# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 318/MP/2022

Coram:

Shri Jishnu Barua, Chairperson Shri Arun Goyal, Member Shri P. K. Singh, Member

Date of Order: 19.04.2024

#### In the matter of:

Petition under Section 79(1)(c) & 79(1)(f) of the Electricity Act, 2003 and all other enabling provisions in this regard, seeking a direction to NRPC to certify availability factor for the months of January 2022 and February 2022 by excluding the outage of the Transmission Line (from 20.01.2022 to 08.02.2022) from the total time of the said Transmission Line, in accordance with Appendix II - Clause 5(i) of the Tariff Regulations (Procedure for Calculation of Transmission System Availability Factor for a Month).

# And In the matter of:

#### NRSS XXIX TRANSMISSION LIMITED.

Unit No. 101, First Floor, Windsor, Village Kole Kalyan, Off CST Road, Vidyanagari Marg, Kalina, Santacruz (East), Mumbai – 400 098

...Petitioner

#### **VERSUS**

1. Northern Regional Power Committee (NRPC),

18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110016

2. Central Electricity Authority (CEA),

Central Electricity Authority, Sewa Bhawan, R.K.Puram, Sector-1, New Delhi-110066

3. Border Roads Organization (BRO),

Seema Sadak Bhawan Ring Road Naraina Delhi Cantt New Delhi- 110010

4. AD Hydro Power Limited,

Bhilwara Towers, A-12, Sector 1, Noida-201301 (NCR Delhi), India

5. Haryana Power Purchase Centre,



UHBVN, IP 3& 4, 4th floor, Sector 14, Panchkula, HARYANA – 134113

## 6. Punjab State Power Corporation Limited,

The Mall, PSEB Head Office, Patiala, Punjab 147001

#### 7. Himachal Sorang Power Pvt. Ltd.,

Sorang HEP (100 MW), Distt. Kinnaur, H.P. D-7, Lane-I, Sector-I, New Shimla, Shimla, HIMACHAL PRADESH – 171009

#### 8. Adani Power Limited, Mundra,

Adani Corporate House Shantigram S G Highway Ahmedabad, GUJARAT – 382421

#### 9. Jaipur Vidyut Vitran Nigam Limited,

Vidyut Bhawan, Janpath, Jaipur – 302005, Rajasthan

#### 10. Ajmer Vidyut Vitran Nigam Limited,

Old Power House, Hathi Bhata, Ajmer -305001, Rajasthan

## 11. Jodhpur Vidyut Vitran Nigam Limited,

New Power House, Industrial Area, Jodhpur – 342003, Rajasthan

### 12. Lanco Anpara Power Limited,

Plot No. 397, Phase-III, Udyog Vihar, Gurgaon - 122016 New Delhi Region – India

#### 13. Lanco green power pvt. Ltd.,

Greenko Group Plot No. 1366, Road No. 45, Jubilee Hills, Hyderabad -ANDHRA PRADESH – 500033

#### 14. Power Development Deptt., Govt. of J&K,

Exhibition Ground, Opposite J&K High Court, Srinagar, Jammu and Kashmir -190009

### 15. North Central Railway,

ORM Office, Nawab Yusuf Road, Allahabad, Uttar Pradesh - 211015

#### 16. Jaiprakash Power Ventures Limited,

Block-F, Corporate Office, Sector-128, Noida, NOIDA (Gautam Budh Nagar), Uttar Pradesh – 201304

#### 17. BSES Yamuna Power Limited,

Shakti Kiran Building, Karkardooma, Delhi-110032

#### 18. BSES Rajdhani Power Limited,

2nd Floor, B-Block, BSES Bhavan, Nehru Place, New Delhi-110019

#### 19. Tata Power Delhi Distribution Limited,

NDPL House, Hudson Lines, Kingsway Camp, Delhi – 110009



#### 20. New Delhi Municipal Corporation,

Palika Kendra Parliament Street, New Delhi-110001

#### 21. Electricity Wing of Engineering Department, Chandigarh,

Electricity 'op' circle, 5th floor, UT Secretariat, sector 9-d, Chandigarh – 160009

#### 22. Power Grid Corporation of India Limited (HVDC Rihand & HVDC Dadri),

Commercial & Regulatory Cell, Power Grid Corporation of India Ltd., 'Saudamini', Plot No.2, Sector 29, Gurgaon, HARYANA – 122001

#### 23. U.P. Power Corporation Limited,

10th Floor Shakti Bhawan Extn., 14 Ashok Marg, Lucknow, Uttar Pradesh – 226001

#### 24. PTC (BUDHIL), PTC India Limited,

2nd Floor, NBCC Tower, 15, Bhikaji Cama Place, New Delhi - 110066

#### 25. PTC (EVEREST), PTC India Limited,

2<sup>nd</sup> Floor, NBCC Tower, 15, Bhikaji Cama Place, New Delhi - 110066

#### 26. Uttarakhand Power Corporation Limited,

V.C.V. Gabar Singh Urja Bhawan, Kanwali Road, Dehradun, Uttarakhand – 248001

#### 27. Himachal Pradesh State Electricity Board,

HPSEB Ltd. Vidyut Bhawan, Shimla – 171004 Himachal Pradesh

..... Respondents

#### **Parties Present:**

Shri Sajjan Poovayya, Sr. Advocate, NTL

Ms. Aparajita Upadhyay, Advocate, NTL

Shri Aman Anand, Advocate, NTL

Shri Aman Dixit, Advocate, NTL

Shri Abhimanyu Maheshwari, Advocate, NTL

Shri Apoorv Kurup, Advocate, NRPC

Ms. Kirti Dadheech, Advocate, NRPC

Shri Lokendra Ranawat, NTL

Shri Saurav Kumar Jha, NTL

#### ORDER

NRSS XXIX Transmission Limited (being the "Transmission Licensee" of the NRSS Project) (hereinafter referred as "Petitioner"/ "NTS"/ "NRSS XXIX") had filed the present petition under Section 79(1)(c) & 79(1)(f) of the Electricity Act, 2003 and all other enabling provisions in this regard, seeking a direction to NRPC to certify availability factor for the months of January 2022 and February 2022 by excluding the outage of the



Transmission Line (from 20.01.2022 to 08.02.2022) from the total time of the said Transmission Line. The Petitioner has made the following prayers:

- (a) Direct the Respondents to certify availability of the Petitioner for the period between 20.01.2022 to 08.02.2022 after excluding the time of outage from the total time under consideration in accordance with Clause 5 / Appendix II; and
- (b) Direct the Respondents to issue revised availability certificates for the months of January 2022 and February 2022 at [100%] and [100%] respectively; and
- (c) Direct the Respondents to revise the cumulative availability after taking into the revised availability for January 2022 and February 2022; and
- (d) condone any inadvertent omissions/errors/shortcomings and permit the Petitioner to add/change/modify/alter this filing and make further submissions as may be required at a future date; and / or
- (e) pass such other relief or further orders, as this Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.

#### **Submissions of the Petitioner**

- 2. The Petitioner, in the instant petition, has mainly submitted the following:
  - (a) NRSS XXIX Transmission Limited (NRSS XXIX) is a Transmission Licensee having a Transmission Project which comprises the following elements:
    - (i) Asset 1: Jalandhar Sambha 400 kV D/C Transmission Line
    - (ii) **Asset 2:** LILO of both circuits of Uri-Wagoora 400 kV D/C Transmission Line at Amargarh (on multi-circuit towers)
    - (iii) **Asset 3:** Establishment of 7 X 105 MVA (1ph units) with 400/220 kV GIS Substation at Amargarh
    - (iv) **Asset 4:** Sambha Amargarh 400 kV D/C routed through Akhnoor / Rajouri (hereinafter referred to as "Transmission Line")
  - (b) The NRSS XXIX Transmission Project was awarded by the Ministry of Power on May 23, 2014, for a 35-year period from the scheduled commercial operation date on a Build, Own, Operate, & Maintain (BOOM) basis. The Transmission Line transmits electricity from Punjab to the Kashmir Valley as per CEA guidelines and was made operational on 20.08.2018; since then, it has been transmitting power without any operation and maintenance concerns. The Transmission Line attained power flow on 31.08.2018, and trial operation was completed on 01.09.2018 and

- it was declared commissioned by NRLDC through its communication dated 20.09.2018.
- (c) In August 2021, the Petitioner, during routine ground patrolling, noticed development works of a new BRO road project (expansion of the Rajouri Thanamandi Surankot Road) in close proximity to Tower No. 286. It is to mention that such type of works directly impact the stability of the Transmission Line and cause imminent danger to life and property around such area.
- (d) As the Transmission Line is located in close proximity to this road, understanding that some of its locations of Transmission Line might get affected by such road expansion work, on 09.08.2021, a meeting was convened with BRO to sensitize about the Transmission Line and probable effects and ensuing dangers the road expansion works pose on the Transmission Line.
- (e) The Petitioner, on 10.08.2021, wrote to BRO reiterating to them the likely impact of the road expansion work on the operation of the Transmission Line. Petitioner brought to the notice of BRO that the construction of a road by them is in violation of the Electricity Act,2003 (herein referred to as EA, 2003) and the CEA Safety Regulations, 2010 made thereunder, inasmuch as no approval of the transmission licensee or the competent authorities was obtained, prior to undertaking the road expansion project in the areas where the road expansion work was impacting the operation of Transmission Line. The relevant extract of the CEA Regulation is reproduced here below for ready reference:

# "63. Erection or alteration of buildings, structures, flood banks and elevation of roads. –

(1) If at any time subsequent to the erection of an overhead line, whether covered with insulating material or not, any person proposes to erect a new building or Structure or flood bank or to raise any road level or to carry out any other type of work whether permanent or temporary or to make in or upon any building, or structure or flood bank or road, any, permanent or temporary addition or alteration, he and the contractor whom he employs to carry out the erection, addition or alteration, shall give intimation in writing of his intention to do so, to the supplier or owner and to the Electrical Inspector and shall furnish therewith a scale drawing showing the proposed building, structure, flood bank, road or any addition or alteration and scaffolding thereof required during the construction.

. . .

(6) No work upon such building, structure, flood bank, road and addition or alteration thereto shall be commenced or continued until the Electrical Inspector has certified

that the provisions of regulation 58, 60 and 61 should not be contravened either during or after the aforesaid construction:

"

- (f) BRO, vide letter dated 24.08.2021, responded that it is maintaining all electrical clearances and had already conducted a joint site visit with the Jammu & Kashmir Power Distribution Department, (hereinafter referred to as "JKPDD"). Petitioner submitted that BRO did not deny the position that it had not complied with the mandate of Regulation 63 of the CEA Safety Regulations, 2010.
- (g) Petitioner submitted that for another section, i.e., the Akhnoor-Poonch Road section of the road expansion project, prior to undertaking the construction activity, the BRO vide communication dated 28.08.2021 initiated the process prescribed under the CEA Safety Regulations, 2010. For this section, the Petitioner, on 27.09.2021, requested BRO to share the detailed profile of the proposed construction so that a joint survey and further steps in terms of the procedure provided under the regulations could be carried out.
- (h) In connection with the Buffliaz-Rajouri stretch of the road, for which no consent/permission as required under the CEA Safety Regulations, 2010 was taken, shockingly, on 07.10.2021, the Petitioner was informed by the contractor of BRO that during hill cutting, cracks had developed at the rear side of the said Tower, which was making the structure unsafe and unstable. The relevant portion from the intimation of the contractor is reproduced here below for ready reference:

"We want to bring this to your notice that we were doing our hill cutting work on chainage 27+600 according to BRO's R.O.W while following the guidelines given by you in which we were supposed to do any Excavation Works 20 meters away from your structures but at Ch-27+600 (Manihal Village), it has come to our notice that there are some cracks developing at rear side of your structure which is making your structure unstable & unsafe as well as it is hazardous to surrounding houses/structures.

So, you are requested to take it as an alarming situation and take immediate action to avoid any adversity."

(i) The Petitioner's patrolling team immediately responded to the situation manifesting on the ground, owing to this unauthorized and negligent hill-cutting exercise. In these circumstances, the Petitioner, vide an email dated 07.10.2021, called upon the contractor to mitigate the damage done and stop all the works near the said Tower.

- (j) The BRO, vide its letter dated 08.10.2021, informed the Petitioner that it had directed its contractor to stop the work in the area and also directed him to carry out necessary protective works to safeguard the hill slope. Simultaneously, BRO asked the Petitioner to relocate/shift the said Tower, which was affected.
- (k) BRO, in response to the letter dated 07.10.2021, attempted to cover up for its negligent and unauthorized action by suggesting that the said Tower was placed at an undesirable site, where the strength of the soil strata was not enough to hold such a heavy structure.
- (I) Petitioner, vide its letter dated 09.10.2021, wrote to the Commander, BRO, giving a complete sequence of events that had been encountered in the region, requesting him to intervene as the excavation work carried out by BRO was posing a risk to the operation of the Transmission Line. The same letter was also marked to all the Authorities, including the CEA, the Chief Electrical Inspector (hereinafter referred to as "CEI"), and the local administration, wherein full facts resulting in damage to the said Tower due to events beyond its control were brought to their notice.
- (m)The Petitioner, vide its letter dated 22.10.2021, sought the intervention of the Ministry of Power (hereinafter referred to as "MOP") to ensure that the procedure prescribed under the law was henceforth followed by BRO. This communication was also copied to the CEA, CEI, and NRPC, amongst others.
- (n) The CEA / CEI, vide its communication dated 29.10.2021, directed BRO to consult the Petitioner before carrying out any further road expansion works.
- (o) A meeting was convened by the CEA on 02.11.2021, wherein the Petitioner's submissions regarding (i) the said Tower and (ii) the future course to be adopted in relation to the road expansion project were discussed. After detailed deliberations on the issue, the following decisions were taken at this meeting dated 02.11.2021:
  - "• A joint survey will be conducted by M/s. NTL and BRO at these critical tower locations (Locations nos. 282, 283, 286 and 290) along with the representatives from CEA. The survey will be conducted as early as possible and the survey report will be submitted to CEA.
  - M/s NTL will continue the monitoring process of the towers at the critical locations and will provide a status report to CEA every 15 days.



- In case shifting of the transmission line is required for widening of road, the cost of realigning the transmission line will be required to be borne by the BRO.
- BRO will not resume construction activity till the tower foundation stabilization is not done."
- (p) Pursuant to the decisions taken in the CEA meeting dated 02.11.2021, a joint survey of the impacted location, i.e., said Tower, and also of other affected locations was conducted on 17.11.2021 in the presence of CEA representatives. The details of the survey were duly communicated to the CEA vide Status Report dated 22.11.2021.
- (q) Thereafter, a second meeting was convened by CEA on 01.12.2021, wherein the following decisions were taken after deliberations:

"A Geo-technical investigation would be conducted at these critical tower locations (Locations nos. 282, 283, 286 and 290) along with the Geo-technical experts from CSIR-Roorkee. Based on advice from Geo-technical and other civil experts, practical solution shall be found out jointly by NTL & BRO and the report shall be submitted to CEA within a week.

No further excavation or construction work near any tower location shall be done by BRO or NTL team before conducting the geo-technical investigation.

M/s NTL will conduct tower spotting for ERS structures and ERS shall be moved immediately to a location as near as practically possible to tower location 286.

Survey for alternate route for shifting of towers shall be carried out by NTL and data shall be submitted to CEA.

In case shifting of the transmission line is required for widening of road, the cost of realigning the transmission line will be required to be borne by the BRO.

NTL shall apprise CEA of status every week."

- (r) Pursuant to the deliberations of the meeting dated 01.12.2021, the Petitioner engaged with CSIR-Roorkee to conduct the Geo-Technical Investigation. Geotechnical experts from CSIR CBRI visited the affected locations on 23.12.2021 to carry out investigations.
- (s) On 08.01.2022, heavy snowfall along with rain at the said location occurred. This led to further changes in the soil strata of the hill slope, as well as the adjoining areas. As a result of such changes in the soil strata, the stress on the tower increased considerably. The situation at said Tower had deteriorated considerably and could have resulted in the collapse of the said Tower. The Petitioner forthwith

- informed about this occurrence to the CEA, the NRPC and the Tehsildar District Rajouri.
- (t) The Petitioner, on 14.01.2022 through an email, requested NRPC for inclusion of approval of outage as an agenda item in the 191<sup>st</sup> meeting of OCC of NRPC. The Petitioner submitted the requirement of shutdown of the Transmission Line from 17.01.2022 to 29.01.2022 to carry out works resulting from force majeure conditions of unannounced and uninformed hill excavation done by BRO leading to landslide conditions. The works were to de-string and re-string at locations 285, 286, and 287 to bypass the said Tower along with dismantling of the said Tower.
- (u) The OCC, in its 191st meeting held on 18.01.2022, approved the shutdown of the element of the transmission line from 19.01.2022 to 31.01.2022.
- (v) Due to certain real time grid conditions faced during the approved period of shutdown, NRLDC ultimately granted the shutdown from 20.01.2022. The area encountered incessant rainfall again on 22.01.2022 and 23.01.2022. This led to additional time being required to restore the element in question. A daily report was, however, being submitted to NRLDC, updating the work progress at the impacted location. The Transmission Line was charged again after receipt of the required energisation clearance on 08.02.2022.
- (w) The Petitioner, on 17.02.2022, after narrating all the facts and circumstances that led to the outage, requested NRPC for certification of availability considering the outage (from 20.01.2022 to 08.02.2022 (both days included)) to be a combination of force majeure events not attributable to and/or controllable by the Petitioner.
- (x) The availability certificates for January and February 2022 were issued on 10.05.2022. It appears that the outage was not treated as an outage caused by a combination of force majeure events.
- (y) The Petitioner on 18.05.2022, disputing the certification of availability, requested that the matter be referred to the Chairperson, CEA, and for the issuance of a revised availability certificate.
- (z) The NRPC, vide letter dated 25.08.2022, intimated to the Petitioner, that the Chairperson, CEA, has upheld the NRPC's decision on availability, and therefore, the availability certificates will not be revised.

- (aa) The Petitioner filed a Writ Petition before the High Court of Jammu & Kashmir and Ladakh in May 2022, being WP(C)/0001153/2022. The said petition was heard on 27.05.2022, and the High Court was pleased to direct that expansion work by BRO will not be undertaken until the provisions of Regulation 63 of the CEA Safety Regulations, 2010, are complied with.
- (bb) A prayer for compensation, including such compensation on account of loss of availability, was originally made before the High Court of J&K. However, in view of the alternative remedy, the Petitioner filed a memo before the High Court stating that the said relief will not be pressed before the High Court.
- (cc) Therefore, the NRPC decision in the certificates dated 10.05.2022, as well as the CEA decision communicated vide letter dated 25.08.2022, deserve to be set aside on the grounds of being non-reasoned decisions.

# **Hearing dated 17.01.2023**

- 3. During the hearing on 17.01.2023, the Learned senior counsel appearing for the Petitioner submitted that the instant petition has been filed by the Petitioner as it is aggrieved by the availability certification given by NRPC for the months of January 2022 and February 2022, in respect of 400 kV D/C Twin Moose Sambha-Amargarh Transmission Line (transmission line) implemented by the Petitioner. He further submitted that the transmission line was successfully executed in the year 2018 and target availability was also achieved. The Petitioner requested the Commission to instruct NRPC for Certification of Availability considering the outage to be a force majeure event not attributable to the Petitioner as the Petitioner is required to show overall availability in a year of 98%, failing which it would be penalized. However, NRPC for the months of January 2022 and February 2022 showed availability of the Petitioner of 85% and 87%, respectively.
- 4. After hearing learned senior counsel for the Petitioner, the Commission admitted the petition and directed to implead all the beneficiaries, including BRO, as Respondents. The Commission further directed the Petitioner to file a revised 'Memo of Parties' and serve notice of the petition on all the Respondents along with documents by 10.2.2023. The Commission further directed the Petitioner to submit the required information on an affidavit by 10.2.2023 with an advance copy of the same to the Respondents, including:

- (i) Complete copy of TSA as page Nos. 160-168 are missing in the petition.
- (ii) Whether the Petitioner is governed by the 2019 Tariff Regulations or by its TSA? The relevant provision of TSA under which it is seeking the relief may be intimated.
- (iii) Whether the Petitioner raised any such prayers before any High Court and later withdrew the same?
- (iv) Has any case of similar nature of outage been earlier taken up by the RPC of any other licensee? If so, furnish details thereof.
- (v) What was the availability of the Petitioner excluding the disputed period in January, 2022 and February 2022?
- 5. The Commission further directed NRPC to submit its reply to the petition by 24.02.2023 with reasons for not considering the outage period of 20.1.2022 to 8.2.2022 in respect of 400 kV D/C Sambha-Amargarh transmission line under Force Majeure event.
- 6. The petitioner, in compliance with the RoP, has impleaded Border Road organization (BRO) and all the beneficiaries as parties to the petition. The Petitioner, accordingly, filed the amended memo of parties on 03.02.2023.

### Submissions of the petitioner

- 7. The petitioner, vide affidavit dated 10.02.2023, in compliance with the RoP, has submitted the complete copy of the TSA (including the missing pages from Pg. 160-168) and submitted as under:
  - (a) The issue concerns NRPC's non-implementation of Clause 5 (i) of Appendix II of the CERC Tariff Regulations, 2019, while certifying availability for January 2022 and February 2022.
  - (b) The subject and procedure for certification of availability are dealt with in detail in the CERC (Terms and Conditions of Tariff) Regulations, 2019, in Appendix II. Even the availability certificates issued by the NRPC state that they have been issued them under the CERC (Terms and Conditions of Tariff) Regulations, 2019, and are subject to clarification by this Commission. Therefore, there cannot be any dispute regarding the applicability of the Tariff Regulations 2019 to the instant case.

- (c) The TSA dated 02.01.2014 signed between the Petitioner as well as LTTCs and the TSA dated 22.12.2015 executed with CTU, incorporate by way of reference the Procedure for Calculation of Transmission System Availability Factor, notified by this Commission as part of the Tariff Regulations, from time to time. Therefore, so far as the scheme for certification of availability is concerned, there is complete reliance on the CERC Tariff Regulations in the TSAs also, and there is no conflict between the provisions of the TSAs and the Tariff Regulations on this score.
- (d) A prayer for compensation, including on account of loss of availability, was originally made before the High Court of Jammu & Kashmir. A memo was being filed before the High Court to the effect that the said relief would not be pressed before the High Court. Accordingly, on 14.10.2022, Petitioner has filed a memo seeking permission of the High Court to not press the prayer as follows:
  - "C. With further writ of Mandamus commanding the respondent nos.1-4 to pay a sum of Rs.21.61 Crores to petitioner towards the settlement of the claim submitted vide letter no. NRSSXXIX/2021-22/111 dated 24.03.2022 for damages/ rectification/ repair expenses incurred qua the Tower bearing Ino.286 situated at Manyal Gali, Tehsil Thana Mandi, District Rajouri which suffered damages due to the acts of commission and omission on the part of the respondents"
- (e) Further, it is stated that it is not within the knowledge of the Petitioner if any case of a similar nature of outage has been taken up by the RPC. The Petitioner is continuing its efforts to find out if any similar case has been taken up by the RPC. Further the petitioner has requested that since NRPC is before this Commission in the present proceedings, this Commission may consider putting this query to the said NRPC.
- (f) Further, it is stated that the Petitioner's availability, excluding the disputed periods in January 2022 and February 2022 was 99.8819% and 99.9219%, respectively.

#### Submissions by the Central Electricity Authority (CEA)

8. CEA, in its submission, vide letter dated 20.02.2023, has made the following observations:

- (a) BRO was widening the road from Bufihaz to Rajouri in the Jammu region of the UT of Jammu & Kashmir. The 400 kV D/C Twin Moose Sambha-Amargarh Transmission line of M/s Indigrid is passing through this area. The tower locations 282, 286 and 290 are very close to the road. The above road was built in the 1960s and its widening was essential for the movement of the defense forces and local people. The 400 kV D/C Twin Moose Sambha-Amargarh Transmission line was commissioned in September 2018.
- (b) Indigrid, vide its letter dated 9.10.2021 to BRO with a copy to Member (PS) CEA and CEI, informed about that the presence of transmission line towers in the vicinity of the new BRO project from Bufihaz to Rajouri. In response to the Indigrid letter, CEI, CEA, in light of clause 63(1) of CEA (Measures relating to safety & Electric Supply) Regulations 2010, had sent a letter dated 29.10.2021 to BRO and Indigrid advising them to plan a joint survey involving officials of BRO & Indigrid to resolve the matter so that road construction can be hassle-free and also ensure that the operation of transmission lines is safe.
- (c) Indigrid, vide its letter dated 22.10.2021, intimated CEA regarding damage to the revetment of the foundation of location no. 286 of 400 kV D/C Twin Moose Sambha-Amargarh Transmission line of Indigrid due to road widening work of BRO. It was highlighted by M/s Indigrid that tower locations (locations no., 282 and 290) are also critical as these tower locations are very near the road that BRO was planning to widen. In this regard, meetings were held by CEA on 2.11.2021 & 1.12.2021 with representatives of M/s Indigrid & BRO to discuss damage to towers of 400 kV D/C Twin Moose Sambha-Amargarh transmission line of M/s Indigrid due to road construction works.
- (d) As decided in the meeting held on 2.11.2021, a joint inspection of the sites of affected towers of 400 kV D/C Twin Moose Sambha-Amargarh Transmission line was conducted on 17.11.2021 by the team comprising officials from CEA, BRO and Indigrid. As per the observations of the team during the joint survey and discussions held during the meeting in the office of the Chief Engineer (PSETD), CEA, on 23.11.2021 with representatives of Indigrid, several measures were suggested to Indigrid, vide mail dated 24.11.2021.

- (e) Based on the meetings/discussions and site visits, various measures were suggested to M/s Indigrid to safeguard the line. Indigrid took necessary steps, such as constructing RCC wall, conductiong a geotechnical investigation, filling the cracks, etc., near tower locations no. 286 to safeguard the line.
- (f) Due to heavy rainfall, the safety of the tower was compromised at location no. 286. Indigrid bypassed/ dismantled tower no. 286, and the line was strung from tower no. 285 to 287. Tower no. 287 was strengthened to take care of design aspects due to the increase in span. For this purpose, shutdown w.e.f. 21.01.2022 was availed of, and both circuits of the aforementioned transmission line were taken into service on 8.02.2022.
- (g) Indigrid application dated 4.02.2022 received for electrical inspection and approval for charging was issued vide CEA letter dated 8.02.2022. Further, the Ministry of Power was updated from time to time vide CEA's letter dated 02.12.2021, 17.12.2021, 07.01.2022, 28.01.2022 & 09.02.2022.

## Submissions of the petitioner

- 9. The petitioner vide affidavit dated 23.03.2023 has submitted as follows:
  - (a) The 1.5-day shifting schedule had a cascading impact on work progress at the location, as the area encountered incessant rainfall and snowfall on 22.01.2022 and 23.01.2022. Considerable time was also lost on other days because of the inclement weather conditions. The activity was planned based on the weather forecast for the area, and the impact on the initial projected schedule resulted in an adverse impact on work progress.
  - (b) The inspection was carried out by RIO, North on 06.02.2022, and the Inspection Report was provided by RIO, North on 07.02.2022. Post complying with the observations made by RIO North, the Petitioner submitted a Compliance Report on 08.02.2022. The delay in compliance was due to the non-availability of approval for shutdown by NRLDC of the section, which was backcharged from Amargarh S/s to Tower Loc.#290 of the subject Transmission Line. A shutdown was required to carry out the conductor continuity test as desired by RIO, North. The Petitioner applied for the shutdown of the jumper connection at Loc.#290 but was denied the shutdown due to real-time grid conditions.

(c) Post completion of the conductor continuity test on 08.02.2022 and receipt of the final Re-energization approval from RIO-North, both circuits of the subject Transmission Line were charged on 08.02.2022.

#### **Hearing dated 28.03.2023:**

- 10. Learned counsel appearing on behalf of BRO sought one week's time to file a reply in the matter. The Commission acceded to BRO's request.
- 11. The Commission directed NRPC to submit reasons for not considering the outage period from 20.1.2022 to 8.2.2022 in respect of 400 kV D/C Sambha-Amargarh transmission line under force majeure events for calculating the availability factor.

# **Reply of NRPC:**

- 12.NRPC, in its reply filed vide letter dated 14.02.2023 to Secretary, CERC submitted as follows
  - (a) The matter came to the light of NRPC Sectt. in the 191<sup>st</sup> OCC meeting held on 18.01.2022 for the outage of lines for bypassing tower no. 286 from 19.01.2022 to 31.01.2022. Member Secretary, NRPC requested NTL to explore the possibility of ERS as the line is an in-feed link to the state of J&K. However, NTL expressed the non-feasibility of ERS.
  - (b) In the OCC meeting, the shutdown of 400 kV D/C Sambha-Amargarh Ckt-1&2 was approved from 19.01.2022 to 31.01.2022. In the same meeting, NTL was informed that deemed availability will be scrutinized separately, and a decision will be taken accordingly.
  - (c) NTL, vide letter dated 17.02.2022, requested that the total outage from 20.01.2022 to 08.02.2022 for bypassing and dismantling Loc #286 and restringing section between Loc #285 and tower Loc #287 (connecting two towers) be considered as a Force Majeure event and deemed availability may be granted for same.
  - (d) NTL claimed that BRO had carried out uninformed construction work en route to the subject transmission line, resulting in substantial damage to the hill slope as

well as Loc# 286, considering the same NTL had requested to consider this as a force majeure event.

(e) Reason for non-consideration of outage period of 20.01.2022 to 08.02.2022 in respect of 400 kV D/C Sambha-Amargarh transmission line under force majeure event:

The case of availability was processed by NRPC Sectt. in the month of May 2022, and certificates for January 2022 and February 2022 months were issued on 10.05.2022. However, before arriving at a decision, there were the following developments:

- (i) The issue originally started in August 2021. Subsequently, a joint survey was conducted on 17<sup>th</sup> November, 2021 by CEA, NTL, and BRO. However, the signed joint survey report was not issued till May 2022. In the absence of survey report, details like the cause of the incident and the distance of the impugned tower from BRO's excavation works were not available. Therefore, the case was scrutinised based on documents provided by M/s NTL.
- (ii) The Scientists of CSIR-CBRI Roorkee, who inspected the site on 23.12.2021 to assess the possible reasons for the crack development and distress in the transmission tower, vide their Report, under the 'probable causes' section has mentioned that:

"This section provides a brief insight of the probable causes of distress in the structure. It is to be stated here that the reasons mentioned here are from the observations in the field. The probable causes for the distress needs to be established through scientific/elaborate investigation. As discussed in the previous section, the distress in transmission tower (286/0) is possibly be due to the continuous removal of material from the bottom portion of the slope. This has initiated stress variation within the slope which causes strength reduction. As informed by the residents, the cracks started appearing during the excavation process."

The inspection report has concluded that:

"The observed distress at transmission tower (286/0) showed the need for proper assessment i.e. geological, geotechnical conditions of the slope and slope stability analysis to ensure the influence of excavation at the bottom portion of the slope. Similarly, the foundation design details, structural load and other technical details also essential which additionally contribute in assessing the stability of the tower system. A detailed investigation and analysis will help in designing suitable control measures for ensuring the stability of the slope and to ensure the safety of the structure and the slope in long term."

- (iii) CSIR-CBRI highlighted that the probable cause of the distress in the transmission tower (286/0) is the continuous removal of material from the bottom of the slope. The report's findings are mainly based on the inputs given by local inhabitants, and IndiGrid Officials and Scientists have also expressed the need for scientific/ elaborate investigation. There is no documented incidence of natural calamity at the site. The report nowhere mentioned natural calamity as the cause.
- (iv) NRPC Sectt. did not find that the incident was due to natural calamity. Therefore, it was decided not to consider natural calamity as defined in regulation 3(25) of CERC (Terms and Conditions of Tariff) Regulation, 2019. The matter was felt to be a bilateral issue between BRO and NTL.
- (f) M/s NTL vide letter dated 18.05.2022 referred the case for consideration of Chairperson, CEA. The matter was referred to Chairperson CEA (I/C), and a meeting was held by him on 16.06.2022. In the meeting Joint Inspection (held on 17.11.2022) Report (not signed by BRO and NTL) was shown by PSETD di. CEA, and it is inferred that the CEA inspection report has photographs of later times, which may not be useful in this case as preventive action has already been started by NTL. Therefore, NTL was asked to share photographs of regular inspections carried out in the month of Aug 2021 as well as Sept. 2021 with NRPC.
- (g) NTL was required to submit photographs of regular inspections carried out. However, the same was received by NRPC Sectt. through mail on 26.07.2022 and 01.08.2022 after repeated requests and directions.
- (h) NRPC Sectt. put in a lot of effort in analysing the cause of the incident, and after scrutiny, it was found that photographs of May, June, and July have no sign of a crack in the revetment wall of the impugned tower no. #286. It was also found that tower no# 286 has bracket bends recorded in the patrolling report of month of Jan and Feb' 21. Thus, on one side, there was no crack before August 21, but on the other side, there were some bends in the tower before August 21. However, a concrete inference could not be drawn based on photographs that the tower was under stress due to natural calamity.

- (i) The licensee is required to carry out regular inspections and maintenance of the line, so such damage to the tower could have come to their notice at the initial stage itself, and the situation might not have deteriorated.
- (j) On one hand, M/s NTL had applied for certification of deemed availability in NRPC for outage period 20.01.22 to 08.02.22 on 17.02.22 and, on the other hand, side by side, M/s NTL vide letter dtd. 26.06.2022 had taken the matter with BRO for claiming its loss of RS. 21.61 Crore from BRO on account of shutdown/ tower failure/ related matter. The NTL claim was refuted by BRO by claiming that they have done construction within RoW. Thereafter, NTL, vide letter dated. 06.04.2022 requested Chief Electrical Inspector, CEA, for intervention in the matter for settlement of Rs. 21.61 Crore, which NTL claimed from BRO.
- (k) The above correspondences prima-facie establish that NTL was in double mind regarding its claim of deemed availability in NRPC since even before NRPC could refuse them in May 2022, they were initially approaching BRO to claim Rs. 21.61 Crore (for non-availability of line). Thereafter, they approached CEI and CEA, but when they faced failure in their attempts on the BRO front, M/s NTL again approached NRPC requesting to refer the matter to the Chairperson, CEA, for certification of deemed availability.
- (I) Thereafter, in the absence of evidence of natural calamity, the matter was referred again to the Chairperson, CEA, along with the brief of the issue. After the Chairperson, CEA, approved the matter, NTL was informed vide letter dated 25.08.2022 that the request for deemed availability had not been considered.

#### Rejoinder of the Petitioner

- 13. The petitioner, in their rejoinder vide affidavit dated 12.06.2023, has submitted as follows:
  - (a) It is not the Petitioner's case that the reason for the outage was a natural calamity. The Petitioner has stated in clear terms that the reason for the outage was the removal of Location No. 286 ("Impacted Location"), which was adversely impacted by the unauthorised and illegal excavation work undertaken by Respondent No. 3, without following the procedure laid down in the CEA Safety Regulations, 2010.

- (b)The unauthorized and illegal activities of Respondent No. 3 (BRO), which resulted in destabilizing the soil strata of the entire hill, were beyond the control of Petitioner, especially since Respondent No. 3 started its excavation without any intimation to or permission from Petitioner. It is principally on these facts, coupled with further deterioration of the tower location, owing to rainfall/snowfall (over which the Petitioner again did not have any control), that the Petitioner had to resort to dismantling the Impacted Location and re-stringing the line from Tower No. 285 to Tower No. 287. This is the claim for the occurrence of a force majeure condition.
- (c)Respondent No. 1 misconstrued Regulation 3(25) of the CERC Tariff Regulations, 2019, and rejected the Petitioner's claim of deemed availability by solely holding that the tower failure is not due to natural calamity. Clause 5/ Appendix II of the CERC Tariff Regulations, 2019 provides that the outage period of a transmission element shall be excluded from the total time of the element under the period of consideration, inter alia, if the outage of the element is due to acts of God (natural calamity) and force majeure events beyond the control of the transmission licensee. However, whether the same outage is due to force majeure (not design failure) or not will be verified by the Member Secretary, RPC. A reasonable restoration time for the element shall be considered by the Member Secretary, RPC, and any additional time taken by the transmission licensee for restoration of the element beyond the reasonable time shall be treated as outage time attributable to the transmission licensee. Member Secretary, RPC may consult the transmission licensee or any expert for an estimation of the reasonable restoration time.
- (d)Petitioner's case does establish force majeure conditions, which resulted in the outage and the extended restoration time. Force majeure is not and cannot be restricted only to "natural calamities," as Respondent no 1 is attempting to demonstrate.
- (e)The attempt to restrict force majeure conditions only to a case of natural calamity would go against the intention and purpose of the Regulations. If the arguments of Respondent No. 1 were to be accepted, the Petitioner would have been entitled to relief if it had waited for the tower to collapse during rainfall/ snowfall but would

not be entitled to relief because it took proactive corrective measures. This can never be the intent of the Regulations.

#### Reply of BRO

- 14. The respondent, BRO, in its reply vide affidavit dated 05.08.2023, has mainly submitted as under:
  - (a) The petitioner has already approached the High Court of Jammu and Kashmir and raised this issue in W.P.(C) No. 1153/2022. Further, the petitioner has also filed a contempt petition [CCP(S) No. 354/2022] in the writ petition. Accordingly, the present petition is liable to be dismissed at the outset as it clearly violates the principles of res-judicata.
  - (b) The Petitioner NTS had requested a No-Objection Certificate for the construction of the transmission line only for Vertical Clearance. Accordingly, NOC was given vide letter dated 16.07.2018 (letter no. 2086/OFC/78/E2) only for the vertical clearance of more than 10.50 meters for the power line crossing over the BRO roads, and no horizontal clearance was given by 79 RCC (GREF).
  - (c) The road Rajouri-Thanamandi-Surankote, which has a length of 56.915 Kms, was originally constructed by Military Engineering Service ["MES"] 1960. The project was handed over to BRO in 1971.
  - (d) In response to the letter issued by the Petitioner, the Answering Respondent vide letter dated 24.08.2021 informed Indigrid that the Rajouri-Thanamandi-Surankote road had been constructed prior to 1960. The road existed on the ground prior to the establishment of the HT line only. Presently, the road is being upgraded to a Double lane along the existing alignment only from Rajouri to Buffliaz via Thanamandi. BRG had already written a letter to the Power Distribution Department (PDD) Rajouri and Poonch dated 13 Sep 2018 with a request to make available all estimates for shifting of electrical utilities, including HT lines/towers, if any.
  - (e) Thereafter, BRO issued letters dated 13.09.2018 to the Power Distribution Department [the "PDD"] Rajouri and Pooch and requested them to provide information and estimates with respect to shifting of electrical utilities including HT

lines/ towers, if any. Subsequently, joint visits were conducted along with officers of PDD on 30.09.2018 (Rajouri to DKG), 05.09.2019 (DKG to Surankote), and 13/14.02.2019 (Surankote Bypass).

- (f) The road expansion work near tower no. 286 commenced on 20.09.2021 at a distance of 27.600 KM. The contractor intimated to Indi-grid of the development of cracks at the rear side of the tower structure, vide email dated 07.10.2021. No road construction activity was done by BRO before 5 days and after 5 days of intimation regarding the development of cracks given by DC(I)PL to Indi-grid/NRSS XXIX Transmission Ltd.
- (g) Subsequently, Indi-grid held the Answering Respondent responsible for the cracks in the tower and raised a claim for reimbursement for an amount of Rs. 21.16 crore. However, it is submitted that the claim raised by the Petitioner is not maintainable because it is in clear violation of the Ribbon Development Act SVT 2007, as per which no construction is permitted within 50 Ft. from the center line of the road. The following are the requirements that were required to be duly complied with before the installation:
  - i. It is to be confirmed if any soil investigation/Geo-investigation was conducted at this location, followed by a preliminary survey by Indi-grid before laying the TL.
  - ii. If the Geo-investigation was carried out, the design of the foundation as per the Geo-investigation report and actual work executed by Indigrid for making a foundation of TL tower in such loose soil and slope hill face is to be checked.
  - iii. Whether any strong foundation, such as a piling method in this slope hill face, was adopted since this area was already affected by a heavy landslide in 2014 and also considering the future development of the road.
- (h) The Indigrid has not complied with the Ribbon Development Act SVT 2007, and the tower was required to be removed as it has been installed on a weak and unstable foundation located on a slip plane.
- (i) An earthquake of 4.3 magnitudes hit near Rajouri in Jammu and Kashmir during the operation of widening the road. Further, there were several occasions of

rainfall that drastically affected the soil's moisture levels, affecting the soil's strength to hold a heavy structure for a long time. These factors have to be taken into consideration as such a phenomenon has a severe effect on soil and constructions of such area, especially when such a construction is made on a slip plane/downhill creep.

- (j) In a letter dated 08.10.2021, BRO replied to the Petitioner stating that Rajouri— Thanamandi—Surankote is being upgraded to a double lane along with the existing alignment. It is also pertinent to note that proper distance was maintained, clearances were given, and specifications were made in terms of clause 5.1 of the IRC (Indian Road Congress).
- (k) As per the manual on construction of and operation practices of EHV substations and lines and commercial and load dispatches operation Vol-II, Page No. 27, the minimum distance from the centre of the nearest tower to the road edge should be 1.5 times the tower height to have sufficient tower falling distance. Accordingly, the clearance given by the BRO was only for vertical clearance.
- (I) At some places, transmission towers have been established just 5 metres from the road's RoW, whereas the RoW mentioned in the guidelines by the Ministry of Power is 46 metres for a 400 KV D/C line.
- (m) HQ 31 BRTF informed HQ 58 RCC, vide letter dated 13.04.2022, that the reimbursement claim is not acceptable.

While the proceedings are pending, the BRO had instructed the contractor to stop the work at the location and has complied with the regulations. **Submissions of Petitioner** 

- 15. The petitioner, vide affidavit dated 22.09.2023, in its rejoinder to the reply of BRO, has mainly submitted as under:
  - (a) In the present case, the Petitioner, well before the start of work by BRO in the vicinity of tower 286, had put BRO to notice regarding the procedure to be followed as per regulation 63 of the CEA Safety Regulations, 2010, on 10.08.2021 while for another section of the road expansion, i.e., the Akhnoor-Poonch section, the BRO initiated the process under regulation 63 of the Safety regulations; for the

- Buflihaz-Rajouri stretch (vicinity of tower 286), the same BRO chose to give a complete go bye to the provisions of the CEA Safety Regulations 2010.
- (b) The Petitioner states that tower no. 286 was erected at an appropriate and satisfactory distance from the centre of the then existing road. The distance between the edge of the road to the centre of the tower before excavation work was 62.5 meters. No objection to the erection of the tower in terms of horizontal distance has ever been taken by the BRO prior to the filing of the present reply. This in itself is sufficient to show that there has been no non-compliance by the Petitioner in terms of horizontal distance while erecting the tower.
- (c) Further, as per standard 5.2 of the IRC 32:1969 (the standard being relied upon by BRO itself), horizontal clearance is not applicable in hilly terrain. It is for this reason that the original NOC issued to the Petitioner by BRO only refers to a vertical clearance.
- (d) The reliance on the provisions of the Prevention of Ribbon Development Act, 2007, is misplaced, inasmuch as the same does not apply to roads controlled by the Central Government. Further, a transmission tower does not fall within the definition of a 'building' under the said act.
- (e) The tower was erected in complete compliance with I.S. 5613 issued by the Bureau of Indian Standards.
- (f) In the event that any utility is to be shifted for procuring Right of Way for BRO, then the same is required to be identified in the DPR [clause 3.16(a) and (b); clause 7.1]. BRO has failed to produce any documents to show that an adequate survey was done by BRO or its consultants regarding the Right of Way where Petitioner's tower was falling.
- (g) In this regard, as per the Works Manual for EPC, BRO can only release payment to its DPR consultant on completion of certain milestones [Clause 3.14]. This schedule of payment provides that 2.5% of the payment will be released on "Submission of all utilities shifting proposals to user agencies and submission of utility relocation plan to Executing Authority." Had BRO or its DPR consultant followed the above guidelines, then the existence of the Petitioner's tower would have been identified by BRO, and steps would have been taken to shift the tower.

- BRO has not provided any evidence to support the fact that it had conducted a thorough survey at the time of preparation of the DPR.
- (h) The Petitioner had carried out a thorough survey of the region before the placement of the tower at this location. As a regular practice the transmission lines are constructed after carrying out a detailed survey and check survey before placement of the Transmission Line. No abnormality was seen during the survey process at this location, and the site conditions were conducive to the erection of the tower. The design of the tower foundation, as well as the actual work for the tower foundation, was carried out in accordance with prudent utility practices. Also, as can be seen from the past periodic patrolling reports for this tower and the associated spans, no such impact on the hill slope/tower location was observed in the past 2 years of its operation since September 2019.

# Hearing dated 06.12.2023

- 16. The commission, after hearing the parties, had some queries for the petitioner. In response to a query regarding the basis on which the condonation of the outage is sought and whether the same was condoned by NRPC and CEA, the learned senior counsel submitted that the approval of the outage is sought under Regulation 5 (Appendix-II) of the 2019-24 Tariff Regulations which was approved in the 191st OCC meeting. The shutdown was not condoned by both NRPC and CEA, and the availability remained below the benchmark.
- 17. Further, in response to another query of the Commission on whether the Petitioner has raised the same issue in the petition filed before the High Court and the amount involved therein because of the shortfall in deemed availability, the learned senior counsel submitted that the issue has since been withdrawn and that the amount involved due to availability shortfall is Rs.20 crore.
- 18. Further, the counsel for BRO submitted that the arguments from their side may be deferred to another day due to some personal difficulty on the part of the counsel. The Commission gave one last opportunity to the BRO to submit their arguments.
- 19. The Commission also directed the Petitioner to furnish on affidavit the report of soil investigation/ geo investigation of the site done at the time of installation of tower no. 286 by 22.12.2023 with a copy to the Respondents.

20. Petitioner did not file any soil investigation/geo investigation report of the impugned tower site.

#### **Hearing dated 08.12.2023**

- 21.BRO submitted that no oral submissions have to be made on behalf of BRO, and their replies/written submissions made in this regard may be taken on record.
- 22. Further, the counsel for the Petitioner submitted that they have no money claim against BRO in the instant petition and only want to highlight that BRO should have followed the set protocol before carrying out excavation around the site, i.e., tower no. 286. The Order was reserved.

# **Analysis and decision**

- 23. Petitioner, NRSS XXIX Transmission Limited (NTL), has constructed a Sambha-Amargarh 400 kV D/C line routed through Akhnoor/ Rajouri (hereinafter referred to as "Transmission Line"). Petitioner has submitted that the downhill slope of tower no 286 and the revetment wall of tower no. 286 of Sambha Amargarh 400 kV D/C transmission line developed cracks due to massive excavation work by BRO in the downhill section, resulting in downhill movement of the land mass near the said tower (Tower No. 286). The 400 kV Sambha-Amargarh D/C Transmission Line was shut down from 20.01.2022 to 08.02.2022 for works related to de-string and re-string at locations 285, 286 and 287 to bypass the impugned tower 286 where damage/ cracks in the land and stress in the tower had been spotted. Petitioner requested NRPC for grant of deemed availability for the period 20.01.2022 to 08.02.2022, during which transmission line was under shutdown for work related to bypassing tower no. 286 by considering the excavation work by BRO as a force majeure event under Clause 5/Appendix II and Regulation 3 (25) of the 2019 Tariff Regulations, which was denied by NRPC.
- 24. Respondent NRPC has submitted that as per documents submitted by the petitioner, NRPC found that there were bracket bends in the impugned tower in patrolling photographs of the months of January 2021 and February 2021 and also found no sign of a crack in the revetment wall of tower no. 286 based on the photograph of the months of May, June and July 2021. Thus, on the one hand, there was no crack before August 2021, on the other hand, there were some bends in the no. 286 before August 2021. However, a concrete inference could not be drawn that the tower was under stress due to natural calamity, and it was felt that it was a bilateral issue

between BRO and NTL. The matter was also referred to the Chairperson, CEA, at the request of the Petitioner. However, the request for deemed availability was not considered by the CEA.

- 25. Petitioner, aggrieved by NRPC's denial of deemed availability, has prayed that the outage period of the transmission line from 20.01.2022 to 08.02.2022 was beyond the Petitioner's control. Therefore NRPC may be directed to certify the Petitioner's availability for the period between 20.01.2022 and 08.02.2022 after excluding the time of outage.
- 26. We have considered the submissions of the Petitioner and the Respondents and perused the records. The issue that arises for our consideration is "Whether the outage from 20.01.2022 to 08.02.2022 can be excluded from the total time considered for calculating availability considering it as an outage due to a Force Majeure event"
- 27. The TSA dated 02.01.2014 entered into by Petitioner provides the calculation of the availability of the project as follows:

#### **ARTICLE: 8**

#### 8 AVAILABILITY OF THE PROJECT

#### 8.1 Calculation of Availability of the Project:

Calculation of Availability for the Elements and for the Project, as the case may be, shall be as per Appendix IV of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, as applicable seven (7) days prior to the Bid Deadline and as appended in Schedule 9

#### 8.2 Target Availability:

The Target Availability of the Project shall be 98%.

#### "Schedule: 9

Appendix IV of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009

. . . . .

**6.** Outage time of transmission elements for the following contingencies shall be excluded from the total time of the element under period of consideration.



- i) Outage of elements due to acts of God and force majeure events beyond the control of the transmission licensee. However, onus of satisfying the Member Secretary, RPC that element outage was due to aforesaid events and not due to design failure shall rest with the transmission licensee. A reasonable restoration time for the element shall be considered by Member Secretary, RPC and any additional time taken by the transmission licensee for restoration of the element beyond the reasonable time shall be treated as outage time attributable to the transmission licensee. Member Secretary, RPC may consult the transmission licensee or any expert for estimation of reasonable restoration time. Circuits restored through ERS (Emergency Restoration System) shall be considered as available.
- ii) Outage caused by grid incident/disturbance not attributable to the transmission licensee, e.g. faults in substation or bays owned by other agency causing outage of the transmission licensee's elements, and tripping of lines, ICTs, HVDC, etc. due to grid disturbance. However, if the element is not restored on receipt of direction from RLDC while normalizing the system following grid incident/disturbance within reasonable time, the element will be considered not available for the period of outage after issuance of RLDC's direction for restoration."

As per the above, outage of transmission elements due to acts of God and force majeure events beyond the control of the transmission licensee are to be excluded from the total time of the element under the period of consideration. However, the onus of satisfying the Member Secretary, RPC, that the element outage was due to aforesaid events and not due to design failure rests with the transmission licensee.

We observe that NRPC has referred to provisions of the 2019 Tariff Regulations while calculating availability. Appendix II of the 2019 Tariff Regulations provides as under:

"For the following contingencies, outage period of transmission elements, as certified by the Member Secretary, RPC, shall be excluded from the total time of the element under period of consideration for the following contingencies:

- i) Outage of elements due to acts of God and force majeure events beyond the control of the transmission licensee. However, whether the same outage is due to force majeure (not design failure) will be verified by the Member Secretary, RPC. A reasonable restoration time for the element shall be considered by Member Secretary, RPC and any additional time taken by the transmission licensee for restoration of the element beyond the reasonable time shall be treated as outage time attributable to the transmission licensee. Member Secretary, RPC may consult the transmission licensee or any expert for estimation of reasonable restoration time. Circuits restored through ERS (Emergency Restoration System) shall be considered as available:
- ii) Outage caused by grid incident/disturbance not attributable to the transmission licensee, e.g. faults in substation or bays owned by other agency causing outage of the transmission licensee's elements, and tripping of lines, ICTs, HVDC, etc. due to grid disturbance. However, if the element is not restored on receipt of direction from RLDC while normalizing the system following grid incident/disturbance within reasonable time, the element will be considered not available for the period of outage after issuance of RLDC's direction for restoration;

Provided that in case of any disagreement with the transmission licensee regarding reason for outage, same may be referred to Chairperson, CEA within 30 days. The above need to be resolved within two months:"

As per the above, the outage of transmission elements due to acts of God and force majeure events beyond the control of the transmission licensee are to be excluded from the total time of the element under the period of consideration, and this is to be certified by the Member Secretary, RPC.

We observe that the methodology for calculating transmission system availability under the 2019 Tariff Regulations has similar provisions as in TSA regarding certification of outages of transmission elements due to acts of God and force majeure events beyond the control of the transmission licensee.

28. Petitioner has claimed that it was under outage due to a force majeure event and qualified to be considered for excluding such period from the calculation of availability. Let us peruse the Force Majeure clause as per TSA quoted as follows:

#### "11.3 Force Majeure

A 'Force Majeure' means any event or circumstance or combination of events-and-circumstances including those-stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:

- 11.4.1 Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:
  - (a) Unavailability, late delivery, or changes in cost of the machinery, equipment, materials, spare parts etc. for the Project;
  - (b) Delay in the performance of any Contractors or their agents;
  - (c) Non-performance resulting from normal wear and tear typically experienced in transmission materials and equipment;
  - (d) Strikes or labour disturbance at the facilities of the Affected Party;
  - (e) Insufficiency of finances or funds or the Agreement becoming onerous to perform; and
  - (f) Non-performance caused by, or connected with, the Affected Party's:
    - i. negligent or intentional acts, errors or omissions;
    - ii. failure to comply with an Indian Law; or
    - iii. breach of, or default under this Agreement or any Project Documents.

#### 11.5. Notification of Force Majeure Event



11.5.1 The Affected Party shall give notice to the other Party of any event of Force Majeure as soon as reasonably practicable, but not later than seven (7) days after the date on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. If an event of Force Majeure results in a breakdown of communications rendering it unreasonable to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably practicable after reinstatement of communications, but not later than one (1) day after such reinstatement.

Provided that such notice shall be a pre-condition to the Affected Party's entitlement to claim relief under this Agreement. Such notice shall include full particulars of the event of Force Majeure, its effects on the. Party claiming relief and the remedial measures proposed. The Affected Party shall give the other Party regular reports on the progress of those remedial measures and such other information as the other Party may reasonably request about the Force Majeure."

As per the above, force majeure is any event or circumstance or combination of events/circumstances not within the reasonable control of the affected party that, directly or indirectly, prevented the discharge of obligations under TSA, subject to the condition that these events could not have been avoided even if the affected party had adopted prudent practices. Further, the affected party is mandated to give notice within 7 days of the occurrence of the alleged Force majeure event. We observe that though the Petitioner is claiming availability under a force majeure event, it has not served any notice in this regard to LTTCs, which is a mandatory requirement to claim any event as a force majeure event.

- 29. The moot question that arises in this petition is whether events/ circumstances that resulted in the development of damage/cracks in the hill section and stress in the impugned tower no. 286 were due to force majeure events beyond the control of the Petitioner. These events/ circumstances are discussed as under:
  - (i) In August 2021, Petitioner, during routine ground patrolling, noticed development works of a new BRO road project (expansion of the Rajouri -Thanamandi Surankot Road) in close proximity to Tower No. 286/0. The cracks in the rear side of impugned tower no. 286/0 was first noticed and conveyed by the BRO's contractor vide letter dated 07.10.2021.
  - (ii) As per the Preliminary Inspection Report of Tower 286/0 of Samba-Amargarh Transmission by CSIR-CBRI, the Scientists visited the site on 23.12.2021 to assess the possible reasons for the development of cracks and distress in the transmission tower. The report concluded that there is a need for proper assessment, i.e. geological and geotechnical conditions of the slope and slope

stability analysis to ascertain the influence of excavation at the bottom portion of the slope.

- (iii) BRO has submitted that soil investigation/ geo-investigation report needs to be studied so as to see if the design of the tower's foundation in such a loose and slope hill face was as per the geo-investigation report. BRO has also stated that the tower is required to be removed as it has been installed on a weak and unstable foundation located on a slip plane.
- (iv) Petitioner vide RoP dated 06.12.2023 was directed to furnish a report of the soil investigation/ geo-investigation of the site done at the time of installation of impugned tower no. 286/0. However, the Petitioner has not filed any report in this regard.
- (v) NRPC vide letter dated 14.02.2023 clarified the reasons for not considering the request of the petitioner for deemed availability. The relevant extracts are as under:

"……

- (i) It is noted that CSIR-CBRI Roorkee's inspection report has highlighted that probable cause of the distress in transmission tower (286/0) is continuous removal of material from bottom of slope. Reports findings are mainly based on the inputs given by local inhabitants and IndiGrid Officials and Scientists have expressed the need for scientific/ elaborate investigation. There is no documented incidence of natural calamity at the site. The report nowhere mentioned natural calamity as cause.
- (ii) In view of above NRPC did not found that incident was due to natural calamity. Therefore, it was decided not to consider natural calamity as defined in regulation 3(25) of CERC (Terms and Conditions of Tariff) Regulation, 2019. The matter was felt bilateral issue between BRO and NTL.

. . . .

- i. Further, the photographs and patrolling report were received from NTL vide e-mail dated 26.07.2022 and 01.08.2022. NRPC Sectt. put a lot of effort in analysing the cause of the incident and after scrutiny, it was found that photographs of May, June and & July 2021 have no sign of crack in the revetment wall of the impugned tower no. #286. Further, it was found that tower #286 has bracket bends recorded in the patrolling report of the month of Jan and Feb 2021. Thus, on one hand there was no crack before Aug 2021 but there was some bends in tower before August' 2021. However, concrete inference could not be drawn based on photographs that tower was in stress due to natural calamity.
- j. It is emphasized that licensee is required to carry out regular inspection and maintenance of the line wherein such damage to the tower could have been come their notice at the initial stage itself and situation might not have been deteriorated."

- 30. From the above paragraph, we observe that while the Petitioner is claiming that the cracks are attributable to the actions of BRO, BRO is suggesting that a geo-investigation report needs to be taken from the Petitioner and studied to see if the design of the foundation of the tower was in accordance with the conditions of the soil. Further, BRO has claimed that the tower is located on a slip plane. Petitioner has not submitted the soil investigation report to the Commission despite seeking it in the ROP. Scientists, in their report, as referred to in the above paragraph, have also not been able to conclude on the reasons for cracks and suggested that a detailed investigation needs to be carried out to arrive at a conclusive finding. Further, we observe that NRPC did not find that the incident was due to natural calamity. Therefore, NRPC decided not to consider the case of the Petitioner for excluding such a period while calculating the availability. NRPC also felt that the matter was a bilateral issue between BRO and NTL. We also observe that it was BRO's contractor who informed the Petitioner about the cracks in October 2021, and the Petitioner did not notice the cracks during patrolling.
- 31. In light of all these observations, it cannot be concluded whether the Petitioner carried out an appropriate soil investigation or not before installing the tower. We further observe that the Petitioner, vide its letter dated 10.08.2021 to BRO, had informed that the road widening project had been initiated without obtaining necessary sanctions and clearances, which shows that the petitioner knew as early as in August 2021 that BRO was doing excavation work near the said tower. Therefore, the petitioner should have taken prudent action to avoid deterioration of the site, even if it claims that stress was due to the action of BRO. We also take note of NRPC submissions that after scrutinizing the patrolling photographs of January 2021 and February 2021, it was found that there were bracket bends in the tower no 286, indicating that the tower was under stress even prior to excavation work by BRO at the impugned site. Considering these observations, we are of the view that the outage of the transmission line during January/February 2022 cannot be attributed to a force majeure event. In our view, it could have been avoided if prudent practices had been adopted by the petitioner, as noted by NRPC. Hence, we uphold the decision of NRPC for not considering the request of the petitioner for deemed availability during the outage period from 20.01.2022 to 08.02.2022.
- 32. In view of the above discussions, all the prayers of the Petitioner are rejected.

33. The Petition no. 318/MP/2022 is disposed of in terms of the above.

Sd/ Sd/ Sd/ (P. K. Singh) (Arun Goyal) (Jishnu Barua) Member Member Chairperson