# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No. 45/TT/2022

Coram:

Shri I. S. Jha, Member Shri Arun Goyal, Member Shri P. K. Singh, Member

Date of Order: 28.06.2023

#### In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of Transmission Tariff from COD to 31.3.2024 for transmission assets under Project-"POWERGRID works associated with North Eastern Region Strengthening Scheme-VI" in the North Eastern Region.

### And in the matter of:

Power Grid Corporation of India Limited, SAUDAMINI, Plot No.2, Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner

#### Vs.

- Assam Electricity Grid Corporation Limited, (Formerly Assam State Electricity Board), Bijulee Bhawan, Paltan Bazar, Guwahati-781001, Assam.
- Meghalaya Energy Corporation Limited, (Formerly Meghalaya State Electricity Board), Short Round Road, "Lumjingshai", Shillong-793001, Meghalaya.
- 3. Government of Arunachal Pradesh, Itanagar, Arunachal Pradesh.
- 4. Power and Electricity Department, Government of Mizoram, Aizawl, Mizoram.



- 5. Manipur State Power Distribution Corporation Limited, (Formerly Electricity Department, Government of Manipur), Keishampat, Imphal.
- Department of Power,
   Government of Nagaland,
   Kohima, Nagaland.
- 7. Tripura State Electricity Corporation Limited, Vidyut Bhawan, North Banamalipur, Agartala, Tripura (W)-799001, Tripura.
- 8. Kohima-Mariani Transmission Limited, Plot No. 101, Part III, GIDC Estate, Sector 28 Gandhinagar-382028, Guiarat.

...Respondent(s)

For Petitioner: Shri S. S. Raju, PGCIL

Shri D. K. Biswal, PGCIL Shri V. P. Rastogi, PGCIL Shri A. K. Verma, PGCIL

For Respondent: None

#### ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, for determination of tariff from COD to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following transmission assets (hereinafter referred to as the "transmission assets") under Project-"POWERGRID works associated with North Eastern Region Strengthening Scheme-VI" in the North Eastern Region (hereinafter referred to as "the transmission project"):

- **Asset-1:** 2 numbers 400 kV line bays at Imphal Sub-station (for termination of Imphal-New Kohima 400 kV D/C line under TBCB);
- **Asset-2:** 1x125 MVAR, 400 kV 3 Phase bus reactor at 400/132 kV Imphal (PG) Sub-station along with associated bays;
- **Asset-3:** 400/220 kV, 500 MVA, ICT-2 along with associated bays, 400 kV, 125 MVAR, 3 Phase Bus Reactor-2 along with associated bay and 2

numbers 400 kV line bays for termination of 400 kV D/C New Kohima-New Mariani line (Line under TBCB scope) at 400/220 kV New Mariani Sub-station;

**Asset-4:** 400/220 kV, 500 MVA ICT-1 along with associated bays at 400/220 kV New Mariani Sub-station;

**Asset-5:** 420 kV, 125 MVAR Bus Reactor-1 along with associated bays at New Mariani Sub-station:

**Asset-6:** Additional works for operation of 400 kV D/C Misa-New Mariani line (initially operated at 220 kV) at 400 kV level along with 400 kV bays at Misa (GIS) and New Mariani Sub-station; and

**Asset-7:** 2 numbers 220 kV line bays at New Mariani Sub-station.

- 2. The Petitioner has made the following prayers in the instant petition:
  - "1) Approve the proposed DOCO under clause 5(2) of Tariff Regulation, 2019 as explained at para 6.20.
  - 2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
  - 3) Approve the Transmission Tariff for the tariff block 2019-24 block for the asset covered under this petition, as per para –8.40 above.
  - 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2019 as per para 8.40 above for respective block.
  - 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
  - 6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.
  - 7) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.
  - 8) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately as mentioned at para 8.9 above.
  - 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
  - 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any



statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

11) Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for purpose of inclusion in the PoC charges.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."

## **Background**

- 3. The brief facts of the case are as follows:
  - a. Investment Approval (IA) for implementation of the transmission project was accorded by the Board of Directors of the Petitioner in its 353<sup>rd</sup> meeting held on 1.5.2018 and communicated vide Memorandum No. C/CP/PA1819-02-0C-IA003 dated 25.5.2018, at an estimated cost of ₹21595 lakh including IDC of ₹1343 lakh based on December, 2017 price level.
  - b. The scope of the scheme was discussed and agreed in the 5<sup>th</sup> meeting of Standing Committee on Power System Planning in North-Eastern Region held on 8.8.2015. The transmission project was agreed in 15<sup>th</sup> NERPC meeting held on 25.8.2015 at Guwahati.
  - c. In the 6<sup>th</sup> Standing Committee Meeting on Power System Planning of North-Eastern Region held on 3.10.2016, the connectivity at New Mariani Sub-station was revised and it was decided that only Mariani (AEGCL)-Misa line section would be disconnected from Mariani (AEGCL) and terminated at New Mariani (Powergrid) for 400 kV operation. Further, only one circuit of Samaguri-Mariani (AEGCL) 220 kV line would be shifted to New Mariani Sub-station and 2 Numbers of 220 kV line bays would be constructed by the Petitioner at New Mariani Sub-station for termination of New Mariani-Mariani (AEGCL) 220 kV D/C (Twin Moose) line to be constructed by AEGCL. For reactive compensation, 420 kV, 2x125 MVAR bus reactors at New Mariani were also approved for implementation under this scheme.

- d. Subsequently, the final scope of works of the transmission project was approved in the 37<sup>th</sup> meeting of Empowered Committee on Transmission held on 19.9.2017 and 18<sup>th</sup> TCC/ NERPC meetings held on 10.10.2017 and 11.10.2017.
- e. The scope of work covered under the transmission project is as follows:

## **Transmission Line**

- (i) Disconnection of Mariani (AEGCL)-Misa 400 kV line (presently operated at 220 kV) from Mariani (AEGCL) and termination of the same at 400 kV bus at both New Mariani (Powergrid) and Misa Sub-stations and operation of the resultant New Mariani (Powergrid)-Misa line (ckt-2) at 400 kV
- (ii) Termination of the existing Misa-New Mariani (Powergrid) 400 kV (presently operated at 220 kV) line (ckt-1) at 400 kV bus at both Misa and New Mariani (Powergrid) Sub-stations and operation of the resultant line at rated voltage level of 400 kV

## **Sub-station**

## (i) Imphal Sub-station

- **Bus reactor:** 420 kV, 1x125 MVAR bus reactor (2<sup>nd</sup>) along with associated bay
- 400 kV Line bay: 2 Numbers. 400 kV line bays for termination of Imphal-New Kohima 400 kV D/C line (line under TBCB)

## (ii) Misa Sub-station

 \* 400 kV Line bay: 2 Numbers 400 kV line bays (GIS) for termination of New Mariani-Misa 400 kV D/C line

#### (iii) New Mariani Sub-station

- ICT: 400/ 220 kV, 2x500 MVA ICT along with associated bays
- Bus reactor: 420 kV, 2x125 MVAR bus reactor along with associated bays
- 400 kV Line bay:
  - (a) 2 Numbers 400 kV line bays for termination of Misa-New Mariani 400 kV D/C line
  - (b) 2 Numbers. 400 kV line bays for termination of New Kohima-New Mariani 400 kV D/C line (line under TBCB)
- 220 kV Line bay: 2 Numbers 220 kV line bays for termination of Mariani (AEGCL)-New Mariani (Powergrid) 220 kV D/C (Twin Moose) line (line under AEGCL scope)



#### Note:

(a) \* At Misa Sub-station under DPR of NERSS-II (Part-B) one complete diameter have been considered for Silchar-Misa (along with switchable line reactor). Similarly, in the DPR of NERSS-VI provision of procurement of one complete diameter has been kept for 400 kV Misa-Mariani D/C line to be terminated at Misa Sub-station.

It may be noted that these two schemes are being implemented in the almost same time frame and hence, one single GIS package has been considered comprising requirements of GIS bays at Misa Sub-station under both NERSS-II (part-B) & NERSS-VI.

Further, it may also be mentioned that considering the advantage of GIS technology from reliability point of view, it has been considered that both the diameters shall have one feeder for Silchar D/C line & one feeder for Mariani D/C line to ensure the availability of at least one bay of both Silchar D/C & Misa D/C line in case of LBB operation of TIE bay for any of the two diameters.

Accordingly, in the BOQ 2 Numbers line bays and one Tie bay has been considered under both NERSS-II (part-B) & NERSS-VI.

- (b) 2 Numbers 420 kV, 50 MVAR fixed line reactors installed at Misa end of the Misa New Mariani line are required to be charged at rated voltage level of 400 kV in view of 400 kV operation of the Misa-New Mariani D/C line.
- (c) With 400 kV operation of Misa-New Mariani D/C line, 2 Numbers 220 kV line bays vacated at Misa shall be utilised by AEGCL for Misa-Sankardebnagar 220 kV D/C line (line under AEGCL scope)
- (d) With 400 kV operation of Misa-New Mariani (ckt-1) at 400 kV, the 220 kV bay vacated at New Mariani shall be utilised by AEGCL for termination of one of the 220 kV Samaguri-Mariani (AEGCL) 2xS/C lines from Mariani (AEGCL) to New Mariani (Powergrid) thus forming Samaguri-New Mariani (Powergrid) and Samaguri-Mariani (AEGCL) 220 kV S/C lines.
- f. The entire scope of work under the transmission project has been completed and is covered in the instant petition.
- g. The details of date of commercial operation (COD) of the transmission assets covered in the transmission project are as follows:

Assets	Asset	COD	Covered under petition
Asset-1	2 Numbers 400 kV line bays at Imphal Sub-station (for termination of Imphal–New Kohima 400 kV D/C line under TBCB)	1.8.2020 (Proposed)	Covered in the instant petition
Asset-2	1x125 MVAR, 400 V 3 Phase bus reactor at 400/132 kV Imphal (Powergrid) Sub-station along with associated bays	22.8.2020	

