

**Before the**  
**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**  
**World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400005**  
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**Case No. 133 of 2016**

**Date: 9 February, 2017**

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

Petition of Nagpur Metro Rail Corporation Ltd. under Section 62 (1) (a) and 86 (1) (e) of the Electricity Act, 2003 for relaxing the applicability of definition of Eligible Consumer under Regulation 2.1(g) and Regulation 5 of MERC (Net Metering for Roof-top Solar Photo Voltaic Systems) Regulations, 2015.

Nagpur Metro Rail Corporation Ltd. (NMRCL) .....Petitioner  
V/s

Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL)

Maharashtra State Electricity Transmission Co.Ltd. (MSETCL) .....Respondents

**Appearance:**

For NMRCL : Shri Alok Sahay (Rep.)  
: Shri. Narendra Ahir(Rep.)  
: Shri. Anant Sant (Consultant)  
: Shri. Krishnajith M.U.(Consultant)

For MSEDCL : Shri Ashish Singh, (Adv.)  
: Shri.P.H. Jambhulkar (Rep.)

For MSETCL : Shri. A.V. Shinde (Rep.)

For Authorized Consumer Representatives : Dr. Ashok Pendse, (Rep) TBIA

**Daily Order**

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

1) NMRCL in its presentation set out the details of its Metro Rail project and its proposal for generation and consumption of solar energy by utilizing the solar energy potential available in its various premises to the tune of 23 MWp under net metering arrangement as per the provisions of MERC (Net Metering for Roof-top Solar Photo Voltaic

Systems) Regulations, 2015 (Net Metering Regulations) which would only require amendment or a special dispensation for a higher capacity exceeding 1 MW. NMRCL also presented the details of the locations (Stations & Depots, etc) and potential available at each location for Roof-top solar PV generation to meet its partial energy requirement in two phases, and connectivity with the grid at two points.

2) NMRCL explained the single line diagram of its project with the proposed net metering arrangement. It stated that it is seeking connectivity to the grid at two different points, with the MSETCL network at 132 kV and with the MSEDCL network at 33 kV. The net meter will be installed at the HT side of the transformer to be installed by NMRCL in its EHV Receiving Station. Roof-top Solar PV system will be connected to LV (415 V) level. NMRCL also set out the Central and State Government initiatives for the promotion of Roof-top solar PV systems.

3) NMRCL stated that only a Solar generation meter will be installed at the LT level at each Metro station for measuring the units generated by the Roof-top Solar PV system, which could be counted for the RPO of MSEDCL under the Net Metering regulation since NMRCL is not an obligated entity. MSEDCL's cost burden will reduce to that extent. MSEDCL's grid supply shall only be used as back-bone and internal distribution losses will be borne by NMRCL. All the applicable charges such as Demand/Fixed Charges corresponding to its Contract Demand of 25 MVA will be paid to MSEDCL, and its grid will be used for banking purpose.

4) NMRCL submitted there will be no net surplus sale to MSEDCL because its overall consumption would be more than the solar generation. MSEDCL's supply will also be used continuously to meet its fluctuating demand and, during some part of the day, solar generation may be more than its consumption; in that scenario, NMRCL may supply the surplus power to MSEDCL/MSETCL's grid.

5) NMRCL presented its case as a unique one and sought relaxation of the maximum limit of 1 MW for Roof-top Solar PV system to be installed under the provisions of the Net Metering Regulations. The Commission asked NMRCL regarding the intent/reasons behind limiting the capacity of 1 MW Roof-top Solar PV system under the Net Metering Regulations. In reply, NMRCL stated that this was for reasons such as to minimize the losses

in the system, grid stability and commercial aspects of the Distribution Licensees.

6) Advocate of MSEDCL stated that NMRCL's proposed Net Metering model is not in line with the definition of 'Net Meter' and 'Net Metering Arrangement' under the Net Metering Regulations. This is purely a case of Captive Generation. For the purpose of the Net Metering Regulations, capacity limit of 1 MW has to be considered and NMRCL is in fact seeking exemption from the provisions of the Regulations.

7) The Commission asked NMRCL about its load pattern and how it differs from the load pattern of Indian Railways which draws energy at various locations. In reply, NMRCL stated that its load pattern is similar.

8) The Commission suggested that MSEDCL & NMRCL meet to discuss the issues keeping in view the Regulations and multiple points of injection and/or drawal of the Metro System.

9) Dr. Ashok Pendse on behalf of Thane Belapur Industries Association (TBIA) stated that if any special dispensation to NMRCL under the Net Metering and Open Access Regulations, is given, other developers such as Metro or Monorail of Mumbai which may come before the Commission for availing similar benefits.

10) The Commission directed NMRCL & MSEDCL to submit the outcome of their meeting within two weeks.

NMRCL may also file its say justifying its case as being unique and requiring a special dispensation considering the intent and purpose of the Net Metering Regulations.

**The next date of hearing will be communicated by the Secretariat of the Commission.**

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

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