

IA No. 168 of 2023 AND Appeal No. 172 of 2023

**Present: Hon'ble Mr. Justice Ramesh Ranganadhan, Chairperson
Hon'ble Mr. Sandesh Kumar Sharma, Technical Member**

Baitarani Power Project Private Limited
Through its Managing Director
35, Nandagiri Hills, Jubilee Hills,
Hyderabad – 500038, Telangana.

... Appellant(s)

(1) Odisha Electricity Regulatory Commission
Through its Secretary,
Bidyut Niyamak Bhawan,
Plot No.-4, Chunokoli,
Sailashree Vihar, Chandrasekharapur,
Bhubaneswar – 751021, Odisha

(2) GRIDCO Ltd.
Through its Managing Director,
Janpath, Bhubaneswar – 751022, Odisha.

(3) Department of Energy, Government of Odisha,
Through the Engineer-In-Chief (Electricity) Cum-
Principal Chief Electrical Inspector
2nd Floor, Kharavel Bhawan
Gopabandhu Marg, Keshari Nagar,
Bhubaneswar – 751001, Odisha. ...

... Respondent(s)

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Ms. Kritika Khanna

Counsel for the Respondent(s) : Mr. Rutwik Panda
Ms. Nikhar Berry
Ms. Anshu Malik for R-1
Mr. Raj Kumar Mehta
Ms. Himanshi Andley for R-2

JUDGEMENT

PER HON'BLE MR. SANDESH KUMAR SHARMA, TECHNICAL MEMBER

1. The IA No. 168 of 2023 has been filed by M/s. Baitarani Power Project Private Limited (in short "Appellant") seeking interim relief/ directions against the Order dated 06/01/2023 (in short "Impugned Order") passed by the Odisha Electricity Regulatory Commission (hereinafter referred as the "State Commission") in Case No. 88 of 2020 whereby the State Commission has reduced the project specific tariff of the 24 MW Small Hydro Electric Project of the Appellant to Rs. 5.03 per unit.

2. The Impugned Order has been passed by the State Commission in compliance to the common judgment dated 17.10.2022 (in short "Remand Judgment") rendered by this Tribunal in Appeal Nos. 73 of 2022 and 392 of 2022 whereby the Order dated 16.02.2019 (in short "Original Order") of the State Commission in Case no. 46 of 2018 for finalization of tariff of RE sources for the third control period 2018 to 2020-21 was set aside and the matter was remitted for fresh adjudication.

3. As an interim measure, the provisional tariff i.e. Rs. 5.71 per unit in terms of the Original Order was put in place subject to adjustment after the Commission has rendered its final decision afresh, the State Commission was directed to undertake the exercise pursuant to remit expeditiously and take the fresh decision at an early date.

4. However, the Appellant is aggrieved by the decision of the State Commission and assailed the Impugned Order by way of this Interim Application, seeking interim stay of the order as the State Commission has determined the tariff of Rs.5.03 per unit from the earlier determined tariff of Rs. 5.99/ Rs. 6.0 per unit ignoring the various technical parameters and the specific directions passed by this Tribunal in the Remand Order.

5. The Appellant is a generating company having set up a 24 MW (3x8) hydroelectric plant in the State of Odisha at a completed capital cost of ₹421.59 crores, as claimed by it before the State Commission.

6. While remitting the matter, this Tribunal noted as under:

“2. The State Commission in the Original Order determined the levelized tariff for the project for a period of 35 years as Rs. 5.99/kWh and for 40 years at Rs. 6/kWh, however, the procurer had objected to any determination beyond the generic tariff determined by the Central Electricity Regulatory Commission (in short “CERC”) at Rs. 5.71 per unit. This objection was accepted by the State Commission by observations in para 27 and on that basis the tariff has been determined at Rs. 5.71/per KWH, it being made effective from

01.02.2022 for energy supplied to GRIDCO, there being nothing in the impugned Order to indicate as to on what basis such effective date (01.02.2022) has been picked up, this being the cause of grievance of the generator.

3. As observed above, both parties have serious reservations about the correctness and the propriety of the impugned Order. They agree that since contentions on the basis of which the present appeals have been filed though raised have not been properly considered by the State Commission, it would be appropriate, to also have the benefit of the views of the Commission, to remit the matter for a fresh decision.

*4. The learned counsel for the generator (M/s. Baitarani) argued that the tariff order has to be made effective from the date of commissioning (COD). **She, however, submitted that as a provisional measure the tariff rate of Rs. 5.71/ kWh as has been determined by the Commission may be treated as a provisional order and made effective from the date of COD (29.08.2020). The learned counsel for GRIDCO agreed that such interim arrangement may be put in position as is being requested till the Commission determines afresh the tariff under the remit. We order accordingly.***

7. The Appellant has filed the captioned appeal contending as under:
- i. Determination of an erroneous Capacity Utilization Factor (CUF) of 47.55%;

- ii. Non-consideration of the actually incurred capital cost of Rs. 421.59 crores by the Appellant and restricting the capital cost to Rs. 314.84 crores;
- iii. Non-consideration of the reasons cited for time overrun and Interest During Construction (IDC);
- iv. Errors by non-considering the report of the Technical Consultant appointed by the State Commission itself;

8. After detailed hearing we considered it appropriate to take up the Appeal itself to the extent of the issue of CUF.

9. One of the grievances raised by the Appellant is that the State Commission has ignored the report of the Technical Consultant (in short “TC Report”) appointed by the State Commission itself, which is violation of the Remand Judgment, as this Tribunal while setting aside the Original Order has made the following observation:

*“5. We note here that during the course of exercise for tariff determination, the Commission had statedly appointed a consultant whose report was before the Commission at the time of the impugned Order being passed. It is the grievance of the generator that some of the aspects on which the consultant had made recommendations having either been glossed over or totally ignored without any proper justification. Though the learned counsel for the State Commission has his own answer to these contentions, we reserve any comment on this aspect at this stage. **We would only say that while revisiting the question of tariff, the Commission will consider such report,***

assisted by the learned counsel for both sides, and take appropriate view thereupon, and if there is any recommendation not to be accepted, the Commission will give proper reasons for dissociation from such views.”

10. The Appellant submitted that after the matter was reheard in the remand proceedings, the State Commission ignored the findings contained in the TC Report of the Technical Consultant already available, thus violating the directions given vide the Remand Judgment, further, the State Commission retained the capital cost at Rs. 314.80 Crores but increased the Capacity Utilisation Factor (“CUF”) substantially from 40.33% to 47.55% as a result, the tariff has been severely affected, claiming that the determination of CUF by the State Commission at 47.55% is completely erroneous and illogical, as it is not possible to be achieved by the Appellant over the life of the Project, also it is contrary to its determination at 40.33% in the Original Order passed by the State Commission appreciating the recommendation of the TC Report where it had been recommended that *“the annual energy generation at 75% dependability shall be 84.85 Mus is at 40% CUF, whereas GRIDCO have adopted design energy generation equal to the average energy generation of 101 Mus at 48% CUF which is at 50% dependability which is on higher side and cannot be considered.”*

11. The Appellant argued that the State Commission has relied on limited data to determine the CUF at 47.55%, also the State Commission, has considered another report prepared by IIT Bhubaneswar (hereinafter referred as “IIT Report”) as submitted by GRIDCO which has considered certain fundamental errors such as assuming plant availability at 100% and overall efficiency at 91%., also, the

State Commission has considered the data for 43 years based on average energy (50% dependability) instead of design energy on 75% dependability years.

12. It is also pleaded by the Appellant that the CUF determined in the generic tariff Order issued considering the regulations of the State Commission, works out to 30% and therefore, the Appellant is entitled to a CUF of 30% as per the prevailing regulatory regime, however, the Appellant has never claimed the CUF of 30%, instead, made a claim of 42.18% in its original tariff petition, based on hydrology data for the period 2005 to 2015.

13. At this stage, the contention of the Appellant by referring to the generic tariff order cannot be accepted as such tariff order is not applicable to the project of the Appellant, however, the other contentions shall be considered in the succeeding paragraphs.

14. Before proceeding further, it is important to note here that the matter was remitted while adjudicating the Appeal No. 73 of 2022 filed by the Appellant challenging the Original Order on the issue of capital cost and the issue of CUF challenged by the Respondent, GRIDCO in the cross Appeal No. 392 of 2022, however, while passing the Impugned Order dated 06.01.2023, the State Commission has reiterated the earlier determined capital cost of Rs. 314.84 crores but increased the CUF from 40.33% to 47.55%, which resulted into substantial reduction in the tariff of the project of the Appellant to Rs. 5.03/- per unit as against the earlier determination of Rs. 5.99/- per unit / Rs. 6.00/- per unit.

15. The Appellant submitted that the State Commission did not even consider the submissions of the Appellant while arriving at such an erroneous figure of the CUF, however, regarding capital cost of the project, the State Commission reiterated the project cost at Rs. 314.84 Crores, ignoring the detailed reasons seeking the condonation of time overrun submitted by the Appellant, further, added that the State Commission has continued with its findings on all issues except the issue of CUF and erroneously, proceeded to neglect the force majeure events which led to delay in commissioning of the Project.

16. During the hearing on the IA for interim relief, it was consented by both the parties, the Appellant and the Respondent, to make submissions only on the limited issue of CUF only, therefore, during the proceedings, only the arguments were held confining to the issue of CUF.

17. The Respondent No. 2, the GRIDCO, submitted that the State Commission determined the CUF in the Original Order dated 15.01.2022 on the basis of recommendations of the TC Report which had suggested decrease in Rainfall over the years in the Catchment Area of river Baitarani, resulting into decrease of CUF from 48% (in DPR) to 40.33%, however, further, referred to the Report of Jadavpur University.

18. We, at this stage, are not inclined to consider such a Report as it was not cited during the Remand Judgment proceedings, also such a report cannot be considered as relevant to the present case as the State Commission itself appointed the Technical Consultant to adjudicate the matter i.e. determination of tariff and if any part of the report is not accepted, it ought to have cited detailed reasons for such a rejection.

19. The GRIDCO further submitted that the STC vide its TEC dated 26.02.2014, approved the Annual Gross Generation of 101 MU at a CUF of 48% and Saleable Energy of 99.99 MU per annum at a CUF of 47.55% for 24 MW Lower Baitarani SHEP, also 221.31 MUs of Energy has been generated from 24 MW Lower Baitarani SHEP during 26 months of its operation from September 2020 to October 2022 considering complete months, at a CUF of 48.57%, similarly, the Project has generated 112.10 MUs of energy during FY 2021-22, the only complete Financial Year Since its coming to operation, at a CUF of 53.32%.

20. Additionally, submitted that the State Commission has also relied on the IIT Report dated 23.05.2022 submitted by it with regard to Hydrological Assessment and Energy Study of Lower Baitarani SHEP, which *inter alia* indicated that there will be a flow variation in a catchment with the changed effect of different parameters affecting flow, while the IIT Report carried out decadal analysis of the Energy Availability considering the flow of Baitarani River from FY 1972-73 to 2014-15, also observation was made that in the first two decades, the Energy Output is below 100 MU per annum, whereas during the latter two decades the Energy Output is above 100 MU with a Long Term Average of 43 years average of 101 MU, and OERC, considering these facts approved a CUF of 47.55% for calculation of Tariff.

21. The Respondent No. 2 further reiterated that the IIT Report observed average generation of 101 MU per annum on the basis of Hydrological Data for 43 years and actual generation being above 99.99 MU (47.55% CUF) per annum which is as approved by STC, further claimed that the highest Small Hydro Tariff in the State of Odisha determined by the Commission is Rs. 5.06/kWh in respect

of Avantika Small Hydro Power Project which was commissioned during November 2021, therefore, the State Commission determined the tariff as Rs. 5.03/kWh is reasonable and justified considering the facts and circumstances of the Case.

22. Also, informed that it has complied with the Judgment dated 17.10.2022 of this Tribunal and had made payment to the Appellant @ Rs. 5.71/kWh with effect from the date of COD, therefore, in terms of the impugned order, GRIDCO is entitled to a Refund of around Rs. 15.78 Crore excluding interest.

23. On the contrary, the Appellant argued that the State Commission has failed to consider any of the contentions of the parties and passed the Impugned Order, the relevant extract of the order is quoted as under:

“11. Now we shall discuss about CUF to be accepted for tariff determination. From the pleading of the parties, the Commission observes that the Techno Economic Clearance (TEC) which is referred to in the revised PPA states that “The total annual gross energy from the project at 75% dependable year, as estimated by the developer will be taken as 101 MU (saleable energy of 99.99 MU) for arriving the tariff structure for sale of power.” This results in a CUF of about 47.55%. It has also been observed that the Actual CUF for FY 2021-22 comes out to be about 53.32% (with actual energy of 112.10 MUs procured) whereas the actual CUF of the project since date of commissioning till October 2022 is about 48.57% (with actual energy of 221.31 MUs procured). Moreover, the report of IIT, Bhubaneswar considering the actual data of 1972-73 till 2014-15 from CWC states

that “... the available annual energy during first two decades is below 100 MU whereas during the latter two decades there are above 100 MU with a long term average of 43 years is 101 MU.” The expected generation as mentioned by IIT in their report and actual generation for complete FY 2021-22 are more than what had been determined by the TEC of STC. Therefore, it would be prudent to accept the recommendation of TEC which had prompted GRIDCO to sign PPA with the Petitioner BPPPL. The procurer GRIDCO has given its commitment to procure the power on the basis of those clearances. Moreover, the actual generation data corroborates with the average generation data provided by IIT Bhubaneswar i.e. 101 MU. Therefore, in line with the provisions of TEC as well as considering the facts of actual generation, the Commission considers 100 MUs as the total annual gross generation with saleable energy of 99.00 Mus from the project for 75% dependable year. Accordingly, the CUF considered for calculation of Tariff comes to 47.55%.”

24. From the above, it can be seen that the State Commission has ignored its own report i.e. the TC Report and passed the Impugned Order on the basis of fresh report submitted by IIT Bhuvaneshwar, without assigning or giving any justification for ignoring the report, also disregarding the remand directions whereby the State Commission was directed to consider the TC Report, the relevant direction given is reproduced as under:

“We would only say that while revisiting the question of tariff, the Commission will consider such report, assisted by the learned counsel for both sides, and take appropriate view thereupon, and if

there is any recommendation not to be accepted, the Commission will give proper reasons for dissociation from such views.”

25. The Appellant submitted that the State Commission in Original Order dated 15.01.2022, had determined the CUF of 40.33% considering all aspects and the TC Report, the Chapter 4 of TC Report provides the results of the Assessment of Generation Potential conducted, also, the overall plant efficiency was taken at 86.68% based on Turbine efficiency of 91%, generator efficiency of 97.1% and flywheel efficiency of 98% i.e. on the basis of the prudent practice and the guaranteed parameters given by the equipment supplier and applying the appropriate formulas, the weighted average efficiency of the plant has been arrived at as 86.68%, further, the Plant Availability had been taken as 95%, which is the widely accepted norm since no plant can be available 100%.

26. We are bound to accept such contentions of the Appellant and the recommendation of the TC Report which is the most prudent practice adopted and certainly no generating plant can be available for 100%.

27. However, disregarding the Remand Judgment, the State Commission has not even referred to the TC Report, instead, the State Commission has gone on the basis that in the Detailed Project Report (“DPR”), the developer had estimated the gross energy as 101 MUs, the Actual CUF from commissioning till October 2022 comes to 48.57 % and the IIT Bhuvaneshwar Report which has considered the actual data of 1972-73 to 2014-15 of CWC given a long-term average generation for 43 years as 101 MUs.

28. It cannot be disputed that the DPR is prepared at the stage of planning of a project and the parameters considered therein cannot be taken as final and binding on either of parties, the State Commission should consider the realistic parameters to the extent these are available, since the State Commission has decided to determine a project specific tariff under section 62 of the Electricity Act, 2003 in the case of the Appellant, therefore, cannot go on the basis of the DPR alone.

29. It is also submitted by the Appellant that the generating plant since its commissioning in August of 2020 till October 2022 has experienced 2.5 to 3 high hydro seasons and therefore, the combined CUF has worked out to 48.57% , however, the Appellant had explicitly placed before the State Commission that FY 2020-21, it had generated only from September 2020 to March 2021, for FY 2021-22, the CUF was higher at 53.32% due to heavy rainfall but for the full FY 2022-23, if the date is extrapolated, the actual CUF would work out to around 39%.

30. It cannot be denied that while fixing a long term parameter for 35 / 40 years, the State Commission cannot decide on the basis of specific period of higher inflow of water.

31. The Appellant also argued that if the hydrological data relied upon by IIT Bhubaneswar, which is based on CWC data for a period of 43 water years (1972-73 to 2014-15) is considered and then by applying the 90% dependability or 75% dependability, the CUF would work out to 36.4% and 41.4% respectively (using daily discharge data) and 38.5% and 42.8% respectively (using 10 daily discharge data), however, the hydrological data, if taken for 50 years, which is again based on CWC data from 1972 to 2022 (50 water years), and by applying the 90% dependability or 75% dependability, the CUF would work out to 36.4% and 41.1%

respectively (using daily discharge data) and 37.1% and 42.8% respectively (using 10 daily discharge data).

32. Contrary to above the IIT Report considered the same, however, made the erroneous assumptions of 100% plant availability and 91% plant overall efficiency, instead of plant availability of 95% and the plant overall efficiency of 86.68% resulting into much higher CUF which is contrary to the prudent practice and is beyond achievement.

33. The Appellant, further, submitted that Respondent No. 2 referred Para 6 (xii) of the Impugned Order where the contentions of the Appellant were recorded in brief, inspite of it, the finding at Para 11 is completely bereft of any consideration of the above submissions, further added that the State Commission had given time to the Appellant to file its detailed calculations and submissions on the IIT Bhuvaneshwar Report by 26.12.2022 and the Appellant had filed the said submissions by 26.12.2022 and given another copy by 30.12.2022, however, there is no consideration of any of these submissions by the State Commission in the Impugned Order.

34. We are inclined to accept the contentions of the Appellant, the State Commission being a technical and adjudicatory body, having all the support of technical experts and technical consultants, which it had realised and appointed a Technical Consultant, must scientifically arrive at the CUF after considering the submissions of all parties, the State Commission is expected to deal with the submissions by passing a speaking order.

35. It cannot be disputed that as a matter of principle, the CUF determination by all regulatory bodies in the country is based on design energy and 90% dependability and so is by the Central Electricity Authority, the Apex Technical Statutory Organisation vested with the powers to accord Concurrence to Hydro Electric Projects with specified cost and capacity under the Electricity Act, 2003, however, even if the State Commission adopted 75% dependability based on the DPR, there cannot be any justification for the State Commission to take the dependability at 50% and therefore, cannot be agreed to.

36. Secondly, the plant availability at 100%, as considered by the State Commission, is deserved to be rejected outrightly, as any generating plant cannot achieve 100% availability during its entire life of 35/40 years and also the widely accepted norm for plant availability adopted by all regulatory bodies is 95% only.

37. Further, the Plant efficiency would depend on the guaranteed norms / parameters given by the equipment supplier and cannot be assumed arbitrarily, further, regarding the hydrological data, the Appellant has filed several charts taking into account the IIT Bhuvaneshwar Report and the 43 years data as well as 50 years data and explained all these calculations in its submissions both before the State Commission as well as before this Tribunal, however, it is seen that there is no consideration or finding on any of these submissions by the State Commission.

38. Therefore, we consider it most appropriate to set aside the determination of CUF made by the State Commission at 47.55% in the Order dated 13.01.2023, and direct that the State Commission will re-determine the CUF considering all submissions of the Appellant as well as of the GRIDCO and the observations made

by us in this Order, having all the powers under the law, we expect the State Commission to deal with the detailed submissions of the parties made before it.

39. We note here that the State Commission, being the court of first instance, it ought to have considered all submission and contentions made before it for determining proper CUF and after hearing both the parties herein, failing which we find it most just and reasonable to set aside the Impugned Order and remanding the matter back to the State Commission to determine the CUF afresh.

40. The right of the Appellant to challenge the other issues relating to capital cost, time overrun and IDC is also reserved and can approach this Tribunal after the State Commission passed the order afresh under the remand proceeding for determining the CUF.

41. Since the Appellant is a small hydro project and has already suffered a substantial reduction in tariff of Rs. 5.71/- per unit as against the tariff of Rs. 5.99 per unit/ Rs. 6.0 per unit as determined by the State Commission in the Original Order, which was being paid from its commissioning and as per our Remand Judgment dated 17.10.2022, and considering that further reduction to Rs. 5.03 per unit will cause irreparable injury to the generator, we direct that for the electricity generated and supplied by from the generating plant of the Appellant to GRIDCO during the pendency of the matter before the State Commission for re-determination of CUF would be at Rs. 5.71/- per unit. This would be an interim arrangement and subject to final adjustment upon determination of tariff for the Appellant's small hydro plant.

ORDER

The State Commission is directed to pass necessary consequential Orders in light of the observations and conclusions recorded by us expeditiously.

The Appeal alongwith the IAs stands disposed of in above terms.

PRONOUNCED IN THE OPEN COURT ON THIS 30th DAY OF MAY, 2023.

(Sandesh Kumar Sharma)
Technical Member

(Justice Ramesh Ranganadhan)
Chairperson

pr/mkj