Electricity Market and Regulatory Risk Review

January 2018

Summary

- **Focus on Disco Network Investment** -
  - In January the Minister of Power (MoP) said was quotes as saying *"government would present to the Discos investment work plans to build 33/11/0.415kV lines and distribution substations"*.[1]
  - Discos on this note need to prepare for this by presenting their own network investment plans based on outputs of the Energy Demand Studies and a Revenue Maximisation Study (RMS) that recognises that the revenue/kWh for each feeder is different depending on the mix of customers and ATC&C losses.
  - Once available, results of the EDS and RMS can feed into Distribution Network Expansion Plan (DNEP) analysis to prioritise investments. We have developed a simple and cost-effective modelling approach that we can work with your team to apply.
- **Power Supply– 2017 Review**
  - **Generation** - National generation sent-out in 2017 was on average 3,549 MWh/h capacity generating - 47% below MYTO 10-year Order projection.
  - **Transmission** - performance in meeting the MYTO load allocations improved but imbalance compensation owed to Discos that are "short" is ₦4.95bn for the year.
  - **Gas -** Although vandalism receded in 2017 due to political interventions, gas-fired generators continued to experience gas supply issues during the year.
- **Power Supply– 2018 Outlook**
  - **Generation** - The office of the MoP anticipates 7 power plants will come on stream in 2018 adding a total of 914 MW to the system. Of the 7 plants, Azura IPP has logged firing hours as it undergoes its commissioning phase.
  - **The ₦701 bn NBET fund** - NBET initially forecast that the fund would last until the end of 2018, although due to lower than expected generation levels and costs draw down has been below their expectations. We estimate about 42% of the fund was used to end of 2017. However, given the emergence of Azura IPP and the expectation that Discos will struggle to increase their % remittances 2018, the fund can be expected to

[1] This day, 30th January 2018.

deplete at a faster rate in 2018: averaging 35.6 ₦bn/month instead of the NBET expectation of 17.0 ₦bn/month.

- **Transmission** - The recently announced 7,200 MW wheeling capability is yet to be achieved but TCN allege that the reason for this is largely due to Disco networks being unable to absorb to this level of power and require reinforcement. This can be resolved as part of the RMS and DNEP modelling if we are able to analyse hourly data from each injection point to show what the Disco required, what TCN made available and what is needed to bring the 2 into step.
- **Gas -** We estimate that current level of gas supply means the collective maximum theoretical availability factor that can be achieved by gas-fired plant is 64%. Combining this with hydro generation (average of 804 MW/h made available in 2017) indicates the potential for 4,367 MW/h available. If, however, completion of the ELPS 2 loop pipeline is achieved (and the pipeline is supplied) then capacity available has the potential to reach 5,597 MW/h.

- **Draft Meter Asset Providers (MAP) Regulations 2017** – NERC published the Draft MAP Regulations 2017. There are several concerns about the regulation, the 5 most significant are:
  - NERC fails to recognise existing metering targets;
  - It is a precursor to a cap on estimated bills, which the market is not ready for;
  - Some use of a MAP seems to be compulsory, but there is nothing in the regulation to prevent the Disco from continuing to install meters themselves;
  - Impact on Capex and Opex provisions in MYTO is not recognised. We would see tariff reviews as necessary before the MAP regulation can be fully effective. Similarly, any indexation in the Meter Service Agreement should be tied to MYTO; and
  - Payment security for MAPs is a barrier to delivery, as the lack of credit this regulation is intended to address may prevent these securities being obtainable.