



एनटीपीसी NTPC
A Maharatna Company
Corporate Centre

NTPC Comments on Draft CERC Tariff Regulations for 2019-24





Background

NTPC Average Tariff (Coal Stations)			
FY	Fixed Charges (Rs/kwh)	Variable Charges (Rs/kwh)	Total Tariff (Rs/ kwh)
2014-15	1.10	2.03	3.13
2015-16	1.18	1.91	3.09
2016-17	1.21	1.98	3.19
2017-18	1.22	1.91	3.13

- Fixed Charge increased by 11% in 3 years
  - Despite record addition of new capacity in last few years and inflation in costs.
- ECR decreased by 6%
  - Against continuous increase in coal prices of around 45%, freight and taxes duties.
- Total cost of power increase: 0%

A Maharatna Company

KEY ISSUES

Modified GFA for Old Stations > 25 years

- Old NTPC stations of 13160 MW contributed more than 86 BU in 2017-18.
- These are mostly pithead stations and are in good condition.
  - Total Cost of power from old stations like Singrauli and Korba was Rs.2.03/kwh & Rs.2.01/kwh and they contributed 13.45 BU & 15.36 29 BU last year.
  - These plants have been maintained in excellent condition owing to support of Regulations providing Special Allowance post 25 years.
- Post-tax ROE for Singrauli and Korba has been reduced to around 10 Cr and 14 Cr. at target availability.
- Due to the proposed mechanism, reduction in tariff for stations like Singrauli, Korba would be in the range of 6 to 8 P/kWh but it would put these stations in loss due to risks related to machine outages, under recovery of O&M expenses, loss on account of stringent operation norms, coal shortage, etc.
  - Being old stations they would be unable to meet norms of heat rate, APC etc. because they do not have separate norms.
  - Being old their O&M expenses is higher than the norms because they do not have separate norms.

Modified GFA for Old Stations > 25 years

- Any of the following could wipe out their annual return:
  - 0.5% deviation in heat rate from the norm
  - 1.0% deviation in availability from the norm.
- Even reduction in PLF by 2.7 and 3.5 in Singrauli and Korba % would wipe out the gain to beneficiaries due to modified GFA.
- As their condition would deteriorate, they would eventually have to be retired.
- Returns not commensurate with the risks; No incentive to run such old stations.
- **Impact on Discoms**
  - These stations have helped beneficiaries maintain low cost of power to the consumers.
  - Running of old stations is vital to maintain the low power cost
  - In case of closure the cost of alternate power to Discoms would be Rs.11152 Cr and Rs.15322 Cr considering alternate power @ Rs. 4.00 /unit and Rs. 4.50 /unit

Hon'ble Commission may retain present GFA approach for these old performing assets in overall interest of Discoms as well as generators.

RoE at debt rate for Emission Control System.

- Draft Regulations have proposed servicing of equity investment at actual debt rate.
- No risk premium provided while all risks remain with the generator.
- In case of loss of availability due to FGD, there would be under recovery in fixed charges of unit.
- Significant investment of around Rs 20,000 Crores required.
- 100% debt financing may not be possible; even if arranged it would be at a higher rate, as lender's risk would increase.
  - In D/E ratio of 70:30 considering RoE@15.5% and 8% debt rate, beneficiary would service the cost @10.25%.
  - Increase in debt rate by 2.25% would wipe out entire gain of beneficiaries intended through this dispensation.
- This would result in differentiated rate of RoE for different Gencos as per their financial health.
- Proposed dispensation shall dis-incentivize implementation of revised emission control norms or force Gencos for 100% debt funding resulting in higher interest rates.
- May not achieve intended reduction in tariff as debt rate for total loan portfolio of Genco shall increase.

Hon'ble Commission may consider servicing of equity invested in Emission Control System at normative rate of ROE.

RoE at debt rate for Add-cap

- Draft Regulations have proposed servicing of equity invested in add-cap at debt rate.
- Retrospective lowering of rate of ROE pertaining to add-cap which have been made considering 15.5% post-tax return at debt rate will shake the lenders confidence and affect the cash flow of the generating company.
- This may reduce the credit rating of the generating company.
- As a result overall rate of interest on loan shall increase.
- This dispensation will result in overall increase in interest rate for the power sector.

Hon'ble Commission may consider servicing of equity invested in add-cap) at normative rate of return on equity.

Operating Norms – Heat Rate

Unit	Existing Norms	Draft Regulations	CEA Recommendation
200 MW	2450	2410	2450
500 MW	2375	2375	2400

- **Operating norms may be aligned with CEA Recommendations**

- Our humble submissions on methodology of fixation of norms (based on past actual data) is as under:
  1. All units may be considered in the base for fixation of norms.
  2. As compensation is available only up to the norms, corrected heat rate may be restricted up to the norms.

- Minimum boiler efficiency of 86% specified for units achieving COD on or after 01.04.2009.
  1. Boiler designed based on coal quality. Actually, coal quality varies as it is from many sources
  2. Units achieving COD in 2009-14 period were designed considering 85% min boiler efficiency, these may not be changed retrospectively.
  3. Min boiler efficiency of 85% may be retained.
  4. Alternatively, only units heat rate may be prescribed as per CEA Recommendations.

- Norms may be fixed considering of operating conditions anticipated in future due to increase in RE generation.

O&M Expenses Norms

- Annual escalation has been reduced from 6.35% to 3.2% :-
  1. 75% of O&M expenses comprises of services including employee benefit expenses, wages to contractual laborers for repair and maintenance.
  2. Escalation @ 5% may be allowed for O&M expenses considering CPI:WPI weightage of 75:25 as allowed in case of hydro stations.
- Impact of GST, Min. Wage Revision, etc. needs to be factored in O&M Expenses.
- Considering the actual O&M units of all units of NTPC station, the O&M expenses works out as under:
  - 200MW: Rs. 33.31 L/MW
  - 500MW: Rs. 22.56 L/MW
  - 600 MW& above: Rs. 19.52 L/MW
- Additional O&M
  - FGD / ECS - 3% of the capital cost

Incentive during peak hours.

- **Separate Eligibility for peak and off-peak hours**:
  - NQPLF may be seen separately for peak and off-peak hours.
  - For stations achieving target availability but not falling in incentive zone (PLF > 85%), there would be no inclination to give higher availability during peak hours.
- **Level of NQPLF:**
  - NQPLF may be set at 83% matching NQPAF as PLF is expected to go down due to increased RE penetration in future.
- **Rate of Incentive:**
  - Allowed at 50 paisa per unit (pre-tax) during 2009-14. Effective incentive 38 paisa per unit (post-tax)
  - Same continued without any escalation in draft regulations for off peak period.
  - Incentive rate of Rs. 1.00 per unit may be allowed.

Target Availability for new units.

- There is need for stabilization period in new units / stations to resolve various technical and operational issues encountered in the initial period.
- Regulations allows a window of 3 years (from COD of last unit to the cut-off date) in order to complete commissioning of all associated systems & equipment of the station.
- CEA has recommended relaxed target availability of 68.5% in the first financial year (FY) after COD.
- Majority of NTPC units are unable to achieve target availability norms in the past.
  - Mouda – I : 58%
  - Mouda – II: 68%
  - Solapur – I: 66%
  - Kahalgaon II: 66%
  - Vindhyachal IV: 74%

In view of the above, it is suggested that relaxed target availability norm of 68.5% may be provided to new units from COD till cut-off date for the purpose of stabilization.

Decommissioning Expenses

- 2-3 years required for complete dismantling after shut down
- Expenditure would be incurred towards employee cost, power charges, water charges, tendering, etc. while no revenue to meet such expenses
- Provision of fund for de-commissioning activities during the fag-end of the stations
- Normative value of lakh/MW

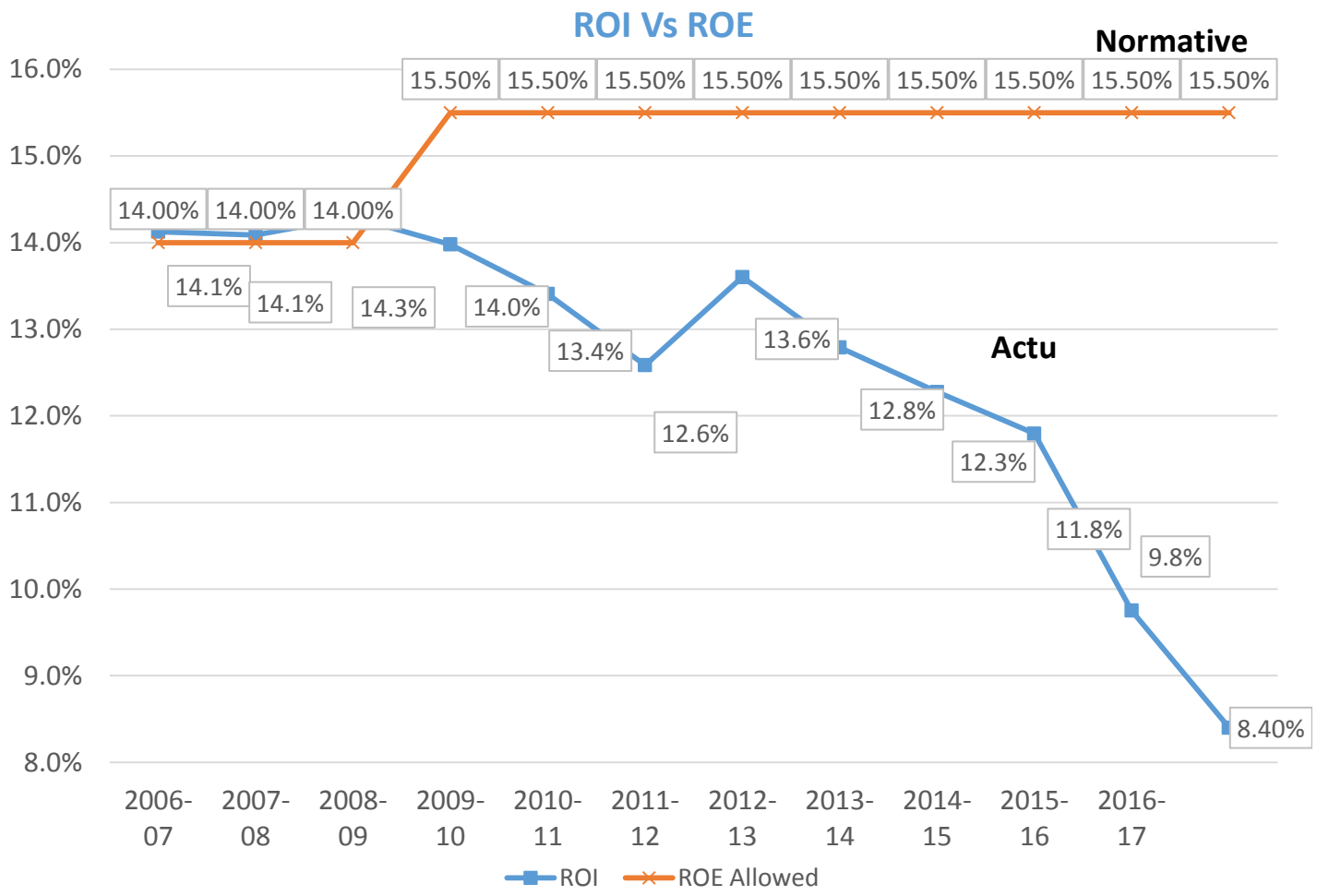
Coal Stock, Rebate and Surcharge,

- Coal Stock in Working Capital
  - Draft Regulations has proposed lowering of coal stock in IWC for non pit head stations from 30 to 20 days.
  - Since arranging coal is responsibility of generator and considering logistics constraints of railways and monsoon, stock of 30 days is required.
  - Since the risk of low stock is with generator, the norm of 30 days may be returned.
- Rebate
  - Rebate on presentation of bills may be made as 1.5% as receivables have been reduced from 60 to 45 days.
- Surcharge (LPSC) - Draft regulations have proposed LPSC @ 1.25% per month.
  - LPSC rate should be deterrent
  - LPSC rate may be retained at 1.5% per month.

Normative Debt Rate

- As most of the financial and operating parameters are based on norms, debt rate may also be normative.
- This would incentivize generator to secure lower cost of debt.
- Benchmark may apply uniformly to all entities based on average credit rating of all the entities in the sector.
- As loans from banks are linked to MCLR, it is suggested to link the normative cost of debt to SBI one year MCLR + 350 bps. This would also take care of movements from time to time in the interest rate conditions.

NTPC Return - Normative versus Actual



- Risks of Generators
  - Coal Availability
  - Machine availability
  - Project implementation risk
  - Meeting Operational norms
- Many stations are not able to recover Fixed charges

THANK YOU