Day Break

Tuesday, 30 July 2019

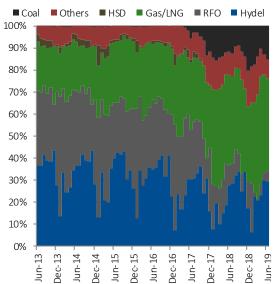
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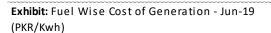
Sector Update

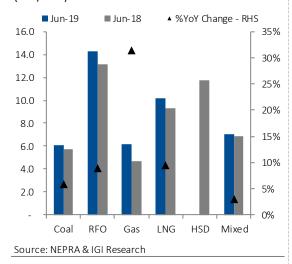
Monthly Power Generation Mix (Jun-19) - Gwh

Source	Jun-19	Jun-18	ΥοΥ	FY19	YoY
Hydel	3,840	3,589	7%	32,356	14%
RFO	695	1,163	-40%	9,092	-60%
Gas/LNG	5,494	5,278	4%	50,180	16%
HSD	-	4	-100%	31	-96%
Coal	2,037	1,522	34%	16,312	38%
Others	1,090	1,358	-20%	14,738	7%
Total	13,157	12,914	2%	122,708	2%

Exhibit: Fuel Wise Generation Mix (%)







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Power Generation & Distribution

Generation lifts by +4%YoY during Jun-19 leading to a meagre +2%YoY growth in FY19

- As per latest data available on NEPRA's website, overall power generation during the month of Jun-19 increased by +2% YoY to 13,157Gwh, up by +2% YoY. Power production through Coal/Hydel/Gas-LNG clocked in at 2,037/5,494/3,840Gwh up by +34%/+7%/+4% YoY, while generation through RFO decreased by 40% YoY to 695Gwh during Jun-19,
- Power generation through RFO in Jun-19 dropped by 40% YoY (down by 468Gwh) to 695Gwh, owing to lower generation from GENCO III, Nishat Power, Narowal, Hub Plant, Attock Gen, Pakgen and KAPCO Block II (cumulatively down by 412Gwh) while generation from smaller IPPs was down by 56Gwh,
- Gas/LNG based power generation increased by +4%YoY (216Gwh) to 5,494Gwh in Jun-19 on the back of a) higher generation by KAPCO Block II (adding 43Gwh), b) GENCO III up by 18Gwh and, c) higher generation from Haveli Bahadurshah, Baloki and QATPL (cumulatively adding 505Gwh), despite lower generation from smaller IPPs,

Power production depicts +2%YoY growth in Jun-19

As per latest data available on NEPRA's website, overall power generation during the month of Jun-19 increased by +2% YoY to 13,157Gwh, up by +2% YoY. Power production through Coal/Hydel/Gas-LNG clocked in at 2,037/5,494/3,840Gwh up by +34%/+7%/+4% YoY, while generation through RFO decreased by 40% YoY to 695Gwh during Jun-19. This in our view is likely due to down turn in economy along with rising fuel costs leading to lower demand. Moreover, extended winter season also kept a lid on demand. This brings total generation for FY19 to 122,708 up by +2% YoY primarily led by +98%/+38%/+14% YoY rise in production through LNG/Coal/Hydel contributing 63% of the total power generation while contribution from FO based power generation is down to 7% YoY as compared to 19% in FY18.

Exhibit: Power Generation Mix (Jun-19)

GWH	Jun-19	Jun-18	YoY	May-19	MoM	FY19	FY18	YoY
Hydel	3,840	3,589	7%	3,747	2%	32,356	28,259	14%
RFO	695	1,163	-40%	398	75%	9,092	22,771	-60%
Gas	1,881	2,026	-7%	2,057	-9%	22,034	29,094	-24%
LNG	3,614	3,252	11%	3,625	0%	28,146	14,196	98%
Gas/LNG	5,494	5,278	4%	5,681	-3%	50,180	43,289	16%
HSD	-	4	n/m	-	n/m	31	788	-96%
Coal	2,037	1,522	34%	1,629	25%	16,312	11,787	38%
Others	1,090	1,358	-20%	1,148	-5%	14,738	13,825	7%
Total	13,157	12,914	2%	12,604	4%	122,708	120,719	2%

Source: IGI Research, NEPRA

FO: Generation down by 40%YoY in Jun-19

Power generation through RFO in Jun-19 dropped by 40% YoY (down by 468Gwh) to 695Gwh, owing to lower generation from GENCO III, Nishat Power, Narowal, Hub Plant, Attock Gen, Pakgen and KAPCO Block II (cumulatively down by 412Gwh) while generation from smaller IPPs was down by 56Gwh. This brings total generation for FY19 to 9,092Gwh down by 60% YoY owing to lower generation from Hub Plant, KAPCO Block I & II and GENCO I & III along with lower generation from smaller inefficient IPPs such as Lalpir and Pakgen.

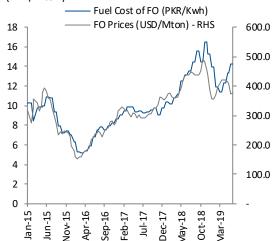


Exhibit: Cost of generation on FO and Gas

(According to Data released by NEPRA)

FO (PKR/Kwh) Gas (PKR/Kwh) 18.0 LNG (PKR/Kwh) 16.0 14.0 12.0 10.0 8.0 6.0 4.0 2.0

Exhibit: FO Prices (USD/Mton) and Fuel Prices (PKR/Mton)



Gas/LNG generation up by +4%YoY in Jun-19

Gas/LNG based power generation increased by +4% YoY (216Gwh) to 5,494Gwh in Jun-19 on the back of a) higher generation by KAPCO Block II (adding 43Gwh), b) GENCO III up by 18Gwh and, c) higher generation from Haveli Bahadurshah, Baloki and QATPL (cumulatively adding 505Gwh), despite lower generation from smaller IPPs. This brings total generation in FY19 to 50,180Gwh up by +16% YoY led by higher generation from QATPL, Haveli Bahadur Shah, Baloki and smaller IPPs.

Generation cost on RFO rises to PKR 14.29/Kwh during Jun-19

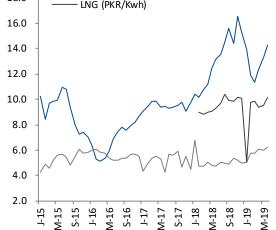
As per NEPRA, power cost on RFO during Jun-19 is up by +7% MoM (or up by +10% YoY) to PKR 14.29/Kwh. However, gas price rose to PKR 6.19/Kwh up by +31%YoY (up by 3%MoM) while generation cost through LNG increased to PKR 10.20/Kwh, up by +10% YoY (or up by 7% MoM) due to PKR depreciation. For the month of Jun-19 to date, international RFO (180cst bunker fuel) prices have averaged USD 375/MTon as compared to USD 412/Mton in the preceding month (average of USD 414/MT in Jul-19 so far). The import price for FO remains unchanged owing to no imports of FO during the last few months. Recent PKR depreciation has led to increase in FO and LNG cost despite decline in international prices.

Outlook

We expect generation on gas to increase due to higher LNG import going forward. RFO based generation is expected to slow down as new LNG/coal plants commence operation and restoration of water levels for higher generation through Hydel. However, in the long term we foresee FO based power generation to slowly phase out as new LNG and Coal based power plants commence operations by FY21. CPHGC plant is likely to start generation by Aug-19. In the medium term we anticipate coal based generation to reach up to 18% from current 13% in FY19. Although, rise in coal and LNG prices could increase the cost of generation in the coming years but renewable energy projects (including wind and solar) would significantly reduce cost.









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