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## ODISHA ELECTRICITY REGULATORY COMMISSION

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**Present:** Shri Pradeep Kumar Jena, Chairperson Shri S. K. Ray Mohapatra, Member

Case No. 04 of 2025

M/s. GRIDCO Limited Petitioner Vrs.

DoE, GoO & Others ...... Respondent

In the matter of: Petition under Section 62 (4), 61 (1) (a) and 86 (1) (a) & (b) of the

Electricity Act, 2003, read with Regulation 76 of OERC (Conduct of Business) Regulations 2004, for modification of Order dated 04.12.2023

of the Commission passed in Case No. 94 of 2023.

**For Petitioner:** Shri R.K. Mehta, Sr. Learned Counsel, Shri Bibhu Prasad Mohapatra, CGM

(PP) and Ms. Rutupurna Mansingh, DGM (El.).

For Respondents: Ms. Sonali Pattnaik, Manager (Legal), DoE, GoO; Ms. Banishree Pradhan,

DGM (RT&C), OPTCL; Shri A.K. Das, DGM (Elect.), OHPC; Shri Bharat Bhadawat, (Chief Regulatory Affairs), TPCODL; Shri K.C. Nanda, Sr. GM (RA &Strategy), TPWODL; Shri Soumitry Dey, Head Regulatory, TPSODL; Ms. Malancha Ghose, Addl. Chief Engineer (RA), TPNODL; Shri Biswanath Samantaray, Sr. Executive (CR) on behalf of M/s. Sidheswari Power Generation Pvt. Ltd.; Shri Bibhu Charan Swain, the authorized Representative on behalf of M/s. Power Tech Consultants, M/s. Sidheswari Power Generation Pvt. Ltd. & M/s. Pallavi Power & Mines Ltd.; Shri Ananda Kumar Mohapatra; the Representative of M/s. OREDA; the Representative of SLDC; the Representative of M/s. OPGC; and Shri Gautam Siddque, Learned Counsel on behalf of M/s. Jaypore Hydro Power Pvt. Ltd. do appear. None appears on behalf of M/s. Jindal Steel & Power Limited, M/s. Institute of Cost Accounts of India, M/s. Indravati Power Pvt. Ltd. & M/s. GEDCOL.

# <u>ORDER</u>

Date of hearing: 20.05.2025 Date of Order:05.07.2025

The present Petition has been filed by M/s GRIDCO Ltd. under Section 62 (4), 61 (1) (a) and 86 (1) (a) & (b) of the Electricity Act, 2003, read with Regulation 76 of OERC (Conduct of Business) Regulations 2004 for modification of Order dated 04.12.2023 of the Commission passed in Case No. 94 of 2023.

2. The Petitioner has prayed before the Commission to:

- a) modify the order dated 04.12.2023 passed in Case No. 94 of 2023 in respect of CUF for SHEP Projects and Generic Tariff of SHEP Projects in conformity with the provisions of CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2024 (notified on 12.06.2024) and CERC Levellised Generic Tariff Order dated 02.08.2024;
- b) Revise the CUF for Small Hydro Electric Projects (SHEPs) in the State of Odisha to 45% in line with CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations 2024 and accordingly approve Revised Generic Tariff for SHEP Projects for the Fourth Control Period i.e. from FY 2023-24 to FY 2027-28;
- c) Allow GRIDCO to sign Power Purchase Agreements with SHEPs based on the proposed Generic Tariff, till modification of Order dated 04.12.2023 passed in Case No. 94 of 2023 of OERC; and
- d) Approve suitable Tariff / incentive for Excess Generation beyond Normative CUF (%) in a Financial Year @ 25% of Generic/Final Tariff for Renewable Energy (RE) Projects, including SHEPs.

# 3. The Background of the Case is as under:

- a) The Government of Odisha has notified GRIDCO as the State Designated Agency for execution of PPAs with developers generating electricity from various sources. Thus, GRIDCO has the statutory obligation to procure power from all sources and act as a bulk supplier to supply power to DISCOMs in order to meet electricity demand in the State. As per Section 61(a) of the Electricity Act, 2003, the State Commission is guided by the Regulations issued by the CERC in the matter of Transmission and Generation Tariff. Accordingly, the State Commission has been determining the levelized generic tariffs for RE projects basing on the principles and methodologies specified by the Central Commission.
- b) The Commission, vide its Order dated 04.12.2023 passed in Case No. 94 of 2023 (Suo Motu) has determined the levelized generic tariffs applicable to the RE projects in the State commissioned during the control period FY 2023-24 to FY 2025-26 basing on the norms specified in CERC, RE Regulations, 2020. However, in case of SHEP, the first year of the Control Period shall commence from the beginning of FY 2023-24 and shall continue up to the end of FY 2027-28. With respect to the SHEPs, the Normative CUF is 30% has been considered as per CERC RE Regulations which is net of free power to the home State.
- c) Subsequent to the pronouncement of RE Generic Tariff Order dated 04.12.2023 by this Commission in Case No. 94 of 2023, the CERC brought out the CERC RE Tariff Regulations,

- 2024, vide Notification dt. 12.06.2024, which is applicable for the period from 01.07.2024 to 31.03.2027, wherein the CERC has increased the normative CUF for SHEPs from 30% to 45% for the State of Odisha.
- d) According to GRIDCO, the existing SHEPs in the State of Odisha are now operating at the CUF of more than 30% and availing full tariff for their generation beyond the CUF of 30%, whereas the tariff has been fixed considering the CUF of 30%. Therefore, they are making huge profit out of their generation beyond the CUF of 30%, the benefit of which should be passed on to the consumers of the State. Therefore, in the present Petition, GRIDCO has approached the Commission to modify its Order dt. 04.12.2023 in line with the present CERC's norms in respect of normative CUF i.e. to increase from 30% to 45% and consequential revision of Generic Tariff and also to approve a suitable tariff for excess generation beyond normative CUF in a financial year.
- 4. The submissions of the Petitioner-M/s GRIDCO Ltd. are summarized as under:
  - a) The Commission, vide Order dt. 04.12.2023 in Case No. 94 of 2023, has determined the Generic Tariff in respect of SHEPs for Control Period FY 2023-24 to FY 2027-28. The said Tariff was determined by the Commission taking the Normative CUF as 30 % at par with CERC's RE Regulations, 2020 which is Net of Free Power to the Home State. The relevant extract of the said order dated 04.12.2023 are as under:
    - "4. As per Section 61(a) of the Electricity Act, 2003, the State Commission is guided by the Regulations issued by the CERC in the matter of Transmission and Generation tariff. Hence, for the purpose of determining the generic tariff of relevant RE sources, the guidelines of CERC RE Regulations, 2020 has been taken into consideration.

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33. Small Hydro projects (SHEP)

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The following financial and operational norms shall be considered for determination of generic tariff.

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b) Capacity Utilisation Factor (CUF)

The normative Capacity Utilization Factor of 30% for the generic tariff determination in case of SHEP is considered as per CERC RE Regulations 2020. The normative CUF as mentioned above is net of free power to the home State, if any, and any additional quantum of the power, if committed by the developer, over and above the normative CUF shall be factored into the tariff.

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- 40. Based on the above observations, the summary of the proposed Generic tariff for various RE technologies/sources for the control period from 2023-24 to 2027-28 is as follows:
- a. The levellized generic tariff for various renewable sources of energy having "Single part tariff' shall be as given in Table below:

Table-3

Particular	Levellised Total Tariff for the current control period (Rs./kWh)	Tariff Period (Years)
Wind Energy	To be procured only through process	competitive bidding
SHEP of 5 to 25 MW capacity	5.82	40
SHEP below 5 MW capacity	5.93	40
Solar PV, Solar Thermal &	To be procured only through	competitive bidding
Floating Solar power Project	process	
XXXX"		

b) Subsequent to the Order of the Commission dt. 04.12.2023, CERC on 12.06.2024 issued the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2024. In CERC's RE Tariff Regulations, 2024, after considering views of various stakeholders, CERC increased the Normative CUF for SHEPs in Odisha from 30% to 45%. Regulation 28 of CERC's RE Tariff Regulations, 2024 states that:

# "28. Capacity Utilisation Factor

The normative capacity utilization factor for the small hydro projects located in Himachal Pradesh, Uttarakhand, West Bengal, Jammu and Kashmir, Ladakh, North-Eastern States and Odisha shall be 45%; for Punjab, it shall be 40% and for other States, it shall be 30%: Explanation: For the purpose of this Regulation, the normative capacity utilization factor is net of free power to the home State, if any."

c) In accordance with the Norms fixed in CERC RE Regulations, 2024, CERC, vide Order dated 02.08.2024, in Sou-motu Petition No. 05/SM/2024 has fixed Levellized Tariff of SHEPs for the State of Odisha as under:

GENERIC LEVELLISED TARIFF FOR SHEPs FOR 1 <sup>ST</sup> YEAR OF CONTROL PERIOD			
S. No.	Particulars	Levellised Total Tariff (Rs/kWh)	
1	Odisha (Below 5 MW)	4.92	
2	Odisha (5 MW to 25 MW)	4.84	

d) In the State of Odisha, actual CUF of SHEPs has consistently exceeded 30% Benchmark set by Commission in various Tariff Orders. Considering Revised CUF of 45% as per CERC's RE Regulations 2024 and Tariff Norms as fixed by Commission, vide Order dated 04.12.2023, GRIDCO has computed the Revised Generic Tariff for the SHEPs in Odisha as under:

GENERIC LEVELLISED TARIFF OF THE SHEPS FOR THE CONTROL PERIOD				
FY: 2023-24 TO FY 2027-28				
S. No.	Particulars	Levellised Tariff (Rs/kWh)		
1	Odisha (Below 5 MW)	3.95		
2	Odisha (5 MW to 25 MW)	3.88		

- e) In absence of any Regulations towards treatment of Excess Generation beyond Normative CUF (%) of RE Projects in a Financial Year, GRIDCO is compelled to pay full Tariff for such excess Energy produced by SHEP Projects as well as other Renewable Energy Projects as per Tariff set by the Commission. The Commission is therefore requested to devise appropriate mechanism for treatment of Excess Generation beyond Normative CUF (%).
- f) In the interest of Justice and larger Consumer interest, the Order dated 04.12.2023 of the Commission passed in Case No. 94 of 2023 may be appropriately modified in respect of CUF for SHEP Projects and Generic Tariff of SHEP Projects in conformity with the provisions of CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2024 (notified on 12.06.2024) and CERC Levelized Generic Tariff Order dated 02.08.2024.
- 5. The Respondents-M/s. TPCODL & M/s. TPWODL submits that in line with the Commission's order dated 04.12.2024 in case No.94 of 2023, the generic tariff determined for a Renewable Energy (RE) project commissioned during the specified Control Period shall remain unchanged for the entire duration of the Tariff period. However, with the pronouncement of the CERC Renewable Energy Tariff Regulations, 2024, effective from 01.07.2024, certain scenarios need to be considered.
  - a. SHEP projects with executed PPAs before 01.07.2024 but commissioned after the effective date: These projects, though signed under the existing tariff and Capacity Utilization Factor (CUF) are yet to be commissioned or have been commissioned after 01.07.2024;
  - b. SHEP projects with executed PPAs after 01.07.2024: Some projects may have signed PPAs after the effective date (01.07.2024) with the existing tariff and CUF but are yet to be commissioned; and
  - c. Approved projects without executed PPAs: There may be projects that have been approved after 01.07.2024 with the existing tariff and CUF but have neither executed PPAs nor been commissioned.
    - Considering these aspects, the Commission may undertake suitable amendments to address these variations judiciously.
- 6. The Respondent-M/s. TPNODL submits that the Commission may issue necessary directions considering the submission of the petitioner.
- 7. The Respondent-SLDC, Odisha did not offer any views in this regard.
- 8. The Respondent-M/s. TPSODL submits that the Commission may consider the following observations:

- a. The CERC has set the CUF of SHEPs in Odisha along with the SHEPs of States having major hilly terrains like Himachal Pradesh, Uttarakhand, West Bengal, Jammu and Kashmir, Ladakh, North-Eastern States; where Head availability for Run-of-the-River projects is much higher.
- b. The CERC has set the CUF of SHEPs in Odisha higher than the SHEPs of Punjab, whereas the water flow rate in Punjab is much higher than the state of Odisha.
- c. The OERC may consider the CUFs for SHEPs of Odisha along with "other States".
- 9. The Respondents-M/s. Pallavi Power and Mines Ltd., M/s. Power Tech Consultants and M/s Sideshwari Power Generation Pvt. Ltd. submits that:
  - a) The delay of 313 days taken by GRIDCO for analyzing the order dated 04.12.2023 raises serious concerns regarding the intent and justification behind such a belated filing.
  - b) If there will be change in tariff in a year of control period itself, then it will lead to erosion of confidence among the investors. An investor or any RE project developer normally invest in Odisha seeing the various opportunities available like secured payment terms, a reasonable tariff so as to have the reasonable return on equity on its investment. If the prayer of the Petitioner is allowed, then there will be huge reduction in tariff and the projects that are already into development will bear the loss. GRIDCO's approach of invoking the later CERC order to seek retrospective modification of a well-deliberated and finalized OERC order is misplaced, unjustified, and procedurally unsustainable.
  - c) While Section 61(a) of the Electricity Act, 2003 mandates that the State Commission shall be guided by the principles and methodologies specified by the CERC, it does not mandate a verbatim adoption of each provision laid down by the CERC. In the present case, the proposal of GRIDCO to alter norms during the ongoing control period is not consistent with regulatory practice and violates the principles of the Multi-Year Tariff (MYT) framework. Both CERC and OERC have historically maintained regulatory stability within control periods, ensuring certainty for investors and RE project developers.
  - d) The Order of the OERC dated 04.12.2023, which governs the tariff and performance norms for the Control Period from FY 2023-24 to FY 2025-26 (from FY 2023-24 to FY 2027-28 in case of SHEPs), cannot be modified or overridden by the subsequent CERC Regulations dated 12.06.2024, which apply to a different Control Period (FY 2024-25 to FY 2026-27). The change in the control period itself signifies a difference in scope, regulatory context, and timing, and therefore the norms established under each regulatory framework cannot be equated or uniformly applied. Moreover, technological advancements in SHPs require sufficient lead time for planning, procurement, installation, and adaptation. Any sudden increase in normative PLF or CUF cannot be realistically achieved at short notice, as it is

- influenced by multiple variables such as the type and efficiency of the installed machines, seasonal and real-time availability of water flow, plant design, and operational timelines. Hence, attempting to impose CERC's revised norms mid-way through an already operational control period under OERC jurisdiction is not only technically flawed but also violates the principle of regulatory certainty which is essential for long-term infrastructure investments.
- e) SHPs in Odisha are largely dependent on monsoonal water availability and canal irrigation schemes, with limited water flow during non-monsoon periods, leading to significantly lower annual CUF. The CERC, in its Explanatory Memorandum to the Renewable Energy Tariff Regulations, had specifically categorized Odisha-based SHPs under the 30% CUF norm, aligning with the prevailing realities of water flow and historical norms adopted by the OERC in previous tariff orders and regulations. However, the final notified Regulations have included Odisha under the 45% CUF category, contrary to its earlier position, based on GRIDCO's recommendation without providing any reasoned explanation or data-based justification for the various feasible SHPs projects of Odisha. Moreover, it has been stated by the CERC that the CUF data considered was primarily sourced from under-construction projects financed by IREDA, and that specific data from IREDA was not available during the formulation of these norms. As such, in the absence of verified operational data and in the interest of ensuring realistic tariff determination, it would be prudent and necessary for OERC to retain the 30% CUF norm for SHPs in Odisha, reflecting the true generation potential of such projects in the State.
- f) In the Suo-Motu Petition No. 05/SM/2024, the CERC, through its order dated 02.08.2024, has determined a different set of levellised tariffs for SHEPs in Odisha which has been submitted by the petitioner as well. Therefore, if GRIDCO has adopted the CUF as per the CERC Regulations, then it would be logical and consistent to also adopt the corresponding levellised tariffs determined by the CERC for the state of Odisha, which has not done by GRIDCO in the instant Petition. Moreover, the CERC has considered a capital cost of Rs.1200 Lakhs/MW for SHEPs in the capacity range of 5 MW to 25 MW, with a normative PLF of 45%. In contrast, the OERC, in its order dated 04.12.2023, has adopted a lower capital cost of Rs.780 Lakhs/MW for projects below 5 MW and Rs.900 Lakhs/MW for 5 MW to 25 MW projects, aligned with a normative PLF of 30% considering Odisha's site-specific conditions. Additionally, the O&M cost escalation factor considered by CERC is 5.25%, while OERC has adopted a more conservative 3.84% escalation, again to ensure region-specific relevance and affordability.

- g) GRIDCO has been delaying the signing of Power Purchase Agreements (PPAs) with developers, despite the availability of an approved tariff as per the Order dated 04.12.2023. Such delays are causing significant uncertainty in achieving financial closure, directly impacting the bankability and timely execution of SHEPs. Further, despite signing multiple PPAs, GRIDCO often does not permit recovery of Electricity Duty (ED) and applicable taxes and duties as part of the tariff. These statutory levies are legitimate expenses incurred by SHEP developers and should be reimbursed through the tariff payable by GRIDCO.
- h) The respondent has prayed to reject request for modifications to the Order dt. 04.12.2023 in Case No. 94 of 2023 and direct GRIDCO to submit the legal opinion for delay of 313 days.
- 10. The Respondent-Shri Ananda Kumar Mohapatra submits that:
  - a) The Petitioner is required to disclose evidential documents in support of higher CUF.
  - b) The Petitioner does not consider the Project Cost of Rs. 10.27 Cr approved for above SHEPs by CERC but considers only Rs. 9 Cr per MW as approved by OERC in Case no. 94/2023. The CERC's levelized generation tariff Order dated 02.08.2024 speaks the levelized tariff approved at Rs.4.84 per MW for above SHEP projects. This clearly reveals that the Petitioner adopts cherry-picking in the petition and proposes lower generic tariff.
  - c) The instant Petition neither makes the levelized generic tariff sustainable nor invites the perspective entrepreneurs to install more and more SHEPs in the State.
  - d) The HEPs of Odisha are built upon multi-purpose river dams whereas the SHEPs don't have multipurpose river dams. The Average actual CUF of NHPC projects located in Special Category States is found to be more than 50%. CERC has approved 45% CUF for such States which is below the actual CUF of 50%.
  - e) The levelized tariff approved earlier for existing SHEPs may be trued up as it forms the basis for determination of levelized generic tariff for MYT period. In the process of verification of the MYT approved for existing SHEPs, the actual CUF issue can be resolved.
  - f) The Electricity Act, 2003 speaks about the MYT principle. MYT principle has been designed to offer a stable and predictable tariff for the defined control period and to ensure regulatory certainty. This enables the Entrepreneurs to seek project financing from the Financial Institutions (Banks). Once the tariff norms and parameters are fixed at the beginning of the control period, it is expected to remain the same throughout the control period. The regulatory certainty enables the Entrepreneurs to foresee the risks and gains for executing the RE project. This principle of MYT is utterly violated by GRIDCO in the

- instant case as the Petitioner has proposed to change the norms which has already been approved by the Commission, and if accepted, would disincentivize the Entrepreneurs.
- g) The Clause no. 28 of the CERC RE Regulations, 2024 increased the CUF standard of Odisha to 45% without effectuating any compensatory amendment to its previous clause no. 27. The Clause no. 27 says that Odisha is bracketed under the category of all other States. The CERC overlooked to increase the Capital Cost of Odisha SHEPs while changing Odisha to Special Category States with CUF of 45%. This matter may be discussed in the next pan India Forum to address the issue in the interest of the State.

# 11. The Respondent-M/s. GEDCOL submits that:

- a) The Commission may take prudent view regarding fixing of CUF so that developers are not discouraged, based on the historical data of the commissioned projects and projects in pipe line for which DPR has been prepared in determining the CUF.
- b) The Commission may consider tariff norms fixed by CERC vide order dated. 02.08.2024 in Case No.05/SM/2024. The generic tariff for SHEPs is based on per MW Capital cost of the project. CERC has allowed increase in capital cost of the project taking in to consideration historical data and inflation factor. The Commission may accordingly consider the same.
- c) The Respondent has prayed to revise the Project Cost, Interest on Loan, Return on Equity (ROE), and to consider CUF based on past performance and approved DPRs for SHEPs.

## 12. The Respondent-M/s. Jaypore Hydro Power Pvt. Ltd. submits that:

- a) Arriving at a CUF of 45% for the entire state may not be justifiable in considering CUF of only three SHEP, with period of consideration ranging from 2 to 13 years only. A long-term analysis for a data period 10-30 years as recommended in standard guideline would have been more appropriate.
- b) The Kolab river is a common interstate river for Chhattisgarh and Odisha. The CERC has fixed CUF of 30% for Chhattisgarh whereas CUF for Odisha is 45% which is flawed.
- c) The CERC has decided Capital cost/MW for SHP Projects for 5 MW to 25 MW as Rs.10.27 Cr. This cost has been arrived at considering the Central Financial Assistance and not the auxiliary project costs such as transmission cost, approaching road, etc. All the developers are developing power transmission infrastructure for power evacuation at their own cost. So, the Capital cost/MW may be considered higher to the recommendation of CERC.
- d) The CERC Order dt. 02.08.2024 is valid up to March 2025 and can't be referred at this time.
- e) GRIDCO has agreed to sign the PPA with M/s Meenakshi Odisha Power Pvt. Ltd. for 25 MW Saheed Lakhan Nayak SHEP and submitted the draft PPA before the OERC for

consideration. In the draft PPA, the tariff period is for 20 years and the tariff is as per 4<sup>th</sup> Control Period as decided in Case No.94 of 2023 i.e. Rs.5.82/kWh.

# 13. The Petitioner- M/s. GRIDCO in its Rejoinder submits that:

- a) The contention regarding alignment of Capital Cost with CUF is devoid of any merit. Capital Cost of SHEPs is determined primarily based on Geographical and Infrastructural Factors whereas CUF is based on the Operational Efficiency and Hydrological Potential of the Project. In CERC RE Regulations, 2024, Clause 27 (Capital Cost) and Clause 28 (CUF) address different aspects and there is no inherent requirement for both to be aligned. Odisha's inclusion in the Special Category for CUF is justified due to its favorable hydrological conditions while its Classification under the "Other States" Category for Capital Cost is appropriate considering the State's Geographical Profile which differs from the hilly terrain of Special Category States like Uttarakhand and Himachal Pradesh.
- b) Since no SHEP has been commissioned during FY 2023-24 and up to the present date, revision of CUF from 2023-24 onwards would, therefore, not adversely impact any Developer. The Commission may permit execution of PPAs based on the Revised Tariff prospectively which would not result in any disadvantage to existing Projects.
- c) Under the Electricity Act, 2003 no period of limitation is prescribed for filing an Application for Modification. However, under the Limitation Act, 1963, period of limitation for an application for which no limitation is prescribed is three years. Since the present Petition for Modification/Amendment of Tariff has been filed within the period of three years from the Order dated 04.12.2023 it is therefore within the period of Limitation.
- d) Section 62 (4) of the Electricity Act, 2003 specifically provides for amendment of Tariff once in a Financial Year. Since GRIDCO is invoking the Regulatory Power of the Commission under Section 62 (4), the question of any delay or Limitation does not arise. Further, Section 61 (a) of the Electricity Act, 2003 provides that while specifying the Terms and Conditions for determination of Tariff the appropriate Commission shall be guided by principles and methodologies specified by CERC.
- e) Greater Water Availability on account of Extended Monsoon Period and Overall better Hydrology in the State of Odisha compared to other parts of the Country are clearly reflected in the Design Energy and CUF as per DPR/TEC/PPA/PSA of the Projects. The projects such as Middle Kolab & Lower Kolab SHEP (43.6%), Samal Barrage SHEP (60%), Lower Baitarani SHEP (47.5%), Saptadhara SHEP (36.2%), Bargarh Head Regulator SHEP (45.6%), Kharagpur SHEP (49.3%), and Shaheed Lakhan Nayak SHEP (45.6%) have CUFs higher than present prescribed CUF by OERC.
- f) Invariably in the DPRs submitted by the promoters to the State Government in respect of

- proposed SHEPs on the basis of which Techno Economic Clearance is issued, much higher CUF and lesser Tariff is reflected. However, by the time the Project is executed and the SHEP files for Project Specific Tariff, CUF reduces and Tariff increases exponentially.
- g) At present, almost all operational SHEPs are performing at a significantly higher CUF than the Normative Levels set by the Commission. It is important to note that Small Hydro Power Developers recover their Fixed Costs upon achieving Generation at the Normative CUF. However, in the absence of specific regulatory provisions for energy generated beyond Normative CUF, GRIDCO is compelled to pay full Tariff for excess generation effectively resulting in undue profit and unjust Enrichment at the cost of the Consumers of the State.
- h) The Petitioner is not seeking any Modification to the Financial or Technical Norms prescribed by the Commission such as Capital Cost or Return on Equity. The prayer is limited solely to revision of the Normative CUF for SHEPs aligning it with the provisions of the prevailing CERC Regulations. It is submitted that while promotion of RE Sources is laudable, the same cannot be done at the cost of the Consumers of the State of Odisha. The proposed Revision of the Normative CUF is intended to apply only to such SHEPs which will be commissioned during the ongoing Control Period, and shall not impact SHEPs that have already been commissioned. The concern regarding the impracticality of achieving revised CUF Levels at short notice due to factors such as Equipment Efficiency, Water Availability and Plant Design is, therefore, misplaced. As no new SHEPs have been commissioned during the Current Control Period so far and the Proposed Revision is prospective in nature, the principles of Regulatory Certainty and Planning foresight will not be affected in any manner. Modification of the Tariff Norms during the Control Period with valid and compelling justification in the interest of Consumers of the State is fully justified.
- i) In principle, incentive for better efficiency should be a certain Percentage of the Tariff rather than granting full Tariff as in case of Thermal and other RE Regulations in the Country. Reference in this regard may be made to Uttarakhand Electricity Regulatory Commission (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2023. Regulation 27 of the said Regulations provides that till the actual CUF is less than or equal to annual CUF of 40% for SHEPs, tariffs would be payable at the levelized generic rates specified in the Regulations arrived at based on the normative CUF of 40%. For generation beyond annual CUF of 40% but up to annual CUF of 45%, tariff shall be Rs. 1.50/kWh. For generation beyond annual CUF of 45%, incentive shall be equal to the levelized generic

- rates specified in the Regulations at CUF of 45% reduced by Rs. 0.75 per kWh. Such reduction of Rs. 0.75/kWh shall be made from the subsequent monthly bills only till the actual annual CUF reaches 55%. For generation beyond actual annual CUF of 55%, incentive shall be equal to the levelized generic rates specified in the Regulations at CUF of 45%.
- j) Issue of delay in signing of any PPA related to SHEPs does not arise in this case. In any case no PPA is currently pending for execution. GRIDCO has consistently acted in a timely and diligent manner to finalize PPAs upon the fulfillment of necessary Regulatory Requirements. Also, the issue of Reimbursement of Statutory Levies such as Electricity Duty (ED), Taxes and Duties are outside the scope of the present Petition.
- 14. We heard the parties through hybrid mode and their written notes of submissions are taken on record. From the submissions of Petitioner and Respondents, we observe the followings:
  - a) The Commission, vide its order dated 04.12.2023 passed in Case No.94 of 2023, has determined the generic tariff for the SHEPs of the State for the control period starting from FY 2023-24 to FY 2027-28, considering the normative CUF of 30% as per the CERC (Terms & Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020. This normative CUF of 30% is net of free power to the home state, if any. The existing SHEPs in the State of Odisha are now operating at the CUF more than the normative CUF of 30% and availing full tariff for their generation beyond the normative CUF. According to GRIDCO, the SHEPs are earning huge revenue from their excess generation beyond the normative CUF. As per the subsequent CERC (Terms & Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2024 (Notified on 12.06.2024), which is applicable for the period from 01.07.2024 till 31.03.2027, the Central Commission has specified normative CUF of 45% for SHEPs located in the State of Odisha.
  - b) M/s GRIDCO Ltd. has filed the present Petition for modification of Order dated 04.12.2023 of the Commission in Case No. 94 of 2023 to revise normative CUF for SHEPs from 30% to 45% in line with CERC (Terms & Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2024 and prayed before the Commission for revision of Generic Tariff of SHEP Projects for the Fourth Control Period i.e. from FY 2023-24 to FY 2027-28 accordingly. It is further prayed for approval of a suitable Tariff / incentive for excess generation beyond Normative CUF (%) in a Financial Year @ 25% of Generic/Final Tariff for RE Projects including SHEPs, so that the additional revenue earned by the RE Project Develolper(s) is passed on to the consumers of the State.
  - c) The Commission, in its Order dt. 04.12.2023, has considered the normative CUF as 30% for determination of generic tariff in respect of SHEPs. Further, the Commission has kept

the levelized tariff as Rs 5.93/kWh for SHEPs of capacity below 5 MW and Rs 5.82/kWh for SHEPs with capacity of 5 to 25 MW based on the financial and operational parameters defined. The relevant provisions are mentioned below:

#### "33. b) Capacity Utilisation Factor (CUF)

The normative Capacity Utilization Factor of 30% for the generic tariff determination in case of SHEP is considered as per CERC RE Regulations 2020. The normative CUF as mentioned above is net of free power to the home State, if any, and any additional quantum of the power, if committed by the developer, over and above the normative CUF shall be factored into the tariff.

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40. a. The levellized generic tariff for various renewable sources of energy having "Single part tariff' shall be as given in Table below:

Table-3

Particular	Levellised Total Tariff for the current control period (Rs./kWh)	Tariff Period (Years)
Wind Energy	To be procured only through process	competitive bidding
SHEP of 5 to 25 MW capacity	5.82	40
SHEP below 5 MW capacity	5.93	40
Solar PV, Solar Thermal & Floating Solar power Project	To be procured only through process	competitive bidding

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The CERC (Terms & Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2024 (notified on 12.06.2024) and the CERC's Order dated 02.08.2024 passed in Suo-Motu Petition No.05/SM/2024 provide changes in normative CUF (from 30% to 45%), O&M Expenses (from 30% to 45%), Capital Cost/MW (from Rs.9 Cr/MW to Rs.10.27 Cr/MW) and accordingly the generic tariff has been determined. These parameters are different in the order dated 04.10.2023 of this Commission. Further, the levelized tariff for the SHEPs has been calculated considering 40 years of useful life of the projects. GRIDCO has requested for modification of Order dated 04.12.2023 in Case No. 94 of 2023 in respect of CUF for SHEP Projects and Generic Tariff of SHEP Projects in conformity with the provisions of above CERC's Regulations and Suo-Motu order regarding levelized Generic Tariff. Therefore, it would be imperative to consider single operational norm (i.e. normative CUF) from the said Regulations of CERC for revision of generic tariff of SHEPs as proposed by GRIDCO. Though the Commission encourages such reduction of tariff for benefit of the consumers of the State, the CERC norms should be adopted in totality and not partially as prayed by the GRIDCO in the instant Petition. While extending the benefit of lower tariff to the consumers, the Commission should also ensure regulatory certainty to the developers as per MYT principle and any modification in between the Control Period may adversely impact the investments made by the developers in SHEPs. In this context, the Hon'ble APTEL vide their order dated 02.05.2022 in Appeal No. 381 of 2018 in the matter of Cogeneration Association of India vs. MERC & Others regarding reduced tariff within a control period have stated as under:

"24. It was incorrect on the part of the State Commission to justify the impugned decision only with reference to its responsibility to take care of consumer interest. As observed earlier, consumer interest is prime but has to be balanced against other considerations including the legitimate expectation of the generators for reasonable returns on their cost of generation.

... " In v

- 16. In view of the above discussions, the Commission is not inclined to any modification in financial & operational parameters pertaining to SHEP, in its order dated 04.12.2023 passed in Case No.94 of 2023 for the period from FY 2023-24 to FY 2027-28. It is to mention here that the generic tariff determined by the Commission for SHEPs in the said order dated 04.12.2023 is based on the normative CUF of 30%, which is net of free power to the home State, if any.
- 17. It is further observed that the levelized generic tariff determined by the Commission in its order dated 04.12.2023 is based on the normative CUF of 30% adopted by the Commission for the SHEPs in the State of Odisha as per the CERC (Terms & Condition for Tariff Determination from RE Sources) Regulations, 2020. The generic tariff so determined is to meet the Annual Revenue Requirement of the developer of SHEP which includes their Return on Equity. The Commission further takes note of the fact that the existing SHEPs in the State of Odisha (e.g. Middle Kolab & Lower Kobal, Samal Barrage, Lower Baitarani, Saptadhara and Shaheed Lakhan Nayak SHEP) are now operating at the CUF more than the normative CUF of 30% and availing the benefit of full generic tariff for the excess generation beyond the normative CUF. The earning from such excess generation beyond the normative CUF brings net profit, which should be shared for benefit of the consumers of the State. Therefore, GRIDCO has prayed for approval of a suitable Tariff / incentive @ 25% of Generic/Final Tariff for RE Projects for the excess generation beyond Normative CUF in a Financial Year so that the profit gained by the RE developers from the excess generation beyond the normative CUF would be passed on to the State consumers.
- 18. The Commission is also of similar opinion regarding revenue and profit earned by Developer(s) of SHEP(s) from generation beyond the normative CUF of 30% and considers the sharing of additional income between the consumers of the State and the developer(s) as the Annual Revenue Requirement of the SHEP(s) would be recovered from the revenue earned from the generation upto the normative CUF in a year. The operating cost for generation of SHEP(s) beyond normative CUF would be nominal and thus, the consumers of the State

- should have major/lion share of the revenue earned from the excess energy generation beyond the normative CUF and the balance amount would be shared with/passed on to the Developer(s) of SHEP(s) as incentive for such excess generation.
- 9. In view of the above and considering the interest of consumers of the State, the Commission feels it prudent for GRIDCO to avail the excess energy generated (beyond the normative CUF of 30%) for State consumption at a tariff reduced by 75% of the generic tariff and the developer(s) of SHEP(s) will be incentivized for such excess generation beyond the normative CUF. In other words, the tariff for the excess energy generation beyond the normative CUF shall be @ 25% of the Generic/Project Specific Tariff determined for the SHEP(s) in the State, which would fairly incentivize the project developer(s). The billing for such excess generation (beyond the normative CUF of 30%) in a month shall be claimed/raised by the developer(s) of SHEP(s) in subsequent month(s) and final adjustment shall be done at the end of the financial year based on the actual generation/CUF of the period. The Commission directs both the developer(s) of SHEP(s) and GRIDCO to incorporate such provision in their PPA for the benefit of the consumer of the State. The financial and operational parameters pertaining to SHEP as per order dated 04.12.2023 of this Commission will remain unchanged for the period from FY 2023-24 to FY 2027-28.
- 20. With the aforesaid observations and directions, the Case stands disposed of.

Sd/-(S. K. Ray Mohapatra) Member Sd/-(P. K. Jena) Chairperson