



Today's Daily

■ Power: Shifting generation landscape

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KSE100 - Index

| | |
|----------|-----------|
| Current | 43,885.51 |
| Previous | 44,301.20 |
| Chg. | -0.94% |

Mkt Cap. (PkRbn/US\$bn)

| | |
|----------|---------------|
| Current | 9,108 / 82.39 |
| Previous | 9,171 / 82.96 |
| Chg. | -0.69% |

Daily Turnover (mn)

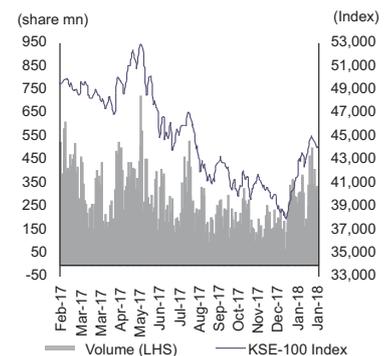
| | |
|----------|--------|
| Current | 237.96 |
| Previous | 284.37 |
| Chg. | -16.3% |

Value Traded (PkRmn/US\$mn)

| | |
|----------|----------------|
| Current | 8,472 / 76.63 |
| Previous | 10,601 / 95.90 |
| Chg. | -20.1% |

News and Views

- The US House of Representatives joined the Senate in seeking to end US economic aid to Pakistan while the Trump administration has already suspended military aid. In this regard, a bill is introduced in the lower chamber of United States Congress, aiming to stop non-defense aid to Pakistan.
- The United States could consider ending a suspension of security assistance to Pakistan if Islamabad takes "decisive and sustained" actions against militant groups in the country, the State Department's No. 2 official said.
- The government is planning to introduce two separate amnesty schemes aimed at legalizing undisclosed local and foreign assets held by Pakistanis at home and abroad.

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Power Generation Snapshot

| | CY17 | | | CY16 | | | CY15 | | |
|---------|---------------|-----------------------|------------|---------------|-----------------------|------------|---------------|-----------------------|------------|
| | Power Gen. MW | Cost of Gen. (Rs/KWh) | Weight (%) | Power Gen. MW | Cost of Gen. (Rs/KWh) | Weight (%) | Power Gen. MW | Cost of Gen. (Rs/KWh) | Weight (%) |
| Hydel | 3,447 | 0.14 | 26.5% | 3,866 | 0.12 | 32.7% | 3,722 | 0.10 | 33.3% |
| Coal | 549 | 4.09 | 4.2% | 10 | 4.65 | 0.1% | 10 | 4.65 | 0.1% |
| HSD | 216 | 14.68 | 1.7% | 143 | 12.70 | 1.2% | 276 | 14.68 | 2.5% |
| FO | 3,487 | 9.97 | 26.8% | 3,592 | 7.68 | 30.4% | 3,395 | 9.58 | 30.4% |
| Gas | 2,643 | 4.75 | 20.3% | 2,952 | 5.61 | 25.0% | 3,073 | 5.68 | 27.5% |
| RLNG | 1,279 | 7.74 | 9.8% | 373 | 6.41 | 3.2% | - | - | 0.0% |
| Nuclear | 881 | 1.00 | 6.8% | 562 | 1.14 | 4.8% | 455 | 1.17 | 4.1% |
| Import | 62 | 10.63 | 0.5% | 53 | 10.57 | 0.5% | 51 | 10.33 | 0.5% |
| Wind | 191 | 1.30 | 1.5% | 104 | 0.05 | 0.9% | 73 | 0.00 | 0.7% |
| Solar | 76 | 2.53 | 0.6% | 49 | 1.71 | 0.4% | 12 | 1.86 | 0.1% |
| Bagasse | 124 | 5.98 | 1.0% | 77 | 6.40 | 0.7% | 42 | 6.10 | 0.4% |
| Mixed | 55 | 6.86 | 0.4% | 27 | 7.08 | 0.2% | 69 | 7.84 | 0.6% |
| Overall | 13,011 | 5.09 | | 11,807 | 4.39 | | 11,178 | 5.04 | |

Source: CPPA & AKD Research

Squeezing the share of big shots: With many of the CPEC power projects still under the implementation stage, an altered generation base can already be sensed where the addition of RLNG and coal based complexes have started to squeeze the share of furnace oil. Bhikki, Balloki and Haveli Bahadur Shah, the 3 most talked about RLNG based plants saw their commissioning in 2017, providing ~3,700MW of capacity (while Pakistan has started importing another 600MMCFD of RLNG from Dec'17). Moreover,



Sahiwal based coal fired plant is fully functional and phase-1 of Port Qasim power plant has finally been commissioned. Cumulatively, RLNG/coal occupied 9.8%/4.2% share in CY17 generation pie, while nuclear also followed suit increasing its share by 2% over CY16 on the back of adequate generation from Chashma nuclear complexes (I-IV). In anticipation of further power complexes coming online, GoP took an unprecedented move and ordered the shut down of all FO based plants in Oct'17, later allowing only the efficient ones to function to absorb the local production of Furnace Oil, whose share in the generation mix declined by 3.6% to an all-time low of 26.8%. While the share of renewables also increased, generation on indigenous gas declined by 4.7% as allocation was made to domestic and industrial users of gas while utilizing RLNG for power generation purposes.

Oil prices continue to amplify unit cost: Average generation cost during CY17 inched up to PkR5.09/unit from PkR4.39/unit in CY16. Surge in unit cost was predominantly caused by higher oil prices, up 23.4%YoY leading to higher FO (PkR9.97/unit vs PkR7.68/unit) and RLNG costs (PkR7.74/unit vs. PkR6.41/unit). Commissioning of renewable power plants (solar with reference tariff at PkR~19/unit vs coal at ~PkR9/unit) providing lucrative ROEs also pushed up cost of generation.

Investment perspective: Despite lower cost on generation on RLNG as compared with FO and reportedly better governance, stock of circular debt has been rising constantly. Total pile-up as per news reports amount to PkR970bn, as compared with ~PkR680bn in 2016. With ~8,000MW of power plants upcoming under the CPEC project (and the underlying CPP commitments), there is little hope of situation getting better. While we do not foresee clearance of power sector receivables (HUBC/KAPCO in particular), receivables of PSO can see a downtrend, as import of RLNG from the 2nd LNG terminal is not routed through the company, while shift from FO can provide further breathing space to the company. With no immediate threat with regards to the CPP payments, KAPCO remains our preferred pick in the power space providing 12% capital upside along with 16.5/16.3% D/Y for FY18/19F.



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| | |
|------------|------------------------------------|
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| Neutral | ≤ 5% to ≥ -5% potential |
| Reduce | < -5% to > -20% downside potential |
| Sell | ≤ -20% downside potential |



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