

Delhi Electricity Regulatory Commission

Viniyamak Bhawan, 'C' Block, Shivalik, Malviya Nagar, New Delhi –110 017

No. F.11 (685)/DERC/2011-12/

Petition No. 30/2011

Re: Petition seeking adoption of generic Tariff for generation of electricity from 60 kWp Solar Photo Voltaic Project, at NDPL DSIDC-II Grid Sub-station, Narela, Delhi

Tata Power Delhi Distribution Ltd.
Formerly known as NDPL
Through its: **Sr. General Manager**
33Kv Sub Station Building,
Hudson Lane,
Delhi 110 009

....**Petitioner**

Coram:

**Sh. P.D. Sudhakar, Chairperson, &
Sh. J.P. Singh, Member.**

ORDER

(Date of Order: 16.03.2015)

1. The Petitioner, Tata Power Delhi Distribution Ltd. (TPDDL) (formerly North Delhi Power Ltd. (NDPL) has filed a petition before the Commission for adoption of Tariff for generation of electricity from 60 kWp Solar Photo Voltaic Project at NDPL DSIDC –II Grid Sub-station, Narela, Delhi.
2. On the basis of information provided by the Petitioner, the Commission came to know that the instant case is not entitled for any subsidy either in the form of capital subsidy or generation based incentive. In the absence of such subsidies and incentives the levelised generic tariff for the solar energy would be on a higher side, which will adversely affect the consumers of Delhi. The Commission, in order to safeguard the interest of the consumers as well as to promote the generation of solar energy, vide Interim Order dated 11.06.2013 has advised the Petitioner to go for REC mechanism which is another instrument for promotion of generation of electricity through renewable energy sources. The relevant paragraphs of the said Interim Order are mentioned as under:

4. *The Commission directed that since no financial assistance is available for this project, therefore, Petitioner can approach the State Nodal Agency for REC registration/accreditation for obtaining REC, which shall be in the overall interest of the consumers of NCT of Delhi. This may be done with immediate effect.*

5. *The Commission also observed that in the case of such a project, a separate dispensation can be considered for energy fed into the generation till REC registration and accreditation, which shall in any case be not later than 31.03.2013.*

3. In order to finalise the tariff, the Petitioner was directed to furnish the requisite information along with the project-wise audited accounts for the projects for which tariff determination is being sought and actual rate of interest on the amount borrowed by the petitioner (Loans & Working Capital).
4. The Petitioner vide letter dated 6th January, 2015, has since submitted the requisite documents including Auditor's Certificate as on Date of Commercial Operation (CoD) and Bidding Evaluation Report.
5. As per the directions given in the Interim Order dated 11.06.2013, the Commission after considering the audited statements, other documents as submitted by the Petitioner and on the basis of following technical parameters as per CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations 2009 has determined a levelised tariff for the project at Rs.13.21/- per unit for the period from the Date of Commercial Operation (CoD) i.e. 29.07.2011 till 31.03.2013. A detailed calculation sheet is attached at Annexure.
 - I. **Capital Cost:** As per Auditor's Statement dated 02.01.2015 regarding Assets & Liabilities pertaining to DSIDC-II Grid Sub-station, Narela Solar plant as on COD i.e. 29.07.2011, total capital cost incurred on the project is Rs. 80.55 Lakh.
 - II. **Subsidy:** As per the submission of the petitioner, there is no subsidy for this project from GOI or otherwise.

- III. **Debt Equity Ratio:** Auditor's Statement dated 02.01.2015 regarding Assets & Liabilities pertaining to DSIDC-II Grid Sub-station, Narela Solar plant as on 29.07.2011 shows that equity infused in the project is more than 30%, whereas normative proportion of equity is 30%, therefore debt: equity ratio is considered at 70:30 for tariff calculation.
- IV. **Return on Equity:** Return on Equity has been considered as per the norms specified in CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations 2009 for the debt: equity ratio of 70:30 and as per CERC Regulations, following rate of return is considered:-
- Pre-tax 19% per annum for the first 10 years, and
 - Pre-tax 24% per annum from the 11th year onwards.
- V. **Rate of interest on loan Capital:** In absence of any specific loan details, the Average Rate of Interest of 10.17% for FY 2010-11 as approved in Tariff Order of TPDDL dated 31.07.2013 is considered; keeping in view the fact that the COD for the project is 29.07.2011.
- VI. **Depreciation:** As per CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations 2009, depreciation has been considered upto 90% of the project cost. The depreciation rate for the first 10 years of the Tariff Period shall be 7% per annum and from 11th year onwards, the remaining depreciation shall be spread over the remaining useful life of the project.
- VII. **Operation and maintenance expenses:** The Operation and maintenance expense of Rs. 9.5 Lakh/MW for FY 2010-11 with escalation factor of 5.72% p.a. has been considered as per the norms specified in CERC Order dated 26.04.2010.
- VIII. **Working Capital :** Working capital is computed as per the norms specified in CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations 2009.
- IX. **Interest on Working Capital:** The actual rate of interest on working capital to TPDDL as approved for the year 2011-12 in Tariff Order dated 31.07.2013 in respect of interest on working capital has been considered @ 11.43%.

- X. **Capacity Utilization Factor (CUF)** : The capacity utilization factor of 19% as per the norms specified in CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations 2009 has been considered. The Petitioner has to ensure that the plant gives the output guaranteed by the bidder.
- XI. **Discount Factor:** A Discount Factor of 13.72% has been considered as Weighted Average Cost of Capital (WACC) as per CERC norms.
6. For the period beyond 31.03.2013 till the completion of 25th year from the Date of Commercial Operation (COD), the Tariff for sale of electricity from this project shall be at the Average Pooled Power Purchase Cost (APPC) of the petitioner viz. TPPDL-D. During this period the petitioner would also be entitled for REC as per CERC (Terms and Conditions for Recognition and Issuance of REC for Renewable Energy Generation) Regulations 2010 as amended from time to time.
7. Ordered accordingly and the petition stands disposed of with the order that for the period from COD i.e. 29.07.2011 till 31.03.2013 the levelised tariff is determined at Rs. 13.21 per unit. Thereafter, the tariff shall be at the Average Pooled Power Purchase Cost (APPC) of the petitioner viz. TPDDL-D, with REC entitlement under CERC Regulations.

Sd/-
(J. P. Singh)
Member

Sd/-
(P. D. Sudhakar)
Chairperson

