

## **Roundtable – The Question of 34 GW Minutes of the meeting**

P.D.Siwal, Central Electricity Authority

- inefficient coal power stations must retire and instead new supercritical units must be installed
- Factors to consider while retiring old power stations and replacement with new supercritical units– vendor capacity, techno economic viability, land & water availability, employment, power demand in the location, R&M-LE investments, cost of electricity generation etc.
- Based on the above factors CEA has recommended replacement of roughly 5000 MW old capacity

Amit Sengupta, CESC Ltd.

- Titagarh power station, though inefficient, is important to ensure reliability of the transmission grid
- reliability of transmission grid is another factor to consider while retiring old power stations

Ashok Khuranna, Association of Power Producers

- Whether techno-economically viable to retrofit old capacity with pollution control equipments and continue operation
- old capacity's coal, water, tariff agreements etc. could be auctioned to private players for replacement with supercritical units

Taruna Saxena and Unnikrishnan, Tata Power

- Instead of setting parameters to retire 'old' capacity parameters must be set to retire 'underperforming' capacity
- NTPC Singrauli, NTPC Korba are old power stations but not underperforming
- O&M practices create a stark difference in the way the a power station performs
- Fresh water OTC plants should not be retired if water scarcity is not an issue in the area.

D.K.Jain, Retd.Director, NTPC

- Units with size less than 110 MW to be decommissioned compulsorily
- Non reheat type power stations should be decommissioned compulsorily
- Unit sizes up to and include. 200/210 MW operating at pressures less than 150 ata to be retired within 5 years and replaced with SC units
- Turbine cycle heat rate – key parameter to be considered for retiring plants

- With evolution in technology - unit sizes in the market is increasing – correspondingly design turbine cycle heat rate has improved
- Government must encourage installation of these efficient units

Anil Razdan, Retd.Sect, MoP

- Merit order dispatch should be modified to include environmental costs and inefficiency costs or integrate more stiff regulations through PAT scheme to penalize inefficient power stations
- Regulators should be invited to understand how much tariff increase is viable and how
- Packages to be designed to compensate employees like voluntary retirement funds (VRFs), etc. for old inefficient coal fire power plant which plans no expansion or renovation and complete closure
- Waiver of all statutory clearances for coal procurement, water procurement, environmental clearances etc. to install energy efficient supercritical new units
- However demand studies essential else assets will be stranded.
- New power plants projects must be constructed taking into consideration – water availability, energy demand in the area, etc. Location criteria should be specified.
- Energy demand: Central Electricity Authority's data on power demand only partially captures the actual demand. CEA was requested to release data on the capacity of captive power station and diesel generator sets in India to reflect actual demand of electricity in India. CEA was urged to look into other methods of procuring data than self disclosure by power stations to improve reliability of the statistics.

S.Ravi, General Manager, Neyveli Lignite Corporation

- NLC is planning to schedule new lignite boilers and decommission the old units of NLC
- Currently challenges are being faced commissioning the new 1\*500 MW PC lignite fired station and 2\*250 MW CFBC lignite firing station

Sandeep Tandon, UNIDO

- Spare part availability might become a concern
- Staff absorption has not happened in the state power sector for the last 8-9 years. Leaves scope for transfer of staffs to other staff short divisions if old power stations are retired.

Anurag Sehgal, Brookings India

- Excess coal capacity exists. Also coal mining is happening in excess than required; according to Brookings India study India's coal requirements will not exceed 1.2 bt till 2020.

N S Mondal, CEA

- Demand is expected to increase so it may not be advisable to shut capacity. Low demand from grid means plants operating under low PLFs
- To increase demand, DISCOMs must be strengthened – low electricity demand is a reflection of poor performance of the DISCOMs
- UDAY scheme which was announced to restructure the discoms may fail as prices of electricity are not being revised as envisaged by the scheme. Better reform policy for the DISCOMs is essential
- Transmission network: Various bottle necks exist in transmission and distribution systems which forces even costly power generations very essential to a particular area as it cannot be catered by other transmission/distribution systems. Such nodes have to be identified and transmission and distribution network must be strengthened.

Prabhat Verma, Doosan

- Adapting best O&M practices can result in a significant improvement
- O&M practices can result in reduction of fuel consumption and over all emission/water uses.

Concluding remarks

1. Given new environmental norms, a meeting should be convened to figure out technology availability, investment required, monitoring plan etc. These standards have implications on old plants – whether the plants should be upgraded to meet new standards or closed expeditiously
2. CSE will work to develop policy package with assistance from APP and other stakeholders to incentivize shutting old plants and replacing them with new super critical units
3. CEA is in the process of finalizing report on future capacity needed that may address plant closures. CEA may also commence working on a report on new pollution standards. The participants expressed a desire that it includes details on relevant/applicable technology to meet various standards to guide plants and other stakeholders.
4. UDAY scheme's performance should be re-viewed and appropriate strategies must be incorporated to ensure discoms sustainable operation.