could not resolve the intricacies linked with the sale of 66.4% stake of KES Power Limited in K-Electric to China-based Shanghai Electric Power, said officials of the Ministry of Privatisation.

Source: The Express Tribune

System may not sustain 24,000MW load despite upgrade

LAHORE: The country's power evacuation, transmission and despatch system (220kV & 500kV lines and grid stations) may not be able to sustain the tasks related to up-gradation or augmentation.

Experts say the system transmitted load of 19,200MW in last summer. And this year, it successfully transported the maximum load of 19,798MW on 23rd May.

"Though the system sustained maximum load of 19,798MW on 23rd May, our technical experts are of the view that it can bear and transmit about 22,000MW or so this summer," a senior official of power division told.

Source: Dawn

Power division secretary goes on leave amid crisis

ISLAMABAD: Power Division Secretary Yousaf Naseem Khokhar on 19th May jumped the government ship amid disagreements over a series of contentious matters, including K-Electric, fresh government-to-government deals for power projects and smart meters.

A grade-22 officer of the Pakistan Administrative Service, Mr Khokhar went on a 14-day leave — exactly the remaining life of the PML-N government — after spending over a year in office and just two days after a major power breakdown in the country.

Informed sources said Power Minister Awais Ahmad Khan Leghari was unhappy with the lack of support from the secretary over some policy issues that he wanted to conclude under a limited tenure, but last four to five months were full of tension between political and administrative heads of the power division.

Source: Dawn

Huge power breakdown cripples life in KP, Punjab

ISLAMABAD: A major breakdown crippled the power system in almost entire Punjab, Khyber Pakhtunkhwa, Azad Jammu and Kashmir and some parts of Sindh and Balochistan for almost eight hours on 16th May, days before the PML-N government completes its five-year tenure riding on the energy sector's turnaround story.

The technical fault occurred around usual North-South corridor near the Guddu-Muzaffargarh transmission network at around 9.28am and forced the closure of almost all the power plants in Punjab, Khyber Pakhtunkhwa and Azad Kashmir in a cascading manner within five seconds.

Source: Dawn

Circular debt crosses massive Rs500bn mark

LAHORE: Some 48 percent of the Independent Power Producers (IPPs) are non-operational due to the non-payment of dues, said power sector sources.

It may be noted that the circular debt has crossed the magical figure of Rs 500 billion and is further likely to grow due to low recovery and high rate of power theft across the country.

Total installed capacity of IPPs in the country is 14,683 almost half of which is dysfunctional, causing a negative impact on the supply side of electricity.

Source: Business Recorder

Agreement signed to build Matiari-Lahore power line

ISLAMABAD: Project implementation agreement was signed by Private Power and Infra-structure Board's Managing Director Shah Jahan Mirza and State Grid Corporation of China Chairman Shu Yinbiao.

Prime Minister Shahid Khaqan Abbasi attended the agreement for construction of 878km 600-kilovolt HVDC bi-pole transmission line from Matiari to Lahore.

Under the contract, which is part of the China Pakistan Economic Corridor, two convertor stations with AC switching stations at Matiari and Lahore; two electrode stations for each end and three repeater stations along the route of the line will also be constructed. The project has a completion time of 27 months and commercial operation date has been fixed at March 1, 2021.

Source: Dawn

Inter-Disco tariff differential subsidy slashed

ISLAMABAD: The government has slashed budgeted inter-Disco tariff differential subsidy by 12 percent to Rs 57.5 billion from Rs 65 billion in 2017-18 due to late submission of claims and recovery through Tariff Rationalisation Surcharge (TRS), well-informed sources told.

The government has budgeted Rs 105 billion for 2018-19 as tariff differential subsidy keeping in view expected increase in generation and subsequent electricity sale this summer, sources added. The ECC recently extended Tariff Rationalisation Surcharge at Rs 20.07 per unit to offset the impact of the subsidy.

Source: Business Recorder

First generation RLNG plants fire up in shadow of second generation circular debt

ISLAMABAD: A second generation of circular debt in the gas sector has come into being as three key Punjab-based power projects of about 3,600 megawatts on imported Liquefied Natural Gas (LNG) are now reaching the belated commercial operation dates (CODs).

Informed sources told that the delayed commissioning of these plants had not only compromised full utilisation of LNG terminals but also caused demurrage charges to LNG importers, losses to the gas utilities and payment problems to the entire supply chain. A public sector bank is also reportedly facing challenges because of cash flow problems in the supply chain.

Source: Dawn

Jhimpir project starts producing wind energy

KARACHI: The 50-megawatt Jhimpir wind power project has started commercial operations in a landmark achievement as Pakistan gradually moves to ramp up renewable energy generation in keeping with the world trend and to bridge the domestic shortfall.

Source: The Express Tribune

International News

Electricity ministry to impose renewable energy quota on factories

Egypt's Ministry of Electricity is planning to impose a minimum quota of renewable energy consumption on factories operating in the local market by mid 2019.

Renewable energy consumption will increase to contribute to around 6-8 percent of the total energy produced, a ministry source said, adding that the decision of imposing a quota would help support the expansion of Egypt's renewable energy projects as it will ease some burdens on investors paying in the feed-in-tariff projects.

The Electricity ministry will be issuing electricity consumption bills to factories, one of which will include the pricing of traditional energy produced, while the other will be for renewable energy according its proportion of the total energy produced.

Source: Eygpt Independent

93 per cent of Jordan's electricity generated by natural gas

AMMAN — Imported natural gas contributes to the production of 93 per cent of the electricity generated in the Kingdom, while the share of renewable energy is the remaining 7 per cent, the National Electric Power Company (NEPCO) said.

Assistant director general of production planning at NEPCO, Amin Zaghal, told the Jordan News Agency, Petra, that the power plants in the Kingdom are currently relying on imported natural gas coming through Aqaba Port, while the rest is produced by renewable energy sources (solar and wind power).

Source: Jordan Times

Renewable energy jobs surge above 10m

ABU DHABI: The growing renewable energy industry created 500,000 new jobs globally last year, surpassing the 10 million-mark for the first time, an Abu Dhabi-based agency said.

2017, a 5.3 percent jump on the previous year, according to the new report by the International Renewable Energy Agency (IRENA).

Adnan Z. Amin, director-general of IRENA, said the findings showed renewable energy "has become a pillar of low-carbon economic growth for governments all over the world".

"Fundamentally, this data supports our analysis that decarbonisation of the global energy system can grow the global economy and create up to 28 million jobs in the sector by 2050," he said.

Source: Business Recorder

Nigeria Electricity Generation Capacity Drops to 2,329.9MW

Nigeria's electricity generation capacity dropped from the 5,222.3 megawatts (MW) attained earlier this year to 2,329.9 MW on May 6.This meant that e country lost about 3,710.8MW due to gas, line and frequency constraints, which is the equivalent of N1.870billion, according to the Nigerian Electricity Supply Industry (NESI).

On this same day, the country's national peak demand was 19,100MW, with installed capacity of 11,165.40MW, but only 7,139.60MW available due to inadequate gas as well as transmission, and issues, which have not been resolved over the years.

Source: All Africa

Kenya leads East Africa peers in electricity access

The electricity access rate in Kenya is the highest in East Africa according to the latest report from the World Bank tracking global achievements in sustainable energy for all.

Kenya Power noted in a statement, according to The Energy Progress Report that was released by the World Bank on 2nd May covering the period up to 2016, electricity access rate in Kenya stood at 56%, compared to Tanzania (32.8%), Rwanda (29.37%), Uganda (26.7%) and Burundi (7.5%).

The electricity access rate in the country stood at 73.42% as at the end of April 2018, owing to various national electrification projects that have been undertaken by Kenya Power such as the Last Mile Connectivity Project and GPOBA that targets informal settlements in urban areas and low-income households in the rural areas.

Source: ESI Africa

Nigeria's abundant gas resources fail to end electricity blackout

The inability to get more gas to generate energy and some constraints in transmission as well as distribution denied electricity users 21,242MW in six days of last week (7-13th May), Daily Trust reports.

Our reporters gathered that part of the problem that recently contributed to poor generation was that the thermal plants could no longer get much gas from their suppliers as the debts mounted.

Source: Daily Trust

Gambia Gets over D1.9 Billion Electricity Project

World Bank has announced that it has approved the sum of $41.0 million (equivalent to about 1,927,000.000 dalasis) to the Gambia government for electricity project on Thursday, May 17.

The statement on the Bank's website indicated that such grant was approved by the executive directors to help The Gambia in the Electricity Restoration and Modernization Project.

"The project will help improve the operational performance of the Project Implementing Entity and improve the capacity of the Project Implementing Entity to dispatch variable renewable electricity," World Bank says.

Source: Foroyaa

Egypt-Saudi electricity power link project to start in 2021

Egypt's Ministry of Electricity announced that it will sign contracts for the electricity interconnection network with Saudi Arabia by the end of next June, with the project set to start in 2021.

Egypt announced back in December 2017 a project worth $1.6 billion that will connect its power network to Saudi Arabia's, joining a system in the Middle East that allows neighbors to share electricity. It will be in the capacity of 3,000 megawatts, so Egypt can export electricity in time of surplus and then import it during shortfall.

Source: Eygpt Independent

Global power industry: $2.20tn investment by 2021

Market research firm Frost & Sullivan announced the release of its Global Power Industry Outlook.

The report forecasts solar and wind to dominate power generation additions through to 2021. The global power industry is expected to invest $2.20 trillion in energy generation between 2017 and 2021.

Increases in renewable energy adoption and growth of the energy generation sector will be driven by factors including declining capital cost of solar and wind, rise in battery energy storage adoption, disruptive start-ups contributing to competition and increases in mergers and acquisitions.

Source: ESI Africa

IEA study shows energy sector's distance from climate targets

A study from the International Energy Agency (IEA) has found that only four of the 38 energy technologies and sectors examined last year were on track to achieve long-term climate and air pollution targets.

The study included energy technologies such as solar, wind, nuclear, coal and gas, as well as energy-intensive sectors including transport, chemicals and aluminium. All were examined for their progress in assisting international goals to prevent rises in global temperatures, deliver universal energy access and lower pollution levels.

Source: Power Technology

Round Up of the Departing Government's Performance

The departing government set several ambitious goals for the power sector at the beginning of its tenure. In 2013 Election campaign, energy security was second highest on the priority list of the PML-N agenda. The manifesto promised that "short and medium terms measures would be initiated to end load shedding in 3 years, invest US $ 20 billion to generate 10,000 MW of electricity in next five years and permanently eliminate circular debt."[1] As the tenure of the current government has ended it would be worthwhile to glance at the last 5 years performance of power sector.

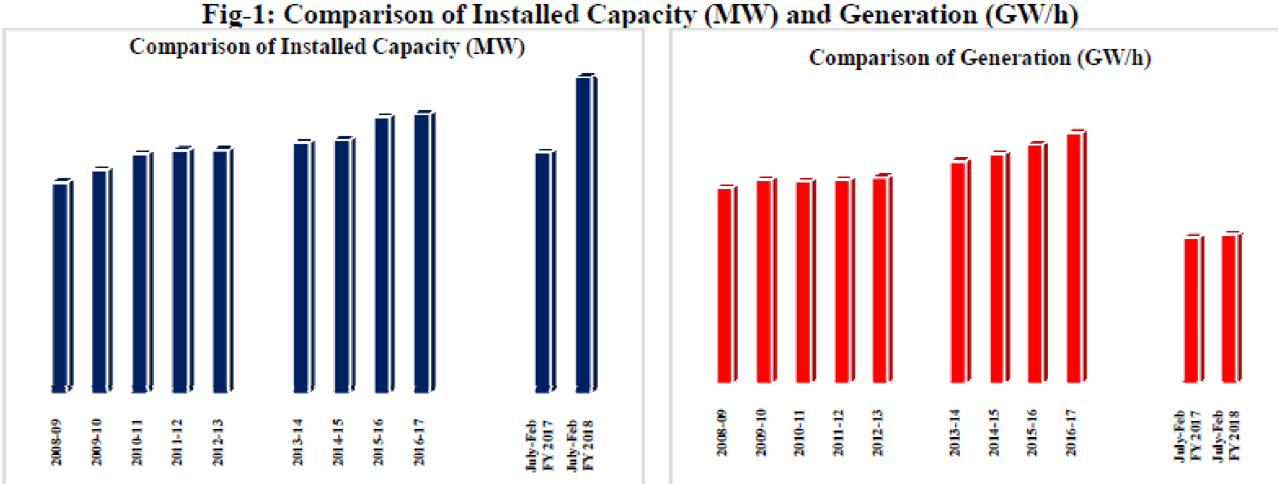
Circular Debt

In 2013, the major issue crippling the power sector was insurmountable level of circular debt leading to unbearably long hours of load shedding for the consumers. Hence, soon after assuming power, the government paid off Rs.480 billion of circular debt[2]. On the outset, it appeared that problem of circular debt had been dealt with however, this was far from the truth.

For most of the tenure of the last government, the oil prices were lower than earlier years yet the circular debt demonstrated an increasing trend. The situation has again spiraled out of control as the circular debt has now crossed the Rs. 500 billion mark[3]. This is in addition to the Rs. 450 billion debt parked in Power Holding Private Limited (PHPL). Due to the non-payment of dues 48% of the Independent Power Producers (IPPs) are unable to operate their power plants[4]. To ease the financial crunch, Economic Coordination Committee (ECC) approved raising Rs. 80 billion through syndicated term finance facility. However, the banks have refused to extend further loans until the government pays off its existing over-dues[5]. Thus, not only was the last government unable to tackle the issue of circular debt, but in fact it has exacerbated the magnitude of the problem.

Generation Capacity

Fig-1: Comparison of Installed Capacity (MW) and Generation (GW/h)



Source: Economic Survey of Pakistan (2017-18)

[1] Pakistan Muslim League (N) National Agenda for Real Change Manifesto 2013

[2] 'Details of Rs480 billion circular debt pay-off released'- Express Tribune (23rd July, 2013)

[3] 'Circular debt crosses massive Rs500bn mark'- Business Recorder (16th May, 2018)

[4] 'Circular debt crosses massive Rs500bn mark'- Business Recorder (16th May, 2018)

[5] 'Banks refuse to extend further loans'- Business Recorder (28th May, 2018)

According to Economic Survey of Pakistan (2017-18) generation capacity has increased from 22,182 MW in June 2013 to 29,573 MW in February, 2018. This perhaps is the most important achievement of the last government in the power sector. However, it is important to ponder if the addition in generation capacity is translating in to increased supply of electricity as well. For example, during July-February 2018 despite increase in generation capacity by 30%, the actual generation increased by only 2%. It may be the case that despite have additional generation capacity, Pakistan is unable to fully benefit from it due to ailing transmission and distribution network; liquidity crunch caused by circular debt and various inefficiencies present in the power sector such as teething problems of new power plants.

Transmission and Distribution (T&D)

The PML-N agenda promised to reduce T&D losses to less than 10%[6]. As of Feb 2018, T&D losses stood at 17.8% as compared to 19% in 2013[7][8]. Although, the electricity generation has increased since 2013, however, in cumulative terms the T&D losses are expected to increase by three times this year, i.e. touching Rs. 360 billion[9] causing a huge cash flow gap in the power sector! This is one of the key reasons why the government was unable to manage the circular debt situation.

Another factor which causes gap in cash flows is low recovery of electricity bills from consumers due to theft and non-payment of bills. In FY 2013, the recovery of electricity consumed was 89.6%. The PML-N manifesto asserted that recovery will be brought as close to 100% as possible. There has been slight improvement in the recovery rate i.e. average recovery rate for the last government's tenure was 91.2%[10]. According to the Economic Survey of Pakistan (2017-18), the recovery rate climbed to 94.5% in 2016, however, since then the recovery rate has dropped.

On the T&D infrastructure front only one notable initiative was taken. The government signed contract with State Grid Corporation of China to construct 878km 600-kilovolt HVDC bi-pole transmission line from Matiari to Lahore[11]. It will be the first HDVC transmission line being constructed in Pakistan. It will have the ability to transmit high transmission load over a long distance. HDVC transmission line will incur fewer losses and will be cost effective[12].

Overall, although there have been some improvements in the T&D, however, the improvement in performance and investment in the T&D infrastructure has been far for being adequate. Moreover, reforms promised in PML-N manifesto, such as privatization and corporatization of DISCOs and elimination of cross disco subsidy, were completely grossly ignored. Poor performance of T&D has resulted in worsening of financial crunch thus restricting Pakistan's ability to reap maximum benefit from new generation projects.

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[6] Pakistan Muslim League (N) National Agenda for Real Change Manifesto 2013

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

[8] The average T&D losses during the tenure of this government have been 18.3% in comparison to 19.4% in the previous government's tenure- Economic Survey of Pakistan 2017-18

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

[10] Economic Survey of Pakistan (2017-18)

[11] 'Agreement signed to build Matiari-Lahore power line'- Dawn (15th May, 2018)

[12] 'PPIB supports HVDC Matiari-Lahore Line project'- The News (10th August, 2017)

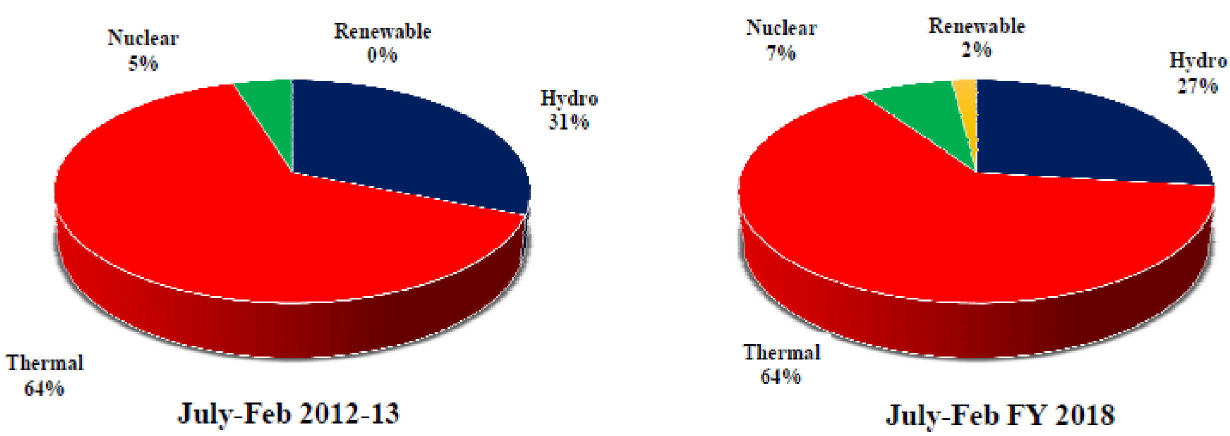
GENCOs

Due to the deplorable performance of GENCOs, the PML-N promised the corporatization and privatization of GENCOs[13]. In June 2014, former Prime Minister Nawaz Sharif approved the privatization of GENCOs[14]. However, not much has been done in this regard. Minister for Privatization announced in January 2018 that at least one GENCO will be privatized in the coming months[15]. Yet the tenure ended with privatization of GENCOs nowhere in sight.

Moreover, the poor performance of GENCOS continues to exacerbate the problem of shortage of funds. During the years 2014-16, GENCOs lost over 15 billion electricity units due to their inefficiencies[16]! This loss essentially means that the exchequer bore a revenue loss of Rs.150 billion[17]. The performance of GENCOs further degraded when the cost of generation increased by around 11% in 2017[18]. Inefficient GENCOs are another contributing factor to the gap in cash flows in the power sector.

Energy Mix

Fig-2: Share in Electricity Generation



Source

Source: Economic Survey of Pakistan (2017-18)

The share of nuclear and renewable power plants in energy mix has increased. However, hydropower generation has fallen from 31% to 27%. Hydropower is a cheap source of electricity hence, the decrease in its share is disappointing. The cumulative share of thermal power plants has remained constant. However, among the thermal power plants, the new power plant are primarily run on RLNG and coal. Around 15 % electricity is generated from coal and 24% of the electricity is generated from RLNG[19]. The last government adopted the policy of shifting away from furnace oil hence its share has dropped from 33% to 16%[20]. Shift from furnace oil has had positive impact on the cost of electricity produced. Although, the generation mix has moved towards cheaper fuels such as coal yet more active

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[13] Pakistan Muslim League (N) National Agenda for Real Change Manifesto 2013

[14] 'PM approves Discos, Gencos privatization'- The Nation (11th June, 2014)

[15] 'Power companies: obstacle to sell-off plan identified'- Business Recorder (31st January, 2018)

[16] 'Rs150bn loss at generation stage alarms Nepra'- Dawn (25th January, 2018)

[17] 'Power Losses'- Business Recorder (3rd February, 2018)

[18] 'Power sector transformation — reality or myth?'- The Express Tribune (25th March, 2018)

[19] 'State of the Power Sector'- Business Recorder (22nd May, 2018)

[20] 'State of the Power Sector'- Business Recorder (22nd May, 2018)

policy was needed to move towards an efficient energy mix to bridge the gap between cost of producing electricity and recovery from consumers.

Conclusion

Contrary to the claims made by the last government, it missed the targets by a huge margin. Like its predecessors, the last government also adopted short term solutions to pacify the problems prevalent in the power sector rather than working towards sustainable solutions. In essence, the state of the power sector will not improve until the governments are futuristic and long term in their vision and start working towards prudent policy making and implementation.

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

June

Analysis of CPEC Power Projects

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