

**ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAVAN
PLOT NO.4, CHUNOKOLI, SHAILASHREE VIHAR,
BHUBANESWAR - 751021**

**Present: Shri S. C. Mahapatra, Chairperson
Shri G. Mohapatra, Member
Shri S. K. Ray Mohapatra, Member**

Case No. 51/2023

M/s. Kakatiya Industries Pvt. Ltd.	Petitioner
Vrs.		
TPWODL & Others	Respondents

In the matter of: **Application under Section 86 (1) (f) of the Electricity Act, 2003 for determination of the Agency (GRIDCO or TPWODL) to bill towards power drawn by its 2 X 4.5 MW SHEP located at Head Regulator of Bargarh Main Canal of Hirakud Dam in Baragarh District of Odisha.**

For Petitioner: Shri R. P. Mahapatra, the Authorized Representative.

For Respondents: Shri K. C. Nanda, GM (RA & Strategy), TPWODL, Shri Mukti Kanta Sahoo, Sr. G.M (Elect.), Shri Subhankar Prusty, D.M (Elect.) and Shri B. K. Das, Sr. GM of GRIDCO Ltd., Ms. Banishree Pradhan, DGM (Elect.), RT&C, OPTCL and the Representative of SLDC.

ORDER

Date of Hearing: 25.07.2023

Date of Order: 16.08.2023

The present petition has been filed by Petitioner-M/s. Kakatiya Industries Pvt. Ltd. for resolution of its dispute with TPWODL on the matter of billing of energy supplied from its 9 MW (2x4.5 MW) Bargarh Head Regulator SHEP to GRIDCO through the 33/11 kV Primary Sub-Station (PSS) of TPWODL at Tangarpali. The Petitioner has prayed the Commission to pass orders that;

- a) No invoice be raised by TPWODL towards auxiliary power drawn by it from the Tangarpali 33/11 kV PSS, as no invoice is raised by GRIDCO on TPWODL in its BSP bill for this quantum of energy.
- b) The agreement executed between the Petitioner and TPWODL be modified accordingly.

2. The submission of the Petitioner is summarized hereunder:

- a) M/s. Kakatiya Industries Pvt. Ltd. (formerly M/s Kakatiya Chemicals Pvt. Ltd.) has entered into a Memorandum of Understanding (MoU) with the Govt. of Odisha (GoO) on 20.03.2001 and the revised MoU on 27.10.2005 for setting up Bargarh Head Regulator SHEP on the Bargarh Main Canal at Right Dike of

Hirakud Dam in Bargarh District. The revised Techno-Economic Clearance (TEC) was accorded by State Technical Committee (STC) on 13.04.2015 for setting up 9 MW (2x4.5 MW), Bargarh Head Regulator SHEP.

- b) The Power Purchase Agreement (PPA) executed between GRIDCO and the Petitioner on 02.12.2015 with the following provisions in addition to others.
 - i. Para-4: Power generated shall be evacuated by the 33 kV line to be constructed by the company at their own cost, which shall be connected to the 132/33 kV sub-station of OPTCL at Kantapalli.
 - ii. Para-5.3: ENERGY ACCOUNTING
 - Para-5.3.1: Both parties agree to facilitate issue of Energy Accounts by 1st week of every month.
 - Para-5.3.2: Energy Accounts issued by SLDC shall be binding on all the parties for billing and payment purpose.
 - iii. Para-7: BILLING AND PAYMENT
 - Para-7.1.2: Kakatiya Chemical Pvt. Ltd. shall present the monthly bill after the end of each calendar month for energy supplied to GRIDCO from the Small Hydro Station as per the Energy Accounts of the concerned month issued by SLDC along with reasonable details and supporting documents.
- c) The Department of Energy, Government of Odisha, vide their Letter dated 01.07.2016, approved to the proposal of the Petitioner for change of its name from M/s Kakatiya Chemicals Pvt. Ltd. to M/s Kakatiya Industries Pvt. Ltd.
- d) Originally the power generated from the subject SHEP was proposed to be evacuated through Kantapalli 220/132/33 kV Grid Sub-Station (GSS) of OPTCL, as approved by the State Technical Committee (STC) of Odisha, by constructing 33 kV dedicated transmission line from the project switch yard to Kantapalli GSS. However, during implementation of project, the Petitioner found it to be extremely difficult and time consuming to get clearance from Forest Department and Railways, as the line was to be laid on Forest land and also cross Railway line. Therefore, in order to complete the project within the time period as stipulated in the Implementation Agreement with the Government of Odisha, the Petitioner was constrained to go for an alternative route to evacuate the power to the State grid at Pradhanpalli 132/33 kV GSS of OPTCL through Tangarpalli 33/11 kV PSS of TPWODL.
- e) TPWODL, vide its letter dated 18.04.2022, had given clearance for synchronization of the generating units and evacuation of power from the SHEP.

An agreement was also executed between the Petitioner and TPWODL regarding evacuation of power through their Tangarpalli 33/11 kV PSS. The 1st and 2nd units of the SHEP were commissioned on 28.04.2022 and 10.05.2022 respectively. TPWODL raised bills on the Petitioner towards drawal of power through 33 kV line from its PSS to meet the auxiliary consumption whenever required. The Petitioner has paid the bills raised by TPWODL for the months of April & May, 2022.

- f) GRIDCO, vide its letter dated 06.07.2022, intimated TPWODL that as per the prevailing practice, GRIDCO is accepting the monthly claim raised by the SHEPs after netting the import energy based on the State Energy Accounting prepared by SLDC. However, TPWODL has raised the monthly invoice on the Petitioner towards the energy imported by it, considering it as a consumer of the distribution licensee. In this letter, GRIDCO has further clarified that GRIDCO has not considered for adding this quantum of energy while raising monthly BSP invoice on TPWODL, hence it is not advisable to raise monthly bills on the Bargarh Head Regulator SHEP towards the energy drawn through the 33 kV Tangarpalli-SHEP feeder.
- g) In accordance with the OERC (Fees and Charges of State Load Despatch Centre and other related matters) Regulations, 2010, the Energy Accounting has to be carried out by SLDC. Further, GRIDCO is making payment towards the power supplied by the Petitioner based on netting of the energy export and energy import by the Petitioner as determined by the SLDC in its monthly Energy Accounting. Moreover, as it is clarified by GRIDCO that the 'import of power' by the Petitioner during a month is not added while raising BSP invoice on TPWODL for the month, there is no justification for TPWODL to raise invoice on the Petitioner for the power drawn from the Tangarpalli 33/11 kV PSS towards auxiliary consumption.

3. The Respondent-TPWODL has submitted that:

- a) Bargarh Head Regulator SHEP has been constructed on the Bargarh Main Canal which is providing water supply to the entire Bargarh District mainly for cultivation of paddy. Normally in a year, there are two crops of paddy for which water supply is needed for a maximum period of six months with different duration and time spans. During the rest of the period water supply through Bargarh main canal is almost nil. So, power generation of the subject SHEP is to serve as a secondary objective. Since, the SHEP relies on the water release from

the Hirakud Dam, its operation period is limited to specific times when water is being discharged through the canal, which poses challenges for consistent power generation through out the year and due to such restricted operational period, the SHEP may not be considered as a pure generator.

- b) During the operational period, the SHEP meets the auxiliary consumption from its power generation. However, it requires standby grid support during the non-generation periods for its auxiliary supply such as various lighting load and other operational requirements. Such requirements are being met out from DISCOM's source, for which the Petitioner-M/s. Kakatiya Industries Pvt. Ltd. is a consumer of TPWODL with load of 110 kVA under HT-GP category.
- c) TPWODL has given clearance for synchronization of the generating units of the Petitioner's SHEP and for evacuation of power. Accordingly, power supply agreement has been executed on 19.04.2022 between the Petitioner and TPWODL and based on this agreement, the Petitioner's SHEP is connected with supply voltage level of 33 kV with contract demand of 110 kVA under HT General Purpose (GP) Category. Accordingly, monthly energy bills for the month of May & June, 2022 have been raised by TPWODL as per the prevailing OERC Distribution (Conditions of Supply) Code, 2019 and terms & conditions laid down in the power supply agreement.
- d) GRIDCO, vide its letter dated 06.07.2022, has viewed that they are not considering the energy billed by TPWODL to the Petitioner while raising the BSP invoice on TPWODL and hence, it is not prudent in the part of TPWODL to raise the energy bill on the Petitioner for the energy drawn through 33 kV Tangarpalli SHEP feeder. In this context, TPWODL submits that as the SHEP is not a pure generator on RTC basis, during non-generation period the energy consumed by the Petitioner shall be billed by TPWODL as per RST and the same energy shall be billed by GRIDCO to TPWODL at BSP. However, levy of demand charges shall be guided as per the applicable RST norms. TPWODL has reserved the capacity as per the contract demand of the Petitioner during load forecasting. Hence, applicable demand charges need to be paid by the Petitioner as per Para-143 of OERC Distribution (Conditions of Supply) Code, 2019.
- e) The power supply agreement executed between TPWODL and the Petitioner on 19.04.2022 is valid for a minimum period of five years. Therefore, the Petitioner is liable to pay the monthly demand charges and energy charges as applicable from time to time as per the RST order.

- f) TPWODL is of the view that the Petitioner needs to be a consumer of DISCOM and energy accounting shall be made during the generation period through netting and during non-generation period as DISCOM's power. However, demand charges shall be applicable through out the year on monthly basis.

4. The Respondent-GRIDCO has submitted that:

- a) The Petitioner has executed MoU with Government of Odisha on 27.10.2015 for setting up the SHEP. GRIDCO has executed PPA with the Petitioner on 02.12.2015 to procure the entire power from the subject 9 MW SHEP of the Petitioner. Thereafter, on 05.12.2015, the Petitioner has executed Implementation Agreement with Government of Odisha. As per the PPA, it was proposed to evacuate the power from the subject SHEP to Kantapalli GSS at 33 kV line to be constructed by the Petitioner at its own cost along with PLCC equipment and metering system. The PPA was approved by the Commission vide order dated 25.07.2016 passed in Case No.25 of 2016.
- b) GRIDCO, vide its letter dated 16.12.2019, had given its consent to the proposal for change of connectivity of the SHEP from 132/33 kV Kantapalli GSS of OPTCL to 33/11 kV PSS of TPWODL (erstwhile WESCO) as this proposal covers less circuit kilometer than earlier one and also free from Forest area. OPTCL and TPWODL had given NOC to this proposal vide their letters dated 17.10.2019 and 20.08.2019 respectively. This proposal has also got the clearance from the EIC (Elect.)-cum-PCEI, Government of Odisha vide their letter dated 26.11.2019. Accordingly, after completion of the project, the COD of Unit-I & Unit-II of the SHEP was declared on 30.04.2022 and 12.05.2022 respectively.
- c) As per the prevailing practice adopted for the SHEPs, GRIDCO is paying the energy charges after netting the export energy and import energy based on the energy accounting statement issued by SLDC.
- d) From the COD of the subject 9 MW SHEP, zero generation is experienced during the month of June, 2022, December, 2022 & June, 2023 with net import energy from the Grid. The Petitioner has adjusted the import energy during the month of June, 2022 & December, 2022 in the subsequent monthly invoices of July, 2022 & January, 2023 respectively and accordingly payment has been released by GRIDCO. There is no provision for recovery of the charges by GRIDCO through monthly bills in the event of net import of the energy from the

Grid in a month. Therefore, settlement of import of energy on annual basis is a feasible option. In the similar matter of 650 kW Biribati & 500 kW Kendupatna Mini Hydel Projects of OPGC, the Commission, vide its order dated 05.01.2019 in Case No.35 of 2018, had allowed annual netting of energy for billing. However, in the said order the Commission has allowed TPCODL to raise the bills on these Mini Hydel Projects at GPS Tariff, if the quantum of imported power in a year is more than the export.

- e) GRIDCO, vide its letter dated 06.07.2022 to TPWODL, has indicated its intention for a proper decision by the Commission on the method of energy accounting of the subject 9 MW Bargarh Head Regulator SHEP.
- f) As per the prevailing practice of netting of energy, the SHEP is paying the generation tariff for the imported energy during the period when the export energy is more than the import energy. During the period of no generation or import is more than export, if the DISCOM shall bill at RST, two different tariff shall be applied to the imported energy.
- g) The Commission may decide a principle of energy accounting for the subject 9 MW Bargarh Head Regulator SHEP, so that the energy accounting can be done smoothly with ease of inter-related processes and record keeping.

5. The Respondent-OPTCL has submitted that:

- a) OPTCL, vide its letter dated 17.10.2019, has issued NOC for connection of 33 kV line from the SHEP of the petitioner to the Tangarpali 33/11 kV PSS of TPWODL. There is probability of inflow of surplus generation from the SHEP to the 33 kV bus of 132/33 kV GSS of OPTCL, when there is no matching load at Tangarpali 33/11 kV PSS and downstream distribution system. In such cases, the surplus power at 33 kV from such SHEPs, solar and other RE sources reserved the capacities in 33 kV bus systems with the associated equipment at different GSS for which OPTCL incurs expenditure towards renovation & modernisation involving bus bar systems, switchyard equipment, cabling systems, protection panels, metering infrastructure, SAS and SCADA etc. in addition to the routine R&M costs.
- b) The Commission may consider the transmission charges receivable by OPTCL, in respect of the surplus power injected by the RE generators to the 33 kV bus systems of GSSs.

6. In response to the submissions of the Respondents, the Petitioner, in its rejoinder, has stated as under:
- a) The generation of power by the subject SHEP is not limited to six months. The 1st and 2nd units of the SHEP were commissioned on 28.04.2022 and 10.05.2022 respectively. The generation of power from May, 2022 till April, 2023 indicates that there is no generation only during June, 2022 and December, 2022 and there is substantial generation in the other months. Further, there is no stipulation in the definition of SHEP regarding the quantum and duration of power generation. Therefore, the submission of TPWODL, that the SHEP may not be considered as a pure generator as water supply for irrigation is needed for a period of maximum six months with different duration & time spans and during rest of the period water supply in the Bargarh main canal is almost nil, deserves to be rejected. Further, the submission of TPWODL that they will raise bills as per RST during non-generation period as the SHEP is not a pure generator, is totally irrelevant.
 - b) GRIDCO, who has agreement with the SHEP to purchase power, has considered for meeting the auxiliary consumption of the SHEP from the DISCOM by not including the same in the BSP invoice of TPWODL. When GRIDCO, the aggregator of power supply in the State, is not billing on TPWODL for the power drawn by the petitioner towards auxiliary consumption, TPWODL cannot bill the same on the petitioner. The power supply agreement was executed between TPWODL & Petitioner on 19.04.2022. Any agreement which is contrary to the statutory provisions and approved practices cannot be considered as binding. Therefore, the submission of TPWODL that the Petitioner has executed a power supply agreement with the Petitioner for a period of five years, based on which monthly energy bills has been raised on it, is not justified and hence, not acceptable.
 - c) On the applicability of Para-143 of the OERC Distribution (Conditions of Supply) Code, 2019, as raised by TPWODL, the Petitioner is of the view that this provision is applicable to a consumer of DISCOM. The Petitioner is not a consumer of TPWODL as the power supply towards auxiliary consumption, whenever necessary, is supplied by GRIDCO through the distribution system. No billing is made by GRIDCO on TPWODL for this power supply. Therefore, TPWODL has no reason on raising bill on the Petitioner towards auxiliary consumption.

- d) The submission of TPWODL that the Petitioner needs to be a consumer of DISCOM and energy accounting shall be made during the generation period through netting and during non-generation period as DISCOM power and the demand charges shall be applicable through out the year on monthly basis, may not be accepted, as it would be contrary to existing Law and Regulations and meant to obtain illegal financial benefits.
 - e) The submission of OPTCL in its reply, is not relevant to the issues raised by the Petitioner in the present Petition and hence, needs to be rejected.
7. Heard the parties through hybrid mode (both physical and virtual) and their written notes of submissions are considered. We observe that:
- a) The Petitioner-M/s. Kakatiya Industries Pvt. Ltd. (erstwhile M/s. Kakatiya Chemicals Pvt. Ltd.) has set up 9 MW (2x4.5 MW) Bargarh Head Regulator SHEP on Bargarh Main Canal at the Right Dyke of Hirakud Dam in the District of Bargarh after getting TEC by STC on 13.04.2015. The 1st and 2nd generating units of the SHEP were commissioned on 28.04.2022 and 10.05.2022 respectively. The said canal is used normally for providing water supply for cultivation of two crops of paddy in a year and rest of the time water supply in the canal is almost zero and hence generation is not possible throughout the year.
 - b) The Petitioner had executed MoU with Government of Odisha on 20.03.2001 and revised MoU on 27.10.2005 for setting up of the subject 9 MW (2x4.5 MW) SHEP and accordingly had executed PPA with GRIDCO on 02.12.2015 for sale of entire power generated from the SHEP. The said PPA was approved by the Commission, vide order dated 25.07.2016 passed in Case No.25 of 2016. As per the said PPA, the Petitioner would construct 33 kV line from its SHEP upto the 132/33 kV Kantapali GSS of OPTCL for evacuation of power. Further, the PPA stipulates that the energy accounts issued by SLDC shall be binding on all the parties for billing and payment purpose. The Petitioner shall present the monthly bill to GRIDCO for the energy supplied from the SHEP as per the energy accounts issued by SLDC for the concerned month along with reasonable details and supporting documents.
 - c) As per the Petitioner, during implementation of the project, they found it extremely difficult and time consuming to get clearance from the Forest Department and Railways as the aforesaid 33 kV dedicated line was to be laid

on the Forest land and also to cross the railway line. Therefore, in order to complete the project within the time period as stipulated in the Implementation Agreement (IA) with GoO, the Petitioner had proposed to go for an alternative route for evacuation of power to the State grid from its SHEP through the Tangarapali 33/11 kV PSS of TPWODL instead of 132/33 kV Kantapali GSS of OPTCL. This proposal was accepted by GRIDCO vide its letter dated 16.12.2019 after obtaining NOC from OPTCL vide their letter dated 17.10.2019 and prior to that, OPTCL had obtained NOC from TPWODL vide letter dated 20.08.2019. This proposal had also got clearance from the EIC (Elect.)-cum-PCEI, Government of Odisha vide their letter dated 26.11.2019 to GRIDCO, wherein it was advised to amend the PPA accordingly. Therefore, it was settled that there would be no technical problem, if evacuation of power from the SHEP is made through the Tangarapali 33/11 kV PSS of TPWODL. However, at that time, no decision was taken by the concerned parties regarding energy accounting and billing procedure when the connectivity point is changed from OPTCL's network to DISCOM's network for evacuation of power from the subject SHEP.

- d) TPWODL, vide its letter on 18.04.2022, has given clearance for synchronisation of the generating units and evacuation of power from the SHEP through its Tangarpali PSS. Accordingly, a power supply agreement has been executed between TPWODL and the Petitioner on 19.04.2022 under HT-GP category for CD of 110 KVA at the supply voltage level of 33 kV. Based on this power supply agreement, energy bills have been raised by TPWODL on the Petitioner from the month of May, 2022 as per OERC Supply Code, 2019 at applicable RST norm without considering netting of export and import of power and in other hand GRIDCO has been paying the monthly energy bills of the Petitioner on the basis of netting of energy i.e. by netting the export and import of power by the Petitioner, as per the prevailing practice in case of other SHEPs.
- e) The subject SHEP has been set up on the Bargarh main irrigation canal and it will run only when water is discharged through the canal. The SHEP has been generating power for last one year during which no generation has been observed in two months. During non-generation period i.e. when water discharge in the canal is almost nil and/or during the period of outage of the generating units, the SHEP would require grid support for meeting its power consumption such as lighting loads and other operational requirements, for

which the Petitioner has executed the aforesaid power supply agreement with the Licensee-TPWODL.

- f) The subject SHEP of the Petitioner has been approved by the STC, Government of Odisha and obtained TEC for implementation of the project in order to harness the hydro power potential of the State and also the generation from the SHEP will help in meeting the RPO. Now, it is the policy of both Central and State Governments to promote such renewable sources of energy.
 - g) The submission made by OPTCL is not justified in the instant case as it is the responsibility of OPTCL to upgrade and strengthen its system to accommodate the power generation from the renewable sources. Before injection of power to the state grid from such sources, NOC from OPTCL must have been taken.
8. In view of the above, we found that the actual connectivity for evacuation of power from the subject SHEP of the Petitioner is now different from the provision of the PPA approved by the Commission in its order dated 25.07.2016 passed in Case No.25 of 2016. Neither GRIDCO nor the Petitioner has ever approached the Commission for amendment of the PPA in this regard after change in connectivity arrangement. Further, while deciding for such change of connectivity for evacuation of power, the parties have not deliberated/ decided the procedure for energy accounting and billing which is being impacted due to such change of connectivity. In addition, in the present case the Petitioner has executed a power supply agreement with the Licensee-TPWODL for availing power supply at 33 kV level with CD of 110 KVA at HT-GP category of consumer for meeting its operational requirements and lighting load at the time of no generation of the SHEP.
9. Under the above circumstances, it is clear that the signatories to the approved PPA have deviated from the same as far as connectivity arrangement of the SHEP is concerned. The conditions in the PPA are sacrosanct for the parties to the PPA who are to stick to it unless they amend the same and get it approved by the Commission. However, in spite of change in connectivity no such thing has happened. Therefore, our interference in the agreement between TPWODL and the Petitioner for supply of auxiliary power to the latter as a HT-GP consumer is uncalled for. Therefore, we are not inclined to consider the prayer of the Petitioner at this stage to pass necessary order that no invoice should be raised by TPWODL towards drawal of power from the Licensee-TPWODL under power supply agreement dated 19.04.2022. However, the Commission directs both GRIDCO and the Petitioner to amend the PPA in respect of the aforesaid change in the

position of connectivity of the SHEP for evacuation of power as well as the consequential changes in method of energy accounting and billing.

10. However, we observe that this project was approved by the State Technical Committee of the Government of Odisha under State Renewable Policy and accorded TEC for implementation in order to harness the hydro power potential of the State and also the generation from such SHEPs will help in meeting the RPO of the State. Now, the policy of the both Central and State Government is to promote such renewable sources. The present dispute arises out of method of settlement of bill pertaining to auxiliary consumption of the Petitioner. Therefore, the Commission opines for execution of a tripartite agreement between the parties i.e. the Petitioner, GRIDCO and TPWODL with the provision that energy accounting for transaction of power shall be done on monthly basis by SLDC on net export basis. Hence, if the export of energy by the SHEP in a month is more than its import of energy from TPWODL, then the Petitioner shall raise monthly energy bill on GRIDCO on net export basis (i.e. exported energy minus import energy). In any month, if there is no generation or less generation by the SHEP than its imported energy, then TPWODL shall raise energy charges bill on the Petitioner for that month only at the applicable RST for HT-GP category of consumer on net import of energy. However, the demand charges shall be levied by TPWODL on the basis of tariff order for each month of the year irrespective of monthly net import or net export of energy by the Petitioner since the Petitioner has entered into power supply agreement with TPWODL.
11. Basing on the above discussion, the parties are directed to amend the PPA in terms of connectivity arrangement along with energy accounting and billing procedure after execution of aforesaid tripartite agreement and submit the amended PPA before the Commission for approval.
12. With the above observations and directions, the case is disposed of.

Sd/-
(S. K. Ray Mohapatra)
Member

Sd/-
(G. Mohapatra)
Member

Sd/-
(S. C. Mahapatra)
Chairperson