# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

# Petition No. 241/MP/2019

Coram:

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

Date of Order: 13.02.2023

#### In the matter of:

Petition under Sections 79(1)(f) read with 79(1)(c) and 79(1)(b) of the Electricity Act, 2003 relating to adjudication of dispute relating to Energy Meter Data discrepancy at Bhadrawati station leading to commercial loss to GMR Warora Energy Limited.

#### And in the matter of:

GMR Warora Energy Limited, 701/704, 7th Floor, Naman Centre, A-Wing, BKC (Bandra Kurla Complex), Bandra, Mumbai 400051.

.... Petitioner

#### Versus

- Power System Operation Corporation Limited, Katwaria Sarai, New Delhi -110016.
- Power Grid Corporation of India Limited
   Qutab Institutional Area, Katwaria Sarai, New Delhi -110016.
- 3. Western Regional Load Despatch Centre (WRLDC)
  Andheri (East), Mumbai-400093. ..... Respondents

For Petitioner : Shri Amit Kapur, Advocate, GWEL

Shri Akshat Jain, Advocate, GWEL Shri Aditya Dubey, Advocate, GWEL

For Respondents: Shri Pallav Mongia, Advocate, PGCIL

Shri Aditya Das, POSOCO & WRLDC

Shri Alok Mishra, POSOCO Shri Benimadhav, PGCIL Shri Arjun Malhotra, PGCIL

#### **ORDER**

GMR Warora Energy Limited (hereinafter referred to as GMRWEL) has filed the present petition under Sections 79(1)(f) read with 79(1)(c) and 79(1)(b) of the Electricity Act, 2003 for adjudication of dispute relating to Energy Meter Data discrepancy at Bhadrawati station leading to commercial loss to GMR Warora Energy Limited.

- 2. The Petitioner has submitted that on account of under-recording by Special Energy Meter at line-1 at Bhadrawati end (PGCIL-end) incorrect data was recorded from 26.4.2018 to 25. 5.2018 (hereinafter referred to as "disputed period"). The under-recording was identified on 3.5.2018 and rectified on 25. 5.2018, after 22 days. In the intervening period, the injection was computed by Western Regional Load Despatch Centre using the standby meter readings of line 1 at GWEL end after applying notional losses of 2%. However, the notional loss of 2% applied by WRLDC is 1.65% to 1.85% higher than the actual transmission loss during the relevant period. As a result of this, GWEL is being wrongly penalized and has incurred major losses of approximately ₹3 to 4 lakh daily, aggregating to ₹74 lakh for the disputed period.
- 3. The Petitioner has made the following prayers:
  - "a. Direct the Respondents consider the transmission loss on the basis of average loss for the last three months in accordance with the LANCO Order;
  - b. Direct the Respondents to pay Rs. 74,00,000/- to GWEL for the commercial losses suffered due to incorrect readings of SEM;
  - c. Pass any such further order as this Hon'ble Commission may deem necessary in the interest of justice."

#### **Submissions of Petitioner**

- 4. The Petitioner has made the following submissions in support of its contentions:
  - a. GWEL is a generating company which has developed a coal based thermal power plant with an installed capacity of 600 MW in Warora Taluka, District Chandrapur in the State of Maharashtra.

- b. The Project is connected to ISTS at 400/200 kV Bhadravati by a dedicated 400 kV D/C line. The injection of power is calculated from the readings of the main meters installed at the Bhadrawati end of 400k V GWEL-Bhadrwati D/C line.
- c. For the week starting from 23.04.2018 to 29.04.2018, the meter readings of SEM at line-1 at Bhadrawati end, in comparison with the standby meter at GWEL end, was found to be under-recording from 26.04.2018 onwards. The meter readings of SEM at line-1 at Bhadrawati are maintained by Power Grid Corporation of India Limited.
- d. On 03.05.2018, WRLDC intimated PGCIL regarding the under-recording of meter readings of SEM at line-1 at Bhadrawati. On 04.05.2018, the energy statements for the week starting from 23.04.2018 to 29.04.2018 were prepared.
- e. On 25.05.2018, after a delay of 22 days, PGCIL informed WRLDC that the discrepancy in the meter readings of SEM at line-1 at Bhadrawati end has been resolved.
- f. The discrepancy reports submitted by POSOCO for weeks starting from 23.04.2018 to 27.05.2018 clearly demonstrate under recording in the meter readings of SEM at line.
- g. On 01.06.2018, GWEL appraised POSOCO about the discrepancy in the meter readings of SEM at line-1 at Bhadrawati. GWEL stated that there was sudden variation in the meter reading from the 46<sup>th</sup> time block of 26.04.2018 which continued till 46th time block of 25.05.2018. Consequently, line loss increased from 0.15% to more than 1.5% from 26.04.2018 which led to loss in injection quantum in Deviation Settlement Mechanism ("DSM")

- calculations. In view of this, POSOCO was requested to check SEM meter reading installed at GWEL's 400 kV switchyard for this settlement.
- h. On 21.06.2018, POSOCO responded to GWEL's letter dated 01.06.2018, denying GWEL's request to use check meter at GWEL end to compute the injection on the ground that the same can be used only if the standby meter at GWEL end was found to be faulty. Thus, it was stated that no revision in energy statement for 26.04.2018 to 25.05.2018 was required. Thereby, POSOCO intimated that as per the procedure agreed in WRPC, the injection was computed by using the standby meter (at GMR end) reading of line-1 after applying notional losses of 2%.
- i. In response to POSOCO's letter dated 21.06.2018, GWEL on 29.6.2018 replied that the notional loss of 2% is higher than the actual line losses. Further, PGCIL notified the issue of discrepancy on 03.05.2018. However, the problem was rectified only after a delay of 22 days i.e. on 25.05.2018. This delay is not attributable to GWEL as it was beyond its control and action. Therefore, WRLDC was requested to calculate the injection readings taking line losses of 2nd line as reference.
- j. On 03.07.2018, POSOCO communicated to all generating stations where relocation of meters was advised (including GWEL), noting that check meters are yet to be shifted from the remote end (generating station) to the interface points (at PGCIL sub-station). It was stated that relocation is essential for ensuring redundancy of measurement and for better validation of main meter data (at interface point) used in energy accounting. Thus, coordination with PGCIL in this regard was requested.

- k. On 19.07.2018, during the 78th Commercial Committee Meeting, Western Regional Power Committee, GWEL's grievance was noted and WRPC opined that the matter ought to taken up with this Commission due to lack of consensus.
- I. On 08.09.2018, during the 7th National Power Committee meeting, the Southern Regional Power Committee and the Eastern Regional Power Committee had stated that straight jacketing transmission losses is erroneous as it leads to exaggerated calculation of loss. In view of this, MS, NPC proposed that the actual loss on line computed based on the previous week data may be used for transmission loss calculation.
- m. There was discrepancy in meter readings of SEM at line-1 at Bhadrawati end, on account of equipment malfunction. Thus, SEMs were unable to record the correct data.
- n. The transmission loss for the period starting from 01.03.2018 to 10.06.2018 has been in the range of 0.15% to 0.58% (excluding the period for which notional loss was considered) as per the data provided by Energy Meter readings at the GWEL and PGCIL end.
- o. Blanket application of 2% notional loss without considering the actual transmission loss is illegal and arbitrary. In the absence of meter reading data, the average loss for the transmission line for the last three months is to be considered for arriving at the actual loss figure for a disputed period. The directions of the Commission in the case of Lanco applies to the present case in as much as correct transmission loss data was not available.
- p. The commercial losses suffered by GWEL is solely attributable to the inaction on the part of the Respondents for which GWEL cannot be made liable.

- 5. The petition was admitted on 5.11.2019 and notices were issued to the Respondents to file their replies. WRLDC/POSOCO and PGCIL have filed their replies vide affidavit dated 21.11.2019 and 22.11.2019 respectively. The Petitioner has filed its rejoinder to the reply of WRLDC/POSOCO and PGCIL vide affidavits dated 10.09.2022 and 10.09.2022 respectively.
- 6. The hearing in this matter was held on 18.10.2022 and the order was reserved.

#### Reply filed by Respondent POSOCO:

- 7. The methodology followed by WRLDC for loss computation using standby meter data with 2% notional loss for 400 kV lines, in absence of correct data from main meter is in line with the extant practice in WRPC and this is a well-deliberated & agreed upon matter in the Commercial Coordination committee (CCM) meetings of WRPC of which GMR is also an esteemed member. This methodology was being deliberated in WRPC forum (74th CCM, 9th Dec 2016).
- 8. It is an integral responsibility of the petitioner to verify the energy statement and the SEM discrepancy report available on WRLDC website every week and report mistakes/omissions if any within 15 days as mandated in Regulation 6.4.22. of the Grid Code. The petitioner's first e-mail on this matter was received by WRLDC only on 28.05.2018 i.e. after expiry of 24 days post publication of energy statement and discrepancy report by WRLDC. Apparently, there was negligence on the part of the petitioner.
- 9. WRLDC being a statutory body, had followed practice as agreed in WRPC in a non-discriminatory fashion. Accordingly, WRLDC could not have unilaterally changed the methodology approved by WRPC members and followed a different approach in case of GMR Warora which would have been construed as discriminatory on the

part of the answering respondents.

- 10. The Commission's order dated 5.12.2017 in Petition No. 188/MP/2016 in respect of LANCO was with reference to a specific case wherein the main meter data itself was not available with WRLDC since the POWERGRID had not sent it and accordingly a specific relief was granted to LANCO. The facts & circumstances of the instant case are entirely different from the case of LANCO. In this instant case meter data was sent to WRLDC by POWERGRID Bhadrawati which were subsequently found to be erroneous where as in LANCO case the interface meter data was not sent to WRLDC. Accordingly, the order of the Commission issued in Lanco vs PGCIL case (188/MP/2016) may not be extended to the instant case.
- 11. As per recommendation of 7<sup>th</sup> NPC that "the actual loss on the line or ICT computed based on the previous week data may be used for loss application", WRLDC followed up the matter in subsequent 80<sup>th</sup> CCM meetings of WRPC to adopt the suggested methodology of applying actual loss (%) computed based on previous week's data or latest week's data in case of non-availability of previous week's meter data. Subsequently, based on decision in 80th Commercial Committee Meeting (CCM) of WRPC held on 21.02.2019 this methodology is being followed with effect from 25.02.2019. SE(C) opined that the date for implementation for the recommendation of 7th NPC shall be implemented starting from the week 25.02.2019 onwards, Committee noted."
- 12. WRLDC pursued with respective generators and the central transmission utility (CTU) for shifting of redundant check meters from such generator's end to the ISTS connection points vide its letter dated 03.07.2018. As a follow-up by WRLDC, a number of generators have shifted their check meters to the respective ISTS interface points and some of the generators have installed separate check meters

- at the ISTS interface for redundancy. It is worth mentioning here that the check meters in the instant portioner's case have since been shifted from the GMR Warora generating station end to the ISTS Bhadrawati sub-station end in July 2018.
- 13. The issue has already been resolved in the 80th CCM of WRPC & since the new methodology of considering previous week's data in case of non-availability or error in main meter data for a given week is already in place in western region (WR) since 25.02.2019 and as this system is running smoothly, the past regional deviation accounts & transmission loss computations need not be revised to grant relief in a particular case. Further, as decided in the 80th CCM, this methodology would be applicable only with prospective effect from 25.02.2019.

# Petitioner's Rejoinder to POSOCO and WRLDC

- 14. On account of under-recording by Special Energy Meter at line-1 at Bhadrawati end (PGCIL-end), incorrect data was recorded from 26.04.2018 to 25.05.2018. The under-recording was identified on 03.05.2018 and rectified on 25.05.2018, after a delay of 22 days.
- 15. In Order dated 05/12/2017 by this Commission in Petition No. 188/MP/2016 has considered the matter and adjudicatory orders passed by this Hon'ble Commission have force of law and are binding on the Respondents, wherein it was held that in the absence of meter reading data, the average loss for the transmission line for the last three months is to be considered for arriving at the actual loss figure for a disputed period. It is reiterated that the order known as LANCO Order applies squarely to the present case in as much as correct transmission loss data was not available. This is in line with the conclusion of the 7th NPC meeting, wherein it was decided that historical data should be considered in the absence of main meter data. PGCIL submitted SEM data was admittedly based on incorrect readings. It is

submitted that a scenario where SEM data is submitted based on faulty readings is akin to a scenario where SEM data is not available at all. Thus, applying a notional transmission loss of 2% based on deliberations in the CCM of WRPC is in the teeth of the LANCO Order. 7<sup>th</sup> NPC meeting, all stakeholders have admittedly agreed to the methodology of using the previous week's data in case of non-availability or incorrect SEM readings. Thus, there is an in-principle consensus on the methodology laid down by this Hon'ble Commission in the LANCO Order.

16. It is submitted that WRLDC has been aware of the discrepancy in the meter readings since 03.05.2018. Thus, it cannot be permitted to avoid its statutory obligations on the ground of purported inaction by GWEL at this juncture. It is submitted that WRLDC is obligated to act as per the provisions of the Electricity Act.

# Reply of CTU (PGCIL)

- 17. It is submitted that the GMR EMCO Ckt#1 Main meter (S. No. 2648A) at Bhadrawati end had reportedly been under-recording since 26.04.2018. This was informed by WRLDC vide its email dated 03.05.2018. This SEM was checked by the site engineer and all physical connections were found to be functioning normally. The problem was again reported after one week and then, once again, a detailed investigation was carried out by the CTU (PGCIL). During the investigation, it was observed that terminals of CT Secondary currents for R & Y Phases were found to be short through Test Terminal Block (TTB). The same was replaced on 25.05.2018. The Insulation failure of TTB is very rare and therefore detection and consequent rectification took 22 days which is reasonable considering the surrounding facts and circumstances. It is respectfully submitted that the CTU acted in the right earnest has resolved the reported issue within reasonable time.
- 18. As per the regulatory provisions, the standby meters are installed to take care of

such exigencies for energy recording and accounting purpose. The rare nature of the discrepancy was dealt as diligently as possible by the CTU.

#### Petitioner's Rejoinder to CTU (PGCIL) dated 10.09.2022

- 19. Failure to rectify the equipment malfunction in a timely manner should not adversely impact GWEL's rights. It is submitted that GWEL cannot be made to suffer losses on account of delay on the part of PGCIL. As per Section 38 of the Electricity Act, PGCIL is, inter alia, responsible for ensuring development of an efficient, coordinated and economical system for inter-State transmission lines. PGCIL is under a statutory obligation to rectify the incorrect readings of SEM at the earliest in order to maintain an efficient transmission network.
- 20. Further, the obligation to install check meters under the Electricity Act is on WRLDC and PGCIL. In this regard it is pertinent to note that, Check Meters were not installed at Bhadrawati end. Moreover, even after the removal of interim LILO of ISTS lines/commissioning of dedicated lines, Check Meters were yet to be shifted from the remote end (generating station) to the interface points (at Power grid substation).

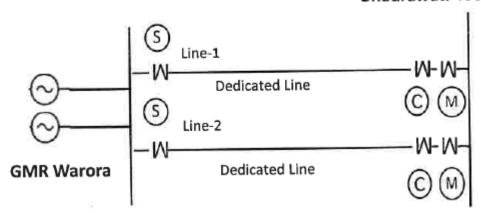
#### **Analysis and Decision**

21. The Present petition has been filed by Petitioner, GMR Warora Energy Limited, a generating station due to under-recording by Special Energy Meter at line-1 at Bhadrawati end (PGCIL-end). Petitioner has submitted that incorrect data was recorded from 26.4.2018 to 25.5.2018. The under-recording was identified on 3.5.2018 and rectified on 25.5.2018, after 22 days. For these 22 days period, injection was computed by WRLDC using the standby meter readings of line 1 at GWEL end after applying notional losses of 2%. The petitioner has submitted that notional loss of 2% applied by WRLDC is 1.65% to 1.85% higher than the actual

transmission loss in the transmission line. Due to this higher notional loss, the petitioner has paid higher DSM charges. Petitioner has prayed that actual average transmission loss for last 3 months may be considered instead of notional loss of 2%.

- 22. Respondent WRLDC has submitted that loss computation using standby meter data with 2% notional loss for 400 kV lines, in absence of correct data from main meter is in line with the extant practice in WRPC. Further as per recommendation of 7<sup>th</sup> NPC the actual loss on the line computed based on the previous week data is being followed with effect from 25.02.2019 as per decision in 80th Commercial Committee Meeting (CCM) of WRPC held on 21.02.2019.
- 23. Respondent CTUIL has submitted that terminals of CT Secondary currents for R & Y Phases were found to be short through Test Terminal Block (TTB) and the same was replaced on 25.05.2018. The Insulation failure of TTB is very rare and therefore detection and consequent rectification took 22 days which is reasonable considering the surrounding facts and circumstances.
- 24. We have considered the rival submissions and perused the documents available on record. The respondents have acknowledged that there was under recording by SEM at Bhadravati end due to technical fault. The issue which arise for our consideration is the % of loss to be considered to calculate injection by petitioner at Bhadravati considering SEM reading at generating station end.
- 25. The Single line diagram for the instant case is as under:

#### Bhadrawati 400 kV Bus



The interface meter for Petitioner is considered at Bhadravati end. There was only main meter at Bhadravati and the meter at Bhadravati got faulty. Hence, the meter at generating station end (standby meter) is to be considered to calculate the injection at Bhadravati.

- 26. As per the provisions of Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 ("CEA Regulations, 2006") 'Check Meter' shall be installed and used for accounting and billing of electricity in case of failure of the main meter. The relevant provision of CEA Regulations, 2006 is as under: -
  - "2 (i) 'Check Meter' means a meter, which shall be connected to the same core of the Current Transformer (CT) and Voltage Transformer (VT) to which main meter is connected and shall be used for accounting and billing of electricity in case of failure of main meter":
- 27. During the relevant period, Check Meters were not installed at Bhadrawati end.
- 28. We observe that seventh (7th) meeting of the NPC took place on 8th September 2017 in which it was decided to consider last week losses for such cases.
- 29. Petitioner has submitted that after LILO was removed, check meters were not shifted to Bhadravati end. We observe that main meter, check meter and standby meter must be installed in accordance with the CEA Metering Regulations so that

such instances are avoided. In the instant case, petitioner has not submitted anything to prove that it took up with CTU and WRLDC to get check meter shifted to Bhadravati end. Petitioner's argument that it was entire responsibility of CTU to install check meter at Bhadravati is not acceptable. A generating station also must ensure that all metering required as per the Regulations is in place.

- 30. However, we observe that there was under recording which has been acknowledged by CTUIL as well as WRLDC. We further observe that NPC had already decided to consider last week average loss way back in 2017, although WRLDC started applying the same post 2019. Keeping in view the NPC decision and the principle followed for application of losses on All India basis while scheduling on day ahead basis, in the given facts and circumstances, in exercise of our regulatory powers and in order to adjudicate the issue to a logical end, we hereby direct losses to be considered for the disputed period of 26.04.2018 to 25.05.2018 as average losses for the previous week (i.e. during the period from 16.04.2018 to 22.04.2018). WRLDC is directed to revise the DSM data for the period from 26.04.2018 to 25.05.2018 and send to WRPC within a month of issue of this Order and WRPC is directed to issue revised DSM account for the Petitioner.
- 31. Accordingly, Petition No. 241/MP/2019 is disposed of in terms of the above.

Sd/ Sd/ Sd/

(P. K. Singh) (Arun Goyal) (I. S. Jha)

Member Member Member