## ODISHA ELECTRICITY REGULATORY COMMISSION PLOT NO. 4, CHUNUKOLI, SAILESHREE VIHAR, CHANDRASEKHARPUR, BHUBANESWAR-751021

\*\*\*\*\*\*

Present: Shri G. Mohapatra, Member

Shri S. K. Ray Mohapatra, Member

## Case No. 110/2023

M/s. SAIL ...... Petitioner

Vrs.

OPTCL & Others ...... Respondents

In the matter of: Application under Section 86 (1) (f) of the Electricity Act, 2003 seeking

permission of the Commission for availing power by RSP, Rourkela at 132kV level under emergency situation through 2 nos. of idle transmission line feeders from Tarkera Grid S/S. of OPTCL to MSDS-

2S/s. of SAIL, Rourkela.

For Petitioner: Shri Dillip Kumar Bhanja, Chief General Manager, SAIL-RSP, Rourkela

For Respondents: Shri Subhasish Samantaray, DGM (Electrical), RT&C, OPTCL

Shri K.C. Nanda, GM (RA& Strategy), TPWODL and the Representative of

SLDC.

## **ORDER**

Date of Hearing: 28.11.2023 Date of Order: 28.11.2023

M/s. Steel Authority of India Ltd., Rourkela Steel Plant (M/s. SAIL-RSP), Rourkela has filed the present petition under Section 86 (1) (f) of the Electricity Act, 2003 seeking permission for availing power at 132 kV level under emergency situation through 2 nos. of idle transmission line feeders from Tarkera Grid S/s of OPTCL. The Petitioner-Ms/SAIL-RSP has prayed the Commission to pass direction permitting the Petitioner to avail power through said two numbers of 132 kV feeders under emergency situation with following conditions:

- i) 132 kV HSL Fdr-1 & 2 shall be made ready and energized upto 132 kV bus of MSDS-2 sub station of RSP, as soon as possible.
- ii) The feeders shall be kept idle charged under normal condition.
- iii) Under emergency condition at RSP (outage of 220 kV MSDS-4 sub station of RSP), RSP shall stop availing 220 kV power through 220 kV RSP Fdr-1 & 2 and shall load

- 132 kV HSL Fdr-1 & 2 to avail approximately 60 MW power through the 132 kV line, in coordination with Tarkera Grid Sub-station and SLDC.
- iv) During this period RSP shall continue to avail power through 220 kV RSP Fdr-3 & 4, RSP shall ensure that there is no mix-up of power drawn at 220 kV & 132 kV
- v) RSP shall pay energy charges to TPWODL based on the meter rading of energy meters installed at Tarkera Grid sub station end of the 132 kV lines following the practice of summation as is being done for 220 kV feeder, or as directed by the Commission.
- vi) The 132 kV lines shall be kept available for loading for a period of three months from the date of energization or rectification of defects at 220 kV MSDS-4 Sub-station, whichever is earlier, RSP shall intimate OPTCL immediately on restoration of normal services at MSDS-4.
- 2. The Petitioner M/s. SAIL-RSP has submitted the following:
  - a) The Petitioner-Company is a consumer of the Distribution Licensee-M/s. TPWODL having contract demand of 170 MVA. Earlier, the Petitioner was connected to Tarkera Grid Sub-Station of OPTCL through 2 nos. of 132kV feeders connected to 132 kV MSDS-II S/s of RSP. Subsequently, after upgradation of its Grid connectivity to 220 kV level, the Petitioner is now availing power from the Grid through 4 nos. of 220 kV feeders from Tarkera Grid Sub-station of OPTCL connected to MSDS-4 Sub-station of RSP.
  - b) MSDS-4 is a double bus 220 kV GIS (Gas Insulated Sub-station) where power is stepped down to 132 kV and is fed to 132 kV network of RSP. The 2X60 MW captive generators are also connected at 132 kV level. Further, the 132kV is stepped down to 33kV for distribution of power to different units of the plant.
  - c) Due to a major breakdown on 06.10.2023, one 220 kV gas insulated VT connected to Bus-1 of MSDS-4 failed. Since then, one 220 kV bus of MSDS-4 is not available. In spite of all efforts, it is expected that restoration of the system shall take about three months' time. Since MSDS-4 is now running with only one 220 kV bus, any problem in the said bus will render MSDS-4 sub-station out of service leading to total power interruption in the plant and township (except for MSDS-7 area). In absence of such grid power the captive generators connected at 132 kV and 33 kV cannot be synchronised and restoration may take more time.
  - d) The existing 132 kV lines from Tarkera Grid Sub-station to MSDS-2 are presently in idle, but healthy condition, which are kept energised from Tarkera Grid Sub-station end, but as a precautionary measure, jumpers have been kept disconnected just before entering to RSP premises.

e) Under the present emergency situation, the Petitioner vide its letter dated 28.10.2023 had requested OPTCL to keep the said 132 lines charged upto 132 bus of the plant (MSDS-2) and permit the Petitioner to draw power though these lines under emergency situation. However, OPTCL in its reply dated 10.11.2023 has stated that connectivity voltage level under special operational conditions/constraints, permission of the OERC is required as per OERC (Conditions of Supply) Code, 2019. The Petitioner has also made similar request to TPWODL vide its letter dated 03.11.2023. Although formal reply from TPWODL has not been received, the concerned officials of TPWODL have assured that they do not have any objection to the proposal provided necessary energy charges are paid by the Petitioner. As per the Petitioner they are now passing through an emergency situation and thus, has prayed for immediate attention and favourable directions of the Commission.

## 3. The Respondent-OPTCL has submitted that:

- a) The Petitioner-M/s. SAIL-RSP has now connectivity with 220 kV network of OPTCL at 220/132 kV Tarkera GSS through four numbers of 220 kV dedicated feeders. Apart from these 220 kV feeders old 132 kV DC line from Tarkera GSS to RSP switchyard is in idle charged condition with jumpers disconnected just before entering to RSP premises.
- b) In view of the submission and prayer of the Petitioner, OPTCL submits that, as per Regulation 64 of the OERC (Conditions of Supply) Code, 2019, unless otherwise agreed to, the supply shall be at a single point at the outgoing terminals of the licensee/supplier. However, there are precedence for supplying power at two voltage levels to the industry for a temporary period of two months, vide the following orders of the Commission:
  - Order dated 13.02.2019 in Case No.61 of 2018 Tata Steel Ltd., Jajpur availing power supply from New Duburi grid s/s at 220 kV & 400 kV till stabilisation of 400 kV.
  - Order dated 23.07.2019 in Case No.21 of 2019 NALCO, Damanjodi availing power at 132 kV & 220 kV, during switching over from 132 kV Jayanagar to 220 kV Laxmipur.
  - However, in no case, the Commission have allowed them to draw power at two voltage levels simultaneously.

However, in the instant case, the Petitioner has proposed for drawal of power through both the 220 kV and 132 kV sources simultaneously, under the emergency condition of outage of its 220 kV MSDS-4 Sub-station.

c) Considering the submission of the Petitioner, the Commission may allow them for getting connected with Tarkera Grid Sub-station at 220 kV and 132 kV voltage levels temporarily, with the following conditions:

- i) RSP shall avail power from 132 kV HSL feeders-1&2 only under emergency condition of outage of their 220 kV MSDS-4 S/s and during that situation no power shall be availed through 220 kV RSP feeder-1&2, which are connected to their 220 kV MSDS-4 S/s.
- ii) RSP shall take enough precaution towards ensuring non-mix-up of power drawn through 220 kV Tarkera-RSP Feeder-3&4 at their MSDS-VII S/s & through 132 kV HSL feeders-1&2 at their MSDS-II S/s.
- iii) RSP shall restrict their drawl to 60 MW (Max.) through 132 kV Feeders-1&2 during emergency situation in consultation with SLDC & Tarkera GSS, as one of the four nos. of 100 MVA, 220/132 kV Auto Transformers at present is out of service for overhauling.
- iv) The metering arrangements of the 132 kV HSL feeders-1&2 at Tarkera end conforming to the requirement of CEA (Installation and Operation Meters) Regulations, 2019 shall be done by RSP at their own cost. Further the cost towards making the 132 kV HSL feeders-1&2 ready for energization, if any, shall also be borne by RSP.
- v) Such arrangement may be allowed for a maximum period of 03 months only.
- vi) Due to the importance of the situation, such approval may be considered as standalone type and may not be taken into reference in future cases.
- d) Further, in response to Case No.86/2023 (filed by M/s. SAIL-RSP seeking direction of the Commission for amendment of Tripartite Agreement dated 06.02.2021 between RSP, SE, Railways and TPWODL in respect of method of calculation adopted for energy generated and exported by RSP), OPTCL has submitted for "Connectivity of SE Railways with 220/132/33 kV GSS, Tarkera at 132 kV level, through existing idle charged 132 kV Tarkera-RSP DC line, as the N-1 contingency of SAIL/RSP is getting fulfilled through 2 nos. 220 kV DC lines" for kind consideration of the Commission.
- 4. No submission has been made by the Respondents-TPWODL and SLDC. However, during the hearing, they have submitted that the directions of the Commission are acceptable to them in the present case.
- 5. We heard the parties and their written notes of submissions and verbal submissions in course of hearing are taken into records. From the above, we observe as under:
  - a) The Petitioner-SAIL is a consumer of TPWODL having Contract Demand of 170 MVA and was availing power from Tarkera Grid Sub-station of OPTCL through 2 nos. of 132 kV feeders connected to 132 kV MSDS-II sub-station of SAIL. Subsequently, Petitioner-SAIL availed power from Tarekera Grid Substation through 4 nos. of 220 kV feeders connected to MSDS-IV (220 kV GIS Sub-station) & MSDS-VII sub-stations of RSP. The outage of 220 kV VT of Bus-I at MSDS-IV sub-station

- has hampered the reliability of power availability. The existing 132 kV line from Tarkera Grid Sub-station to MSDS-II s/s is healthy and has been kept idle charged by opening of jumpers. The Petitioner has requested for permission to avail power through above existing 132 kV line under emergency situation.
- b) Clause 64 of OERC (Conditions of Supply) Code, 2019 stipulates that, "unless otherwise agreed to, the supply shall be at a single point at the outgoing terminals of the licensee/supplier, i.e x x x x x x x x". However, earlier in certain cases, the Commission has allowed connectivity at two different points at the outgoing terminals of the licensee/supplier for supply of power to the consumers in emergency situations. This was allowed subject to the conditions that in no case the consumer shall draw power simultaneously at both the points/voltage levels and necessary agreement between the concerned Licensee, STU and the consumer shall be signed to this effect considering all technical and commercial issues. But in the instant case, the Petitioner-M/s. SAIL-RSP has requested for availing power at both 132 kV and 220 kV voltage levels from Tarkera Grid Sub-station, but at any point of time power supply will be available from one voltage level (220 kV or 132 kV), which is not permissible under law. Further, no such agreement exists between the concerned Licensee, STU and the Consumer-Petitioner.
- c) Further, in Case No.86/2023 (filed by M/s. SAIL-RSP seeking direction of the Commission for amendment of Tripartite Agreement dated 06.02.2021 between RSP, SE Railways and TPWODL in respect of method of calculation adopted for energy generated and exported by RSP), OPTCL has submitted for "Connectivity of SE Railways with 220/132/33 kV GSS, Tarkera at 132 kV level, through existing idle charged 132 kV Tarkera-RSP DC line, as the N-1 contingency of SAIL/RSP is getting fulfilled through 2 nos. 220 kV DC lines". Considering the said proposal of OPTCL, the Commission, vide its order dated 17.11.2023 passed in Case No.86 of 2023, has directed the concerned parties to initiate action for providing power supply to M/s. LIL and M/s. SER directly from the Grid at the earliest.
- 6. OPTCL has submitted that power flow through the proposed 132 kV link shall be restricted to 60 MW for a maximum period of 3 months along with required metering of 132 kV feeder and enough precaution to avoid mixing of power drawal through 220 KV & 132 KV links.
- 7. In view of the above scenario, considering the emergent situation as submitted by the Petitioner-M/s. SAIL-RSP, we allow the Petitioner to avail power supply at 132 kV level from Tarkera Grid Sub-station of the OPTCL through the existing idle charged 132 kV feeders for a period of maximum two months from the date of issue of this order subject to condition that at any point of time, power supply from Tarakera Grid Sub-station will be available at one voltage level (220 kV or 132 kV) only and required full proof interlocking scheme shall be in place along with required metering arrangement restricting

the drawal to 60 MW through 132 kV feeder during emergent situation. The Petitioner is directed to rectify defects in its MSDS-IV GIS sub-station (breakdown of 220 KV Gas Insulated VT connected to Bus-1) within above specified time period. In this regard, necessary agreement shall be signed among M/s. TPWODL, OPTCL and the Petitioner considering all technical and commercial issues. However, in the meantime action shall be initiated by the concerned parties for execution of the direction passed by the Commission vide its order dated 17.11.2023 in Case No.86 of 2023.

8. With the above observations and directions, the case is disposed of.

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