ODISHA ELECTRICITY REGULATORY COMMISSION PLOT NO. 4, CHUNUKOLI, SAILESHREE VIHAR, CHANDRASEKHARPUR,

BHUBANESWAR-751021

Present: Shri G. Mohapatra, Officiating Chairperson

Shri S. K. Ray Mohapatra, Member

Case No. 44/2024

Odisha Power Transmission Corporation Ltd. (OPTCL) Petitioner Vrs.

The Director (Regulatory Affairs), OERC Respondent

In the matter of: Application for determination and approval of levy of Grid Support

Charges (GSC) for industries having Captive Generating / Cogeneration Plants which are running in parallel with the Grid of

OPTCL.

For Petitioner: Sri Kulamani Biswal, Advocate, Shri B.B. Mehta, Director (Operation) and

Shri S.K. Rout, Consultant.

For Respondent: Shri Priyabrat Patnaik, Director (Regulatory Affairs).

ORDER

Date of Hearing: 09.07.2024 Date of Order: 09.07.2024

The case is taken up for hearing today through hybrid arrangement.

- 2. In view of the subject matter of the instant application of the Petitioner-OPTCL, the Commission has decided to implead the Director (Regulatory Affairs), OERC as Respondent in the present proceeding.
- 3. In course of hearing, the Learned Counsel appearing on behalf of the Petitioner-OPTCL submitted that the OPTCL has filed the present application for determination and approval for levy of Grid Support Charges (GSC) for the industries having Captive Generating/ Cogeneration plants which are running in parallel with the Grid of Odisha Power Transmission Corporation Ltd.
- 4. We observe that earlier in 2012, OPTCL had filed an application before this Commission registered as Case No.46 of 2012 for levy of grid support charge for the Captive Generating Plants running in parallel with the grid of the OPTCL and the Commission, vide its order dated 31.03.2014 passed in Case No.46 of 2012, did observe as following:

"16. After going through the submission of various stake holders of the grid system we conclude that the behaviour of industries having CGPs and also without CGP varies case to case basis. There are ample provisions in the Odisha Grid Code to regulate the behaviour of entities connected to the OPTCL system. Hence, a generic method of calculation of Grid Support Charges for all industries may not be proper. The Petitioner

has failed to submit a State-wide study before us basing on which a decision could have been taken. One solution fits all can't be applicable here. So implementation of a model of another State in our State will not be proper.

- 17. There are enough provisions in Odisha Grid Code, 2006 to maintain qualitative supply in the grid system. Regulation 4.7 of Odisha Grid Code discuss elaborately the ideal behaviour of constituent of the Grid. OPTCL should play the role of watchdog and analyse the pollutant injected by various constituents of the grid system. CGPs and industries injecting pollution should be directed to take up remedial measures like installation of capacitors, filters for harmonics etc. so that grid pollution will be minimised. The non-compliance by any industry or industry having CGP of the Grid Code should be dealt as per Regulation 1.18 of OGC, 2006. Therefore, the prayer of OPTCL for levy of Grid Support Charges is not acceptable."
- 5. Further, OPTCL had again filed an application before this Commission on 23.09.2020 registered as Case No.52/2020 for determination and approval for levy of Grid Support Charges (GSC) for industries having Captive Generating plants and running in parallel with OPTCL Grids. M/s. Vedanta Ltd., M/s CCPPO and M/s Tata Steel Limited had challenged the proceedings in the above Case No. 52/2020 before the Hon'ble High Court of Orissa in W.P.(C) No. 2220 of 2021, W.P.(C) No.16513 of 2021 and W.P.(C) No. 38361 of 2021 respectively. The Hon'ble High Court, vide their common order dated 06.07.2023 in W.P.(C) No. 2220 of 2021, W.P.(C) No. 16513 of 2021 and W.P.(C) No. 38361 of 2021, had set aside the proceedings of this Commission in Case No.52 of 2020. The relevant portion of the order of the Hon'ble High Court is in following language:
 - "35. As the cumulative effect of all these observations as made above, we set aside the proceeding being the OERC Case No.52 of 2020 by declaring that the orders passed in that proceeding as ultra vires, void ab initio and without any effect whatsoever on the charges. It is our duty to observe that if the Opposite Party No.2 filed a separate application urging the Opposite Party No.1 for examining whether the levy of GSC/POC is justifiable and if found justifiable, to frame the appropriate regulation in exercise of the powers conferred upon the Opposite Party No.1, in that event, the Opposite Party No.1 shall examine the matter, not initiating a proceeding, but by invoking its powers as provided under Section 181, EA."
- 6. In view of the above order of the Hon'ble High Court, this Commission had closed the Case No. 52 of 2020 vide its order dated 19.10.2023 with the following observations: "In view of the aforesaid authoritative pronouncements of the Hon'ble High Court of Orissa, there survives no litigation to be addressed by this Commission."
- 7. Now OPTCL has filed the present application before the Commission with the following justifications for levy of Grid Support Charges (GSC) for the industries having Captive Generating/ Co-generation plants which are running in parallel with the Grid of OPTCL:

- a) By virtue of connectivity with the grid, Captive Generators are being relieved from the harmful effects overheating of their generator terminals due to harmonics, which enhances the equipment life and reliability/profitability of CGP owners. Further, it minimize the effect of fault current on the CGP equipment which avoids the risk of failure of the equipment.
- b) The PLF of the Captive Generators is enhanced due to grid connectivity ensuring more revenue by way of sale of surplus power or low cost of production, as the case may be.
- c) As grid acts as an infinite bus, voltage and frequency dip during starting of their high-capacity HT motors are nominal.
- d) Since the CGP is connected to Grid, the impact of sudden load through-off and consequent tripping of generator on over speed is being avoided as the shock is taken by the grid.
- e) CGPs are installing low-capacity equipment than their requirement for operating in isolated mode by making substantial saving in terms of investment.
- f) Transient surges reduce the life of the equipment and in few cases the high magnitude of the transient surge may lead to failure of equipment. CGPs connected with the grid are at low risk as the surge is absorbed by Grid.
- g) Industries get uninterrupted supply in case of tripping of their captive generator(s) as supply is extended instantly by virtue of the connectivity with the Grid.
- h) The CGPs also inject harmful harmonics, sudden jerks and unbalanced currents which stress and pollute the overall power quality and inflict detrimental effects on the safety and useful service life of the equipment of the State Grid.
- 8. OPTCL further submits that all the above benefits are being extended to CGPs without any mechanism for recovery of the cost towards polluting power quality and endangering/lowering the service life of equipment deployed by the State Grid for the very purpose. In view of the above, CGPs should pay Grid Support Charge (GSC) to the Transmission Licensee i.e. OPTCL in lieu of the benefits derived by them from the Grid. The levy of Grid Support Charge (GSC) / Parallel Operation Charge (POC) is not a new concept, which has already been in practice in several other States of India such as Tamilnadu, Gujarat, Rajasthan, Chhattisgarh & Madhya Pradesh etc. from the last decade. In its application, the Petitioner-OPTCL has computed the average GSC to the tune of Rs.36.68/kVA/Month basing on 'Base MVA Support Method' considering ten number of CGPs inside the State and prayed before the Commission to approve the same.
- 9. We find that as per the observations of the Hon'ble High Court of Orissa in their aforesaid order dated 06.07.2023 in W.P.(C) No. 2220 of 2021, W.P.(C) No. 16513 of 2021 and W.P.(C) No. 38361 of 2021, the Petitioner-OPTCL needs to file a separate application

urging the Commission for examining whether the levy of GSC/POC is justifiable and if found justifiable, to frame the appropriate Regulation in exercise of the powers conferred upon the Commission, in that event, the Commission shall do so by not initiating a proceeding, but by invoking its powers as provided under Section 181 of the Electricity Act, 2003. It implies that the Grid Support Charges, as claimed by the Petitioner-OPTCL in the present petition, cannot be levied without an appropriate Regulation framed by the Commission. Further, the Commission shall examine the proposal of the Petitioner-OPTCL, by not initiating a proceeding, whether the levy of GSC/POC is justifiable or not. Thus, to continue the proceeding on the present application of the Petitioner-OPTCL with a prayer to approve the proposed Grid Support Charge @Rs.36.68/kVA/Month is inconsistent with the observations of the Hon'ble High Court in their order dated 06.07.2023 in W.P.(C) No. 2220/2021, W.P.(C) No. 16513 of 2021 and W.P.(C) No. 38361 of 2021.

- 10. On behalf of the Commission, the Director (Regulatory Affairs), OERC, as Respondent submits that the present application of the Petitioner-OPTCL lacks various data/information to examine the matter for levy of GSC/POC on the industries having Captive Generating/ Co-generation plants which are running in parallel with the Grid of the Petitioner. Therefore, the Petitioner-OPTCL needs to furnish a consolidated Study Report justifying the levy of GSC on parallel operation of individual CGPs across the State, in tune with the following observations:
 - a) It must be ensured that the study report includes an analysis of the impact of Inertia, Harmonics (Current THD), Reactive Power, and Power Factor. These parameters should be measured at the point of common coupling (PCC) and the generator output point both in isolated mode and Grid connection mode.
 - b) As mentioned at Para-4 above, the Commission, vide its order dated 31.03.2014 passed in Case No.46 of 2012, had made certain observations in the matter of levying Grid Support Charges considering the existing provisions in Odisha Grid Code Regulations. In this context, OPTCL needs to clarify whether the provisions of the Odisha Grid Code (OGC) Regulations, 2015 particularly Regulation 1.7 (Charge/Payment for Reactive Energy Exchanges) and other provisions relating to control of other abnormalities are not contradicted, if GSC are imposed.
 - c) Whether the pollutants like injection of harmonics and VAR exchange etc. are only attributable to the industries having CGP and not to the industries without CGP.
 - d) OPTCL must justify the methodology for the determination of uniform GSC rates on all CGPs when they have different capacities, contract demands, and power exports to the grid.

e) In view of the integrated network of OPTCL & DISCOMs, whether DISCOMs has a role in providing Grid support. If so, how the GSC can be apportioned between OPTCL and DISCOMs.

f) OPTCL should submit its views on the applicability of Grid Support Charges (GSC) on RE generators including CGP based on RE.

g) If any case CGP loses its CGP status and becomes IPP, then what would be the methodology of charging GSC?

h) OPTCL must suggest the methodology of recovery of GSC in case of default in light of the Section 56 of the Electricity Act 2003.

i) Impact of GSC on Transmission Tariff and Retail Tariff of Industrial consumers.

11. In view of the above, the Commission directs the Petitioner-M/s. OPTCL to submit a consolidated report considering the above observations/ suggestions of the Director (Regulatory Affairs), OERC. Further, in the said Report, M/s. OPTCL should address the observations/queries raised by the stakeholders in the earlier Cases filed by M/s. OPTCL regarding GSC. As prayed by the Petitioner, the Commission allows three months' time to the Petitioner to submit the aforesaid Report before this Commission on or before 15.10.2024.

12. With the above observations and directions, the present Petition stands disposed of.

Sd/-(S. K. Ray Mohapatra) Member Sd/-(G. Mohapatra) Officiating Chairperson