

**Before the  
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION  
World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400005  
Tel. 022 22163964/65/69 Fax 22163976  
Email: mercindia@merc.gov.in  
Website: www.mercindia.org.in / www. merc.gov.in**

**CASE No. 15 of 2017**

**Dated: 28 November, 2017**

**CORAM: Shri Azeez M. Khan, Member  
Shri Deepak Lad, Member**

**In the matter of**

**Petition of MSEDCL seeking directions for optimization of power generation in the  
State of Maharashtra by reducing the technical minimum limit of Generating Units as  
per CERC norms**

Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) : Petitioner

Maharashtra State Load Despatch Centre (MSLDC) : Respondent No.1

Maharashtra State Power Generation Co. Ltd. (MSPGCL) : Respondent No. 2

JSW Energy Ltd. : Impleaded Respondent No. 3

RattanIndia Power Ltd. (RPL) : Impleaded Respondent No. 4

Adani Power Maharashtra Ltd. (APML) : Impleaded Respondent No. 5

Tata Power Company Ltd.-Generation Business : Impleaded Respondent No. 6

Reliance Infrastructure Ltd.-Generation Business : Impleaded Respondent No. 7

Vidarbha Industries Power Ltd.- Generation Business : Impleaded Respondent No. 8

Sai Wardha Power Ltd. : Impleaded Respondent No. 9

Emco Energy Ltd. : Impleaded Respondent No. 10

Ideal Energy Projects Ltd. : Impleaded Respondent No. 11

Abhijeet MADC Nagpur Energy Pvt. Ltd. : Impleaded Respondent No. 12

BEST Undertaking : Impleaded Respondent No. 13

Tata Power Company- Distribution Business : Impleaded Respondent No. 14

Reliance Infrastructure Ltd.- Distribution Business : Impleaded Respondent No. 15

## Appearance

Representative of the Petitioner	: Shri Paresh Bhagwat (Rep.)
Representative of the Respondent No. 1	: Shri A.P. Rewagad (Rep.)
Representative of the Respondent No. 2	: Shri S.B. Soni (Rep.)
Representative of the Respondent No. 3	: Shri Tushar Borse (Rep.)
Representative of the Respondent No. 4	: Shri Nilesh Thakur (Rep.)
Representative of the Respondent No. 5	: Shri Akshay Mathur (Rep.)
Representative of the Respondent No. 6	: Shri Amey Mhapsekar (Rep.)
Representative of the Respondent No. 7	: Shri Abaji Naralkar (Rep.)
Representative of the Respondent No. 8	: Shri Madhav Tekawade (Rep.)
Representative of the Respondent No. 9	: Shri Anand K. (Adv.)
Representative of the Respondent No. 10	: Shri Alok Shankar (Adv.)
Representative of the Respondent No. 11	: Shri Rajiv Shankar Dvivedi (Adv.)
Representative of the Respondent No. 13	: Shri R.D. Waikar (Rep.)
Representative of the Respondent No. 14	: Smt Swati Mehendale (Rep.)
Representative of the Respondent No. 15	: Shri Ghanashyam Thakkar (Rep.)
Authorized Consumer Representative:	: Dr. Ashok Pendse, TBIA

## Daily Order

Heard the Advocates/Representatives of the Petitioner, Respondents and Authorized Consumer Representative.

1. Representative of MSEDCL stated that:

- i. All Inter-State Generating Stations and Central Sector Generating stations are following revised norms of 55% Technical Minimum as per the amended CERC Regulations and same should be made applicable in Maharashtra as well. This will help MSEDCL to manage its extreme varying demand and reduce the power purchase cost.
- ii. As directed by the Commission vide Daily Order dated 20 June, 2017, MSEDCL has served copies of the Petition to the Generating Companies and other Distribution Licensees.
- iii. The Commission had directed MSEDCL to confirm whether NTPC had changed any operating parameters to achieve the revised Technical Minimum of 55%. Accordingly, confirmation has been obtained from NTPC that it has not carried out any power plant modification to achieve the revised Technical Minimum.
- iv. The situation of bringing the Generating Units upto the Technical Minimum arises for limited periods of the day and on only few occasions in the year. Therefore, the financial impact on the Generating Companies may not be significant and can be checked at the time of truing up.

2. The Commission observed that MSEDCL should have obtained the confirmation regarding any additional expenditure, if any, incurred on fuel or any parameter variation adopted by NTPC to achieve revised norms.
3. Representative of TPC-G stated that:
  - i. MSEDCL has not considered the compensation payable to the Generating Companies while calculating the saving in power purchase cost.
  - ii. It is incorrect to say that the Generating Units are operated at Technical Minimum for limited periods of time. Rather, the Units are required to operate at Technical Minimum daily during night off-peak hours.
  - iii. To a query of the Commission, Representative of TPC-G stated that it is not advisable to operate the Generating Units below the CPRI tested Technical Minimum as there is likelihood of loss of stability and tripping.
4. Representative of TPC-D stated that:
  - i. There should not be any additional financial burden on the Distribution Licensees due to revised Technical Minimum norms.
  - ii. The impact on the stability and the operating life of the Generating Units is also important as it affects the reliability of supply to the consumers.
5. Representative of RInfra-G stated that:
  - i. A study should be undertaken on case to case basis if the Technical Minimum is to be reviewed.
  - ii. CEA in its recommendations has stated that Units with specific operating constraints or where there are different OEM recommendations with proper technical justification should be excluded.
  - iii. Certain operational issues regarding RInfra-G's Units at Technical Minimum of 55% have already been submitted to the Commission.
6. Representative of RInfra-D stated that:
  - i. It is necessary to study whether the Units can sustain their performance at 55% and an independent body like CPRI may be engaged for the study.
  - ii. Based on such study, a chart indicating the compensation amount vis-à-vis the Unit loading should be prepared so that MSLDC, in real time, can decide about backing down the Units or otherwise based on economics.
7. Representative of MSPGCL stated that:
  - i. MSEDCL is silent on the provision of compensation mentioned in CERC Regulations.
  - ii. There may be issues relating to safety and stability if the Generating Units are brought to 55% Technical Minimum.

- iii. As already pointed out by MSPGCL, the compensation payable to the Generating Companies will be more than the saving in power purchase cost. Hence, there will be an additional burden on the consumers.
  - iv. Also, the performance parameters like Auxiliary Consumption, Heat Rate, and specific oil consumption will be affected.
8. Representative of M/s GMR Warora Energy Ltd. ( formerly Emco Energy Ltd. ) stated that:
- i. The Technical Minimum of its Generating Unit is specified as 70% based on OEM recommendations.
  - ii. Operation of the Unit below this limit would not be advisable due to stability issues and extensive oil support required.
  - iii. There are provisions regarding compensation in CERC Regulations. However, it is likely that the compensation payable to the Generating Companies may be contested by the Distribution Licensees, citing provisions in the Power Purchase Agreements.
  - iv. MSEDCL's submission that additional flexibility of 1703 MW would be achieved due to revised Technical Minimum is based only on assumptions and it may not be possible to achieve flexibility of such quantum.
9. Representative of IEPL stated that the Generating Plants may have their own issues and Plant shutdown may result in the Generating Company going bankrupt.
10. Representative of BEST stated that there should not be any additional burden on the common consumers.
11. Representatives of RPL, APML and JSW Energy Ltd. stated that they have already filed their respective submissions which may be taken on record.
12. Representative of Sai Wardha Power Ltd. stated that:
- i. Technical Minimum of 70% has been specified for its Generating Units based on OEM recommendations and CEA certification.
  - ii. Operation of Unit below this limit may not be sustainable and there will be degradation of the boiler and the generator.
  - iii. Also, extensive oil support may be required.
13. Representative of MSLDC stated that:
- i. It has no objection to revision in Technical Minimum upto 55%.
  - ii. NTPC units are being scheduled by MSEDCL at 55% and these Units are running at this technical minimum without any problem.
14. Dr. Ashok Pendse on behalf of Thane Belapur Industries Association (TBIA), an Authorized Consumer Representative, stated that:

- i. As per his information, NTPC is charging additional variable charge whenever its units are operated below the normative availability and upto the Technical Minimum of 55%.
- ii. The PPAs between the Generating Companies and the Distribution Licensees may require amendment so that compensation as per CERC Regulations can be given to the Generating Companies.
- iii. Technical Minimum of a Unit of a particular make may not be appropriate for Units supplied by other manufacturers.
- iv. Life of the Units may be affected due to revised Technical Minimum.
- v. Net saving on the power purchase cost depends upon additional compensation payable to the Generating Companies.

The Commission asked MSEDCL whether it is ready to bear the additional cost on account of compensation payable to the Generating Companies, to which MSEDCL did not respond.

The Commission observed that the operation of a Generating Unit upto the Technical Minimum of 55% may have an adverse impact on the operating life of the boiler and machine and these technical aspects cannot be ignored. Also, there are other options like zero scheduling or reserve shutdown available for optimization of power purchase expenses. MSEDCL should consult MSLDC and STU and explore different permutation/combinations for a practicable solution for managing the extreme variation in demand.

**The Case is reserved for Order.**

**Sd/-  
(Deepak Lad)  
Member**

**Sd/-  
(Azeez M. Khan)  
Member**