

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

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

**Case No.80/2021**

<b>M/s. Dalmia Cement (Bharat) Ltd.</b>	.....	<b>Petitioner</b>
<b>Vrs.</b>		
<b>DoE, GoO &amp; Others</b>	.....	<b>Respondents</b>

**In the matter of:**      **Application for seeking direction of the Commission to the State Technical Committee for On-Grid Solar and Hybrid Power Projects of 1MW and above capacity and the concerned licensees, including TPCODL to permit the installation and operation of the 14.6 MW Solar PV Plant under order dated 19.08.2016 as amended up to 17.01.2018 for NET Metering/Bi-directional Metering with respect to Solar PV Project.**

**For Petitioner:**      Shri R. P. Mahapatra, the authorized representative.

**For Respondents:**      Shri P. K. Das, CGM, GRIDCO, Shri B. K. Das, GM (RT&C), Ms. Banishree Pradhan, AGM, OPTCL, Shri V. Wagle, TPCODL and Ms. Sonali Patnaik, ALO I/c., DoE, GoO.  
Nobody is present on GEDCOL.

**ORDER**

**Date of Hearing: 19.04.2022**

**Date of Order: 12.05.2022**

1.      This petitioner, M/s. Dalmia Cement (Bharat) Ltd. (DCBL), has installed 14.6 MW ground mounted solar PV Captive Power Plant in the premises of its Cement Manufacturing Unit and has prayed the Commission for issue of directions to the concerned authorities (OPTCL & TPCODL) to permit synchronization of the solar plant with the Grid and operation of such Captive Solar Power Plant of the petitioner on Net Metering/Bi-directional Metering mode based on the Order of the Commission dated 19.08.2016 as amended upto 17.01.2018.
2.      The petitioner has submitted the following:
  - (a)      The petitioner, M/s. Dalmia Cement (Bharat) Ltd., owns a Cement Manufacturing Unit at Biswali, Barunia P.S. Tangi, Dist-Cuttack, for which power supply has been availed from TPCODL with a contract demand of 22 MVA at 132 kV through LILO of 132 kV ICCL-Salipur Circuit. Power generated from solar PV Captive Power Plant (CPP) is injected at 11 kV level in

132/11 kV sub-station of the petitioner. During any break down or for major maintenance, the surplus solar power is to be exported to the OPTCL Grid through LILO arrangement at 132 kV level (at Tangi) through net metering system.

- (b) The petitioner had raised the issue of “Synchronization Approval” to synchronize 14.6 MW solar PV plant with Odisha Grid and had prayed Commission for passing an interim order for synchronization of solar plant. As per the order of the Commission, the plant was synchronized on 25.12.2021 with OPTCL’s system.
- (c) There is no PPA or any other commercial agreement between GRIDCO & M/s. DCBL for evacuation of 14.6 MW AC power from solar plant. Therefore, if there is any inadvertent power injection to the OPTCL network, it will be treated as free power to OPTCL/GRIDCO.

The petitioner has agreed that the power injected into GRID will be inadvertent in nature. The injection of inadvertent power to OPTCL network needs to be treated as per different orders of the Commission.

- 3. Petitioner has further submitted that the Commission has passed orders relating to “Net Metering/Bi-Directional Metering with respect to solar PV projects” on 19.08.2016 as amended upto 17.01.2018. The para 1(vi)(c) of the order is reproduced below:

*“There is no cap on the capacity of solar installation at a particular consumer level as long as it is within the limit of the connected load / 75% of transformer capacity.”*

The earlier restriction on 1 MW solar capacity at single location has been removed.

The order further states as follows:

*“The Commission is mandated to promote Co-generation and Generation of electricity from Renewable Sources of Energy by providing suitable measures for connectivity with the Grid and sale of electricity to any person under Section 86 (e) of the Electricity Act, 2003.”*

- 4. The Petitioner has also responded to various queries raised by the Commission regarding gross metering, action plan for sale of excess power in power exchange, expected quantum of injection to grid and measures to restrict injection of harmonics to grid.

Petitioner has further submitted that

- (a) Net metering is beneficial to DBCL

- (b) There is no action plan for selling excess power in power exchange although petitioner has provided the details of sale of power and inadvertent power exported to Odisha grid from December 2021 to March 2022.
  - (c) There is no action plan for injection of Solar power to state Grid as capacity of solar plant (14.6 MW) is less than the contract Demand (22MVA). The injection of solar power to grid will occur in case of contingencies like break down or maintenance of plant of petitioner.
  - (d) Total Harmonic distortion is less than 3% at rated power.
5. The State Technical Committee (STC) has observed that the document submitted by the Developer is not in consonance with the terms and conditions of the Net-metering connection. STC has also observed that the proposed solar PV power plant by M/s DCBL on Net metering connectivity cannot be considered at present. STC further advised -
- (i) GRIDCO, TPCODL and OPTCL shall discuss and decide whether the installation of 14.6 MW solar PV Captive Power Plant on a Net-metering basis is permissible under the Regulations made by the OERC.
  - (ii) The Developer may be asked to approach TPCODL and OPTCL for detailed discussion if they want to pursue the matter.

However, the State Technical Committee (STC) had allowed for connectivity of solar power plant with Grid as a Captive Generating Plant without Net metering.

6. OPTCL-Respondent No.4 has submitted that system study was completed to connect 14.6 MW solar power plant of DCBL with OPTCL system and report was submitted to petitioner on 15.09.2021. The conclusion of the report is as follows:

*“The system is adequate (for synchronization of 14.6 MW Solar Plant of M/s Dalmia Cement (Bharat) Ltd. at OCL, Tangi and to utilize the full quantum so generated for its own use.)”*

OPTCL has issued NOC for synchronization of solar plant of DCBL, vide letter dated 23.12.2021 and the plant was synchronized on 25.12.2021 with OPTCL's system.

7. TPCODL Respondent No.5 submits that the Govt. of India Consumer Rights Rules, have recently increased the Net Metering Capacity capping from 10 kW to 500 kW only which itself demonstrate that the intention has always been to limit the capacity to smaller values and not to large capacity of 14.6 MW as proposed by the Petitioner.

The net metering arrangement is meant to be provided for solar installations with small capacity and connection is envisaged with distribution system and not transmission system. The mechanism based on gross metering can also be adopted. TPCODL has also taken reference of MERC (Grid Interactive Roof Top Renewable Energy Generation System) Regulations 2019, which restricts the capacity to 1 MW and does not support connectivity of 14.6 MW of M/s DCBL under net metering arrangement.

8. TPCODL-Respondent 5 has further submitted that the removal of 1 MW capacity in OERC's order should not be construed to mean that any amount of capacity as large as 14.6 MW is permissible under Net Metering arrangement.
9. GRIDCO-Respondent No.3 has submitted that inadvertent power will be injected to the Grid, if the proposed 14.6 MW Captive solar PV plant is allowed to be connected through 132 kV OPTCL system which is not desirable and not priced. The net metering order also does not permit a Net metering scheme when beneficiary is connected to EHT system. However, Net Metering order allows solar power project above 1 MW capacity to be connected to the distribution system if it remains within certain limit of distribution transformer capacity.
10. Heard the parties through virtual mode. The observations of Commission are as follows:
  - (a) The petitioner-DCBL has stated that 14.6 MW AC (17.5 MW DC) ground mounted solar PV has been installed as a Captive Power Plant primarily for its own consumption. There is no action plan for injection of solar power to the state grid as the capacity of solar PV plant (14.6MW) is less than Contract Demand (22MVA). In case of contingencies like any breakdown or major maintenance of the cement plant, the surplus solar power will be exported to Grid through LILO arrangement at 132 kV level of OPTCL's system and there is no long term contract for sale of surplus power.
  - (b) From the submission of petitioner-DCBL, it is observed that surplus power has been sold in the Power Exchange / market, particularly in the month of March 2022. About 2.088 MU (83%) of the energy generated was consumed by DCBL and about 0.3145 MU (12%) of energy was sold in market.
  - (c) STC has not favoured the net-metering connectivity of 14.6 MW solar PV captive power plant of DCBL.

- (d) The intention of Net-metering order of the Commission, in general, is to allow connectivity of RE generation of small capacity with the Grid upto certain level of distribution transformer capacity. The power generated by distributed RE generator is expected to be consumed locally and only surplus is to be injected into the Grid.
- (e) In the meantime Ministry of Power, Government of India had brought out a Rule called Electricity (Rights of Consumers) Rules, 2020 notified on 31.12.2020 restricting grid interactive Solar PV through net metering to 10 KW which was subsequently amended on 28.06.2021 enhancing the limit to 500 kW. This rule being a Central Rule has overriding effect on our net metering / bi-directional metering order. Consequent to that Rule the Commission has brought out an amendment to the net metering / bi-directional metering order on 05.05.2022 limiting the application of that order upto 500 kW for Grid interactive solar PV plant connected to the Grid through net meter. Had the present Petitioner entered into the agreement with DISCOMs/OPTCL before 31.12.2020 it could have availed that benefit. Therefore, the application for extending Net Metering facility to the applicant within the perimeter of our net metering /bi-directional metering order 2016 as amended from time to time at this juncture is not possible.
- (f) The injection of power to Grid from solar PV plant of DBCL will occur in case of contingencies, which is in general unpredictable. This power is inadvertent in nature and cannot be given credit. This can be treated similar to inadvertent power of conventional CGP.
11. In view of the above observations, the Commission is not inclined to allow 14.6 MW solar PV Captive Power Plant of the petitioner to operate under net metering/bi-directional metering scheme and the Petitioner-DCBL may sell surplus power to third party like any other CGP if they so desire.
12. The case is accordingly disposed of.

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

Sd/-  
**(G. Mohapatra)**  
Officiating Chairperson