

**ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
UNIT-VIII, BHUBANESWAR - 751 012**

**Present : Shri S. P. Nanda, Chairperson
 Shri S. P. Swain, Member
 Shri A. K. Das, Member**

Case No. 15/2015

M/s. Orissa Power Consortium Ltd.	Petitioner
Vrs.		
GRIDCO Limited & Ors.	Respondents

In the matter of: **An application under S. 86 (1)(f) of the Electricity Act,2003 for adjudication in determination of final tariff payable by GRIDCO Ltd. for supply of power from the 20MW Samal Barrage SHEP based on capital cost approved by the STC and factoring in the cost of transmission lines as per Order dated 19.05.2011 of the Commission passed in Case No.17 of 2011.**

For Petitioner: Shri R. P. Mahapatra, the authorized representative of M/s. OPCL, Shri K. Yogeswar Rao, Chief of Operations, M/s. OPCL, Shri K. S. Rao, MD, M/s. OPCL, Shri Biswanath Samantaray, M/s. OPCL.

For Respondents: Shri L. R. Dash, GM, GRIDCO Limited, Ms. S. Patajoshi, DM (PP), GRIDCO Limited, Shri Niranjana Mahalik, E.E, Head Works Division, Samal, Water Resources Department, GoO and Shri Samir Malik, Advocate on behalf of M/s. PTC India Limited are present.

Nobody is present on behalf of W. R. Department, GoO

ORDER

Date of Hearing: 04.12.2015

Date of Order: 04.02.2016

The petitioner M/s. Orissa Power Consortium Limited (OPCL) is operating the Samal Barrage Small Hydro Electric Power Project, with capacity of 20 MW (5x4 MW), which achieved COD in October, 2009. Since GRIDCO did not agree to purchase power from this SHEP, the petitioner executed PPA with M/s. PTC India Limited on 21.10.2004 amended by agreement dated 01.04.2006. Subsequently GRIDCO approached the Commission to purchase the entire power from this SHEP and accordingly a Power Sale Agreement (PSA) was executed between GRIDCO and PTC on 26.05.2009. The Annexure-A to the PSA provided that “the tariff payable shall be determined in the PPA which is as per CERC Tariff Regulations or as determined by the Appropriate Commission plus PTC’s margin of 4 paisa per Kwh”.

2. While concurring with the PSA dated 26.05.2009, the Commission in its interim order dated 01.10.2009 in Case No. 101/2009 observed that “the tariff mentioned in the PPA between M/S. PTC and M/s. OPCL is indicative tariff and not based on the current CERC guide lines”. In view of the above observations and considering that the completed capital cost of the project has not been approved by the State Technical Committee (STC), the Commission directed GRIDCO to pursue and take expeditious action for approval of completed capital cost of the SHEP by STC and submit the final tariff calculation to the Commission for approval of the final procurement price of the GRIDCO in respect of purchase of power from this project through PTC.
3. The STC in its 51st Meeting held on 22.05.2012 had concluded that the final capital cost of the 20 MW Samal Small Hydro Electric Project is to be Rs.154.84 Crores (including capital power evacuation/transmission line cost of Rs.23.17 Crores).
4. Since GRIDCO the Respondent No-1 did not file the tariff application before the Commission for determination of the final tariff applicable to the SHEP, the petitioner OPCL had to file the same.
5. The CERC notified on 16.09.2009 the CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2009 and determined the generic levellised generation tariff of the RE Projects for the FY 2009-10. This Regulation did not provide for any “Project Specific Tariff” for SHEPs. The evacuation infrastructure beyond the interconnection point was to be borne by the Transmission/Distribution Licensee. Accordingly, Regulation 12 provide that the Capital cost shall be inclusive of all capital work including plant and machinery, civil work, erection and commissioning, financing and interest during construction and evacuation infrastructure upto interconnection point. In view of the above the petitioner has calculated and submitted the levellised the final tariff for the Samal Barage SHEP by including the cost of evacuation infrastructure beyond the interconnection point (transmission line) for which the levellised tariff comes to Rs. 4.76 per Kwh. Considering the capital cost as given below:
 - (i) Normative capital cost as per CERC Regulation, 2009= Rs.500 lakhs/ MW
 - (ii) Cost of Transmission line = Rs.2317.00 lakh
 - (iii) Total project cost of the 20 MW project = Rs.12317.00 Lakh
 - (iv) Normative capital cost including Transmission Line = Rs.615.9 lakh/MW
 - (v) Levellised tariff = Rs.4.76 /Kwh.

6. GRIDCO the Respondent No-1 submitted that the counter dated 14.09.2015 was not based on the orders of the Commission. In the subsequent counter dated 03.02.2015 the levelled Project Specific Tariff of the Samal Barage SHEP was determined as Rs. 4.14 per Kwh, based on the Capital cost approved by the STC minus Transmission cost of Rs.23.17 cr. and the order dated 14.09.2010 of the Commission in Case No. 37/2008, which is for determination of “Generic Tariff” of RE Sources.

It was also submitted by GRIDCO that “the cost of evacuation system for an amount of RS. 23.17 Crores, as proposed by M/s. OPCL is to be borne by OPTCL as an STU. The 132 KV double circuit transmission line upto the OPTCL system can be declared as an STU asset and its cost can be included in the capital cost of OPTCL”

7. GRIDCO has submitted that the present petition filed by M/s. OPCL demanding increase of the applicable tariff in terms of Project Specific Tariff is not justified for lower generation from their 20 MW SHEP from the COD than the projected quantum (i.e. design energy), which is a major factor for fixation of tariff.
8. GRIDCO has submitted that the Project Specific tariff for 20 MW Samal Barage SHEP for the total power to be exported to GRIDCO for 35 years from the date of Commercial operation is coming around Rs. 4.14 per Kwh. But taking into consideration the actual generation from the project, the tariff may further reduce. GRIDCO prays that the Project Specific tariff for the 20 MW Samal Barage SHEP may kindly be re-determined on the basis of the parameters as per OERC Order dated 14.09.2010 in Suo Motu Petition No. 37/2008 for finalization of tariff for Renewable Energy Projects during 1st control period for the lifetime of the project i.e. for 35 years.
9. GRIDCO had not raised the above issues in the past hearing that the cost of the evacuation system is to borne by the OPTCL as STU. Further, GRIDCO did not confirm during the hearing that OPTCL is agreed to bear the cost of the evacuation system or not.
10. On this, the petitioner submitted that OPTCL has not accepted the proposal for taking over the power evacuation system constructed by the Petitioner on reimbursement of the cost incurred and submission of OPTCL was recorded in Para-II of the OERC order dated 19.05.2011.
11. In view of the above submissions the levelled tariff determined by the petitioner is Rs. 4.76 per Kwh, based on the orders of the Commission may be approved w.e.f. the Commercial Operation Date (COD) i.e. 12.10.2009. The Commission may hear the case regarding

reimbursement of the cost of evacuation by OPTCL and pass suitable order in this regard. In case OPTCL reimburses the capital cost of the transmission infrastructure along with the interest from the date of COD i.e. 12.10.2009, both the petitioner and GRIDCO will adjust their payables and receivables based on the applicable tariff determined based on the CERC Regulations, 2009 and the generic levelled Generation Tariff for the RE Projects for the FY 2009-10.

12. Further the Petitioner submitted that the Commission may pass Orders that no water cess is payable for the first five years from COD and Water Resources Department may be directed to refund/adjust the water cess already paid @ Rs.0.01 per Kwh by the Petitioner.
13. In view of the above, the petitioner prays that the Commission may direct the Respondent No. 1 GRIDCO to make payment immediately towards the power supply from the Samal Barage Small Hydro Electric Power Project @ Rs.4.76 per Kwh w.e.f the COD i.e. 12.10.2009, excluding the trade margin of 4 Paisa per Kwh payable to M/s. PTC India Limited.
14. Heard the parties at length and taken their written note of submission into record.

The Commission observed that initially provisional rate of Rs.3.10 (inclusive of Rs.4 p/u to PTC) was allowed to the petitioner in its interim order dated 01.10.2009 in Case No.101/2009 stipulating that the project developer shall file detail tariff calculation with authenticated supporting documents, approval of the STC on capital cost of the project for tariff purpose along with view of M/s. OPCL & M/s. PTC. The Commission further directed the project developer and GRIDCO Ltd to file the application early for final determination of tariff within normative parameters fixed by CERC.

15. Thereafter, deciding on the petition of the project developer in Case Nos. 138/2010 & 101/2009, the Commission in its order dated 14.01.2011, re-determined the provisional tariff at Rs.3.64 per Kwh (including 4 paise /kwh towards PTC margin) on saleable energy of 88% power based on design energy (excluding 12% free power to home State) and again directed for early submission for final tariff. The payable and receivable on provisional tariff was directed to be adjusted based on final tariff along with other issues, if any.
16. The petitioner had sought for review of the above order dated 14.01.2011 of the Commission. The Commission in their order dated 19.05.2011 extended this provisional tariff of Rs.3.64 per kwh (excluding 4 paise /kwh towards PTC margin) to 100% of saleable

energy based on design energy instead of 88% energy, since entire energy from this SHEP is being purchased by GRIDCO through PTC.

17. The CERC Regulations, guiding determination of tariff of SHEPs was notified on 16.09.2009 under the title CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2009 and determined the generic levelled generation tariff for RE project for the year 2009-10. Further, in the said Regulation the cost of evacuation infrastructure was to be borne by transmission/ distribution licensees.
18. Subsequently OERC in its order dated 14.09.2010 passed in Sou-Moto petition in Case No. 37/2008 has also determined the generic levelled tariff for renewable energy sources applicable for SHEPs to be commissioned during the control period i.e. from FY 2010-11 to 2012-13.
19. At para 36 (d) of the order dated 19.05.2011 passed in Case Nos. 17 & 24/2011, the Commission has directed that since the cost of transmission lines as shown by generators is the part of project cost, this shall be factored into when the final tariff will be determined. In para 27 of said order, it was mentioned that the tariff is determined on provisional basis and in case the final tariff based on the cost data proposed above found to be different from this provisional tariff, the petitioner and GRIDCO shall adjust their payable the receivables from future bills.

In the said order, it was mentioned by the Commission that the generic tariff has been arrived at, through study conducted by the Commission and considering CERC Regulation normative to the project in various sites of State and DPRs of the projects inside the State. Hence, tariff of the project commissioned prior to 2010-2011 should not be more than generic tariff fixed by the Commission for projects in any circumstances.

20. In the power sale agreement between M/s PTC India Ltd. and the GRIDCO for sale of power from 20 MW SHEPs of M/s OPCL it was agreed that the tariff payable to GRIDCO shall be determined in the PPA or as determine by the appropriate Commission plus M/s PTC margin of 4 P/Kwh.
21. In the agreement between M/s PTC India and M/s OPCL, it was also mentioned that the tariff determination shall be as per CERC guidelines. The subject 20 MW SHEPs of M/s OPCL was commissioned during FY 2009-10. At that time, OERC norms were not notified. Therefore, the tariff was to be determined as per CERC Regulations, 2009 for this project, which is also agreed by the petitioner.

22. Now we proceed to determine the final tariff of the project. As per the said regulation normative cost for project was Rs.5.00 crore per MW and the Commission accept the same. Accordingly, the cost of 20 MW SHEPs of M/s OPCL comes to Rs.100 crore. Because of greater availability of the water in the State compared to other parts of country, considering the extended monsoon period and better hydrology, the Capacity Utilisation Factor (CUF) has been taken at 35% as per State regulation and studies conducted by OERC the levelled tariff of said 20MW SHEP of M/s OPCL comes to Rs.3.42 per Kwh as per CERC norms. We have not considered the higher cost proposed by the petitioner since this is not justified as per CERC regulation and views expressed by the Commission in earlier orders. This is also necessary because in normative tariff determination process we cannot accept determination tariff basing on design energy.

23. It is contended by the petitioner that a 132KV double circuit line has been constructed for evacuation of power and an expenditure of Rs.23.17 crore has been incurred. GRIDCO submitted earlier that the construction cost stated by the petitioner was very high since 132 KV Double Circuit transmission lines which has a carrying capacity of around 150MW is not justified for 20MW power evacuation of the Petitioner's project. The power evacuation from the project could have been done through a 33 KV double circuit line instead of 132 KV Double Circuit line. Therefore, this cost should not be allowed and increased expenditure in transmission should not be included in the project cost.

We observe that connectivity arrangement is a necessity for the project. Connectivity arrangement has not been disputed by STU at any point of time in the past. Therefore, we are not inclined to accept the prayer of respondent in complete shape. The Commission thinks it appropriate to allow 25 paise per Kwh to M/s OPCL for recovering cost of transmission infrastructure as a normative approach as allowed to STU (OPTCL). Thus, the tariff in this project is arrived at Rs.3.67 Kwh (i.e., Rs.3.42 per kwh + Rs.0.25 per kwh) including transmission infrastructure.

24. In view of the agreement between M/s PTC India Ltd. and GRIDCO, trading margin of 4 paise Per kwh is retained for procurement of power through PTC from 20 MW SHEP of OPCL.

25. Taking the above factors into the consideration, Commission finally allows Rs.3.71 P/kwh including PTC margin for procurement of power from petitioner's project by GRIDCO through PTC. This shall be applicable from the date of commercial operation of the project.

Other issues such as SOC and MOC charges on SLDC and water recovery cess of the State Govt. etc has already been clarified by the Commission in its order dated 19.05.2011 passed in Case Nos. 17 & 24/2011. The Commission does not find any reasons to deviate from this now and it shall continue. We direct accordingly.

26. With the above observation the case is disposed of.

Sd/-
(A. K. Das)
Member

Sd/-
(S. P. Swain)
Member

Sd/-
(S. P. Nanda)
Chairperson