CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 514/MP/2020

Coram:

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

Date of Order: 11th August, 2022

In the matter of

Petition under Section 63 and Section 79(1)(c) and Section 79(1)(f) of the Electricity Act, 2003 seeking reliefs due to occurrence of certain Force Majeure and Change in Law events under the Transmission Service Agreement dated 6.8.2009.

And

In the matter of

East-North Interconnection Company Limited,

F-1, The Mira Corporate Suites, Ishwar Nagar, Okhla Crossing, Mathura Road, New Delhi-110 065.

... Petitioner

Vs

1. Jodhpur Vidyut Vitran Nigam Limited,

New Power House, Industrial Area, Jodhpur – 342 003.

2. Jaipur Vidyut Vitran Nigam Limited,

Vidyut Bhawan, Janpath, Jaipur – 302 005.

3. Ajmer Vidyut Vitran Nigam Limited,

Old Power House, Hathi Bhatta, Jaipur Road, Ajmer.

4. BSES Yamuna Power Limited,

Shakti Kiran Building, Karkardooma, New Delhi – 110 092

5. BSES Rajdhani Power Limited,

BSES Bhawan, Nehru Place, New Delhi – 110 019.

6. North Delhi Power Limited,

(Now known as Tata Power Delhi Distribution Limited) Sub Station Building, Hudson Lines, Kingsway Camp, New Delhi-110 009.

7. New Delhi Municipal Corporation,

Palika Kendra Building, Opp. Jantar Mantar Building, Parliament Street, New Delhi -110 001

8. Uttarakhand Power Corporation Limited,

Urja Bhawan, Kanwali Road, Dehradun, 248 001.

9. Paschimanchal Vidyut Vitran Nigam Limited,

Victoria Park, Meerut – 250 001.

10. Poorvanchal Vidyut Vitran Nigam Limited,

Hydel Colony, Bhikharipur, Post: DLW, Varanasi- 221 004.

11. Dakshinanchal Vidyut Vitran Nigam Limited,

220 kV Vidyut Sub-Station, Mathura Agra by pass road, Sikandra, Agra-282 007.

12. Madhyanchal Vidyut Vitran Nigam Limited,

4-A, Gokhle Marg, Lucknow-226 001.

13. Uttar Haryana Bijli Vitran Nigam Limited,

Vidyut Sadan, Plot No. 16-C, Sector-6, Panchkula- 134 109.

14. Dakshin Haryana Bijli Nigam Limited,

Vidyut Sadan, Vidyut Nagar, Hissar-125 005.

15. Punjab State Electricity Board,

The Mall, Patiala-147 001.

16. Power Development Department,

Mini Secretariat, Jammu, Jammu& Kashmir-180 001.

17. Himachal Pradesh State Electricity Board,

Vidyut Bhawan, Shimla-171 004.

18. North Central Railway,

Subedarganj, Allahabad- 211 033.

19. UT Chandigarh,

Chandigarh Administration, Sector-9, Chandigarh.

...Respondents

The following were present:

Shri Jafar Alam, Advocate, ENICL Ms. Harneet Kaur, Advocate, ENICL Shri Ashwin Ramanathan, Advocate, ENICL Shri Balaji Sivan, ENICL Ms. Anisha Chopra, ENICL

ORDER

The Petitioner, East North Interconnection Company Limited ('ENICL'), has filed the present Petition under Section 63 and Section 79 (1)(c) and (f) of the Electricity Act, 2003 (hereinafter referred to as "the Act") seeking reliefs on account of occurrence of Force Majeure and Change in Law events in terms of Article 11 and Article 12 of the Transmission Service Agreement (in short, 'TSA') dated 6.8.2009. The Petitioner has made the following prayers:

- "(a) Declare that the collapse of the towers forming part of the PB Line due to a sudden and unprecedented change in the course of the river Ganga is a Force Majeure Event in terms of Article 11 of the TSA;
- (b) Declare that the Petitioner would not be liable in any manner for a breach of its obligations under the TSA for the period consumed in restoration of the PB Line between August 2018 until December 2019 due to the occurrence of the above Force Majeure Event in terms of Article 11.7(a) of the TSA;
- (c) Declare that the Petitioner be duly compensated in the amount of Rs. 82.58 crore in terms of Article 11.7 of the TSA for the unforeseen and unavoidable additional expenditure incurred in restoring the operations of the PB Line, which collapsed pursuant to the occurrence of a Force Majeure event;
- (d) Without prejudice to the above and in the alternate, declare that the restoration of the PB Line required to be carried out by the Petitioner in terms of the decision arrived at in the ERPC Meeting dated 13.02.2019 amounts to a deviation from the scope of work provided in the bidding documents and is a Change in Law event in terms of Article 12 of the TSA, entitling the Petitioner to claim compensation in the amount of Rs. 82.58 crore, as per Article 12.2 of the TSA, for the additional expenditure incurred by the Petitioner after the Cut-off Date in restoration of the PB Line."
- 2. The Petitioner, East North Interconnection Company Limited (ENCIL) a fully

owned subsidiary of Sterlite Technology Limited, is an inter-State transmission licensee selected through the international tariff based competitive bidding under Section 63 of the Act to establish the following transmission systems on Build, Own, Operate and Maintain basis and to provide transmission service to the Long-Term Transmission Customers (LTTCs) of the transmission systems:

- (a) Bongaigaon-Siliguri 400 kV Quad D/C transmission line (BS Line); and
- (b) Purnea-Biharsharif 400 kV Quad D/C transmission line (PB Line)
- 3. The Petitioner has entered into TSA with LTTCs on 6.8.2009. The Commission in its order dated 28.10.2010 in Petition No. 131/TL/2010 granted transmission licence to the Petitioner for inter-State transmission of electricity. The Petitioner achieved commercial operation of PB Line and BS Line on 13.9.2013 and 11.11.2014 respectively.
- 4. In the present Petition, the Petitioner has claimed relief on account of the occurrence of Force Majeure and Change in Law events in terms of Article 11 and Article 12 of the TSA, namely, collapse of towers of PB Line and restoration of PB Line by construction of additional towers along the revised route on the directions of ERPC respectively.
- 5. The Petitioner has submitted that it has incurred the additional expenditure towards carrying out the following activities for restoration of PB Line which is covered under Change in Law:
 - (a) Installation of 5 new transmission towers with open case foundation;
 - (b) Installation of 3 new transmission towers with pile foundation;
 - (c) Installation of 1.1 km of Special High-Performance Conductor (HPC with ACCC Conductor) between tower location AP 46/9A AP 47/1;
 - (d) Installation of around 4.386 km of additional overhead electrical lines; and

(e) Additional expenditure incurred in transporting repair material for the towers of the PB Line through a 12 km route along with Ganga river due to damage to the 12kilometer approach road which existed prior to the inundation at the sites.

Submission of the Petitioner

- 6. The Petitioner has mainly submitted as under:
 - (a) Subsequent to the commissioning of Purnea-Biharsharif 400 kV D/C transmission line ('PB Line') on 13.9.2013, three of its towers collapsed in quick succession on 10.8.2018, 21.8.2018 and 3.10.2018 due to sudden and unprecedented change in the course of river Ganga, leading to tripping of the PB Line. The aforesaid event constitutes a Natural Force Majeure event in terms of Article 11.3 of the TSA.
 - (b) The Petitioner apprised the Eastern Regional Power Committee ('ERPC') about occurrence of the Force Majeure event in the subsequent meetings along with the possible alternatives. Pursuant thereof, vide minutes of meeting dated 13.2.2019 of a special Committee constituted by ERPC, the Petitioner was directed to restore the PB Line by reconstructing the damaged transmission towers and relocating the other towers of PB Line which were susceptible to damage in future, on an alternate route from the original scope of work.
 - (c) In the said minutes dated 13.2.2019, ERPC observed that the collapse of the towers of PB Line constituted a Force Majeure event which was beyond the reasonable control of the Petitioner. It was also observed that the Petitioner was required to be granted a reasonable period of time to overcome the impact of the said event and to restore the operation of PB Line. In the same minutes, the ERPC found that PGCIL's Patna-Kishanganj transmission line, situated at distance of approximately 200 meters, from the PB Line was also similarly affected due to the change in the course of the river Ganga.
 - (d) In order to restore the PB Line, the Petitioner has been required to install 8 new transmission towers, 1.1 km of special high-performance conductor and approximately 4.4 km of additional overhead lines. The restoration work of PB Line was completed in December, 2019 and it was successfully charged on 19.12.2019. In this regard, the Petitioner has incurred an additional expenditure to the tune of

Rs. 94.58 crore. After considering approximately Rs. 12 crore as insurance proceeds received, the Petitioner is claiming the balance expenditure of Rs. 82.58 crore as Change in Law compensation.

- (e) The restoration of PB Line by construction of additional towers along the revised route on the direction of ERPC amounts to additional scope of work not attributable to the Petitioner. ERPC is an Indian Government Instrumentality and its orders constitute 'Law' in the meaning contemplated under the TSA. Therefore, the rerouting of the PB Line at the instance of the ERPC constitutes an event under Article 12 of the TSA. Consequently, the Petitioner is also entitled to relief in terms of Article 12.2.1 of the TSA.
- (f) The Petitioner has duly issued the notices for occurrence of Force Majeure and Change in Law events in terms of TSA. However, no reply has been received from the LTTCs in this regard.
- 7. The matter was called out for virtual hearing on 21.5.2015 and notices were issued to the Respondents to file their replies. However, no reply has been filed by the Respondents despite notice.
- 8. During the course of hearing, the Commission enquired from the Petitioner as to whether the issues relating to availability of PB Line, levy of penalty/ damages due to claimed Force Majeure event, etc. have been discussed/ deliberated in the ERPC meetings, learned counsel for the Petitioner sought liberty to take necessary instructions in this regard and to file the subsequent minutes of EPRC meetings within a period of four weeks. Accordingly, the Petitioner vide its affidavit dated 18.6.2021 has placed on record the copy of the minutes of EPRC meetings.
- 9. The matter was heard on 14.10.2021 through video conferencing. The Petitioner was directed to file the findings of investigation/study, if any, carried out by any

independent agency/Government body including the Central Electricity Authority regarding collapse of these transmission towers.

10. The Petitioner vide its affidavit dated 3.12.2021 has placed on record the copy of the 'Technical Report and Root Cause Analysis on Collapse of Electrical Transmission Towers Located on the Banks of River Ganga" dated 20.2.2019 which has been discussed in succeeding paragraphs.

Analysis and Decision

- 11. Earlier, the matter was heard on 14.10.2021 and reserved for order. However, consequent upon notification of the Electricity (Timely Recovery of Costs due to Change in Law) Rules, 2021 (hereinafter referred to as "the Change in Law Rules") by the Ministry of Power, Government of India on 22.10.2021, it was considered expedient for the ends of justice to re-hear the matter in the light of Change in Law Rules. Hence, matter was re-listed for hearing on 11.1.2022 through video conferencing.
- 12. In the meantime, the Petitioner filed Original Petition bearing OP No. 2 of 2022 before the Appellate Tribunal for Electricity (in short, 'APTEL') under Section 121 of the Act seeking directions to the Commission to adjudicate and decide the Petition instead of applying the Change in Law Rules. APTEL directed the Commission to hear the petition and issue appropriate order.
- 13. In terms of the direction of APTEL, the matter was heard on 11.1.2022 on the applicability of the Change in Law Rules to the present case. The Commission vide order dated 4.2.2022 directed the Petitioner to approach the beneficiaries/LTTCs for settlement of Change in Law claims in terms of the Change in Law Rules and approach the Commission only in terms of Rule 3(8) of the Change in Law Rules.

- 14. Subsequently, APTEL vide its judgment dated 5.4.2022, *inter alia*, held that the Change in Law Rules apply only prospectively and cannot be retrospectively applied to the proceedings pending for adjudication before the Commission, particularly where the cause of action had already arisen before the said rules were brought into existence and accordingly, the Commission has been directed to consider each such case on merit and adjudicate the matter in exercise of its jurisdiction under Section 79 of the Act. Accordingly, the matter was heard on 7.6.2022. None appeared on behalf of the Respondents. We now proceed to deal with the claims of the Petitioner on merits based on the documents available on record and in terms of the judgment of APTEL dated 5.4.2022.
- 15. We have considered the submissions of the Petitioner and perused the documents available on record. Based on the above, the following issues arise for our consideration:
 - Issue No.1: Whether the Petitioner has complied with the provisions of the TSA before approaching the Commission for claiming relief under Force Majeure and Change in Law?
 - Issue No. 2: Whether the claims of the Petitioner are covered under Force Majeure in terms of the TSA?
 - Issue No. 3: Whether the claims of the Petitioner are covered under Change in Law in terms of the TSA?
 - Issue No. 4: What reliefs, if any, should be granted to the Petitioner in the light of the answers to the above issues?

The above issues have been dealt with in succeeding paragraphs.

Issue No. 1: Whether the Petitioner has complied with the provisions of the TSA before approaching the Commission for claiming relief under Force Majeure and Change in Law?

16. The Petitioner has claimed relief under Article 11 (Force Majeure) of the TSA. Article 11.5.1 of the TSA provides as under:

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 renderin7g 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.

- 11.5.2 The Affected Party shall give notice to the other Party of (i) the cessation of the relevant event of Force Majeure; and (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this Agreement, as soon as practicable after becoming aware of each of these cessations."
- 17. Under Article 11.5.1 of the TSA, an 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 days after the date on which the party knew or should have reasonably known of the commencement of the event of Force Majeure. It further provides that such notice shall be a pre-condition to the affected party's entitlement to claim relief under the TSA. Further, under Article 11.5.2 of the TSA, an affected party is also required to give notice to the other party of cessation of the force majeure event and cessation of the effects of such Force Majeure on the performance of its rights or obligations under the TSA as soon as practicable after becoming aware of each of the cessations.
- 18. The Petitioner has claimed relief under Article 12 (Change in Law) of the TSA.

 Article 12.3.1 of the TSA provides as under:

"12.3 Notification of Change in Law Event

12.3.1 If the TSP is affected by a Change in Law in accordance with Article 12.1 and wishes to claim relief for such Change in Law under this Article 12, it shall give notice to Lead Long Term Transmission Customer of such Change in Law as soon as reasonably practicable after becoming aware of the same.

- 12.3.2 The TSP shall also be obliged to serve a notice to Lead Long Term Transmission Customer even when it is beneficially affected by a Change in Law.
- 12.3.3 Any notice served pursuant to Articles 12.3.1 and 12.3.2 shall provide, amongst other things, precise details of the Change in Law and its effect on the TSP."
- 19. Article 12.3 of the TSA provides that if the TSP is affected by a Change in Law in accordance with Article 12.1 and wishes to claim relief for such Change in Law, it shall give notice to the lead LTTC as soon as reasonably practicable after being aware of the same. It further provides that any notice served pursuant to Articles 12.3.1 and 12.3.2 of the TSA shall provide amongst other things, precise details of Change in Law and its effect on the TSP.
- 20. The Petitioner vide its letter dated 16.8.2018 had intimated the LTTCs about collapse of the transmission tower forming part of PB Line viz. location no. 47/0 on 10.8.2018. Thereafter, the Petitioner vide its letter dated 26.10.2018 further informed the LTTCs about the collapse of the subsequent towers of PB Line at location Nos. 46/8 and 46/9 on 21.8.2018 and 3.10.2018 respectively. We observe that said letters were mere intimations about collapse of towers, and as such the Petitioner did not indicate about the Clause of TSA under which such purported Notices were issued. However, in the said notices, the Petitioner had intimated about the change in course of River Ganga claiming it to be an act of God - an event beyond the Petitioner's control and which led to the collapse of the transmission towers. Accordingly, we are of the view that even though the Petitioner has not quoted the specific provision of the TSA, the Petitioner had intimated the LTTCs about the collapse of transmission towers of the PB Line and hence, the requirement under Force Majeure provisions of the TSA have been substantially complied with. We now proceed to deal with the claim of the Petitioner on merit.

21. The Petitioner has further submitted that it was decided in ERPC for diversion of PB line for its restoration. The Petitioner gave notices to LTTCs on 15.7.2019 inter-alia stating that resultant diversion in the route for the restoration for the PB Line, as required by ERPC, will lead to an escalation in the cost of the operation of the Project and amounts to a Change in Law events under Article 12 of the TSA. The Petitioner has submitted that no response was received from the lead LTTC or other LTTCs to the said notice. In our view, the Petitioner has complied with the requirement of TSA regarding prior notice to the lead LTTC regarding occurrence of Change in Law events before approaching the Commission.

22. This issue is answered accordingly.

Issue No. 2: Whether the claims of the Petitioner are covered under Force Majeure in terms of the TSA?

- 23. The Petitioner has sought declaration that the collapse of the towers forming part of the PB Line due to sudden and unprecedented change in the course of river Ganga is a Force Majeure event in terms of Article 11 of the TSA.
- 24. The Petitioner has contended that on account of the collapse of the transmission towers, the Petitioner was left with no choice but to carry out the diversion in order to prevent further damage to the PB Line which constitutes a natural Force Majeure event under Article 11.3 of the TSA entitling the Petitioner to claim relief as per the provisions of Article 11.7 of the TSA, namely (i) reasonable time period for the restoration of the PB Line, (ii) waiver of any penalties or liabilities under the TSA for the period when the PB Line was not operational, and (iii) compensation for the expenditure incurred by the Petitioner in relocation of the towers constituting the PB Line, which the Petitioner was compelled to undertake to prevent any further damage to the PB Line.

- 25. We have considered the submissions made by the Petitioner. We note that the claimed force majeure period by the Petitioner on account of collapse of the towers is from 10th August, 2018 (i.e. date on which the first tower of PB Line collapsed) to 29th December, 2019 (i.e. date on which the PB Line was finally restored).
- 26. The provisions of the TSA with regard to "Force Majeure" are extracted hereunder:

"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:
- (a) Natural Force Majeure Events: Act of God, including, but not limited to drought, fire and explosion (to the extent originating from a source external to the Site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred (100) years,
- (b) Non-Natural Force Majeure Events:
- i. Direct Non-Natural Force Majeure Events:
- Nationalization or compulsory acquisition by any Indian Governmental Instrumentality of any material assets or rights of the TSP; or
- the unlawful, unreasonable or discriminatory revocation of, or refusal to renew, any Consents, Clearances and Permits required by the TSP to perform their obligations under the RFP Project Documents or any unlawful, unreasonable or discriminatory refusal to grant any other Consents, Clearances and Permits required for the development/ operation of the Project, provided that a Competent Court of Law declares the revocation or refusal to be unlawful, unreasonable and discriminatory and strikes the same down; or
- any other unlawful, unreasonable or discriminatory action on the part of an Indian Governmental Instrumentality which is directed against the Project, provided that a Competent Court of Law declares the action to be unlawful, unreasonable and discriminatory and strikes the same down.
- ii. Indirect Non Natural Force Majeure Events.
- act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
- radioactive contamination or ionising radiation originating from a source in India or resulting from any other Indirect Non Natural Force Majeure Event mentioned above,

excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the Site by the Affected Party or those employed or engaged by the Affected Party; or

- industry wide strikes and labour disturbances, having a nationwide impact in India.
- 11.4 Force Majeure Exclusions
- 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.
- 11.6 Duty to perform and duty to mitigate

To the extent not prevented by a Force Majeure Event, the Affected Party shall continue to perform its obligations as provided in this Agreement. The Affected Party shall use its reasonable efforts to mitigate the effect of any event of Force Majeure as soon as practicable."

27. The Petitioner has claimed that the towers collapsed on account of unprecedented flood and change in course of river Ganga is an act of God. Perusal of the TSA shows that the provision regarding force majeure event on account of act of God is covered under "Natural Force Majeure Events". "Act of God" includes flood. However, in order to qualify for relief under Force Majeure, it has to be proved that the event or circumstance wholly or partly prevents or unavoidably delays the affected party from performance of its duty and such event or circumstance is 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.

28. The Commission vide ROP dated 14.10.2021 directed the Petitioner to submit findings of investigation/study, if any, carried out by any independent agency/ Government body including the Central Electricity Authority regarding collapse of these transmission towers. In this regard, the Petitioner has not submitted any report of government agency, however has submitted a report, namely "Technical Report and Root Cause Analysis on Collapse of Electrical Transmission Towers Located on the Banks of River Ganga", dated 20.2.2019 prepared by Sinha & Associates, a private agency engaged by the Petitioner. The relevant portion of the said report are as follows:

"6.0 Incident Report (From ENICL record)

From the ground patrolling team reports it was observed that:

- Rise of water in the river reached alarming level on 2nd August 2018, the water line on right embankment near tower no. 47/0 was noted at 20m distance from the tower legs. On 9th August2018 all the four legs of this tower gone under water and heavy scouring of the river bank was noted. On 10th August 2018, the transmission line tripped due to collapse of tower no: 47/0.
- The bank scouring was so severe and fast that, on 14th August 2018, the waterline reached at 35mfrom the leg of tower no. 46/9, On 21st August 2018, tower no 46/9 collapsed.

Main river stream reached the leg of tower no 46/8 at a later date and it was also collapsed on 03rd September 2018

13.0 Findings:

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All the available design documents and parameters are being reviewed in the line of above philosophy and findings are explained in detail. The towers had been designed in respect of the hydrological and geological parameters and the main channel profile of the river as retrieved up to the preconstruction period till 2011 and were installed in the year 2012 to 2013. Since commissioning of the transmission line, all the subject towers had exposed to several monsoons and floods in theriver Ganga. From the available information/data and pictures, it is very much clear that, whatever incident of damage/collapse occurred are primarily due to the rapid and drastic change in river course, its section profile and scouring of bed. Detail findings are tabled below:

A: On Hydrological Data:

S. No.	Basic Parameter	Value considered in design	Maximum Value as observed during the flood-2018	Remarks
For Tower No. 47/0				
1	HFL	43.15M	42.6M	Report of CWC indicates, flood water level remained belowthe designed HFL, but water flow maintained well above danger level for a prolong period during the monsoon-2018.
2	MCL	19.15M	Couldn't Measure during flood	For a river like Ganga since flood water carries a
3	BL	31.16M	32.35M (Measured after the flood water receded during Nov-2018)	huge amount of silt, bed level and profile thus keeps on changingrapidly with the recess of flood water level. Bed level get lowered due to scouring in higher velocity of water flow during flood condition and raised again due to rapid sedimentation as flow velocity get reduced on receding of flood water. The bed level around tower no. 47/0 thus definitely reached a level well below the design value of MCL during its collapse. Bed level measured to be at 32.35M on 07.11.2018 is at higher level that raised out of silting once the flood water receded.
4	Vmax	5.035m/s	Couldn't	Immediate measurement was not possible as
5	\overline{V}_{max}	3.56m/s	measure during 2018 flood.	site was not accessible due to prevailing water conditions in the river during 2018 flood. Velocity of flood water was measured during the worst flood of 2016 and maximum and mean maximum velocity found to be 6.1m/s, and 4.57m/s respectively which were much higher than their values the foundations were designed with. But Since exposure condition for tower 47/0 was not severe it could withstand the 2016 severe flood without any damage.
				Hence actual velocity or water flow on the date of loss might have definitely reached much higher than their designvalues.
6	Q max	66973Cum ec	No authenticate datareceived	Comparison was not possible in absence of data.
For tower No. 46/8 & 46/9				These tower foundations were designed as shallow foundations considering the sites as virgin farmland, thus no hydrological parameters for main channel flow have any relevance for comparison for these locations.

14.0 Technical Discussion on Collapse and its Root Cause Analysis:

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Unpredicted, Sudden course change and huge meandering of the river profile within a very short period of time caused an erratic water flow, collapse of land mass exposed the foundation and all stability arrangement disturbed thereon was the root cause of collapse for all the three tower foundations."

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29. It is noticed that in respect of tower No.47/0, the Highest Flood Level (HFL) considered in design of the tower was 43.15 m. However, as per the report, the maximum value observed during the flood in 2018 was 42.6 M as against the HFL of 43.15 m. Other parameters like Maximum Current Level (MCL), Bed Level (BL), Maximum Velocity (V Max) and Mean Maximum Velocity (\overline{V}_{max}) could not be measured during the flood. As regards tower Nos. 46/8 and 46/9, the firm has recorded that "these tower foundations were designed as shallow foundations considering the sites as virgin farmland". We observe that no documentary proof has been placed on record neither in the above quoted report nor in the Petition so as to prove that right type and design adopted for all three types of tower foundations adopted, based on soil testing report. We also observe that the agency has concluded that "Unpredicted, Sudden course change and huge meandering of the river profile within a very short period of time caused an erratic water flow, collapse of land mass exposed the foundation and all stability arrangement disturbed thereon was the root cause of collapse for all the three tower foundations". While concluding the said reasons, the agency has not produced any meteorological data or any other data for last 20-30 years to substantiate tis conclusion that event was "unpredictable". We are unable to accept the findings in the report, prepared by a private agency appointed by the Petitioner itself, as the conclusive reasons for collapse of tower Nos.46/8, 46/9 and 47/0 in PB line.

30. The Petitioner in its presentation given by it at ERPC has submitted as follows:



- 31. As per the above presentation, the distance between the tower no. 47/0 and the river bank was 324m on 23.2.2010 which was reduced to 75 m due to change in course of river Ganga. However, the Petitioner has not placed on record the data for the years prior to 2010 which are relevant for the purpose since the bid was awarded and TSA was signed in the year 2009. Change in river course is not an abnormal phenomenon as mentioned below at paragraph-32 in the site report of the ERPC Committee where in it is mentioned that the area of around 7-10 Km in and around the affected site location is low lying area of River Ganga and lies submerged form July to January during the year. As such the Petitioner was expected to consider the historical data for a considerable long period while finalizing the route of the transmission line, designing the foundations and erection of tower in the river bed or nearby the riverbed. Therefore, the claim of the Petitioner that collapse of towers due to the change in course of river Ganga being entirely sudden, unprecedented and unforeseeable, constitutes a Force Majeure event in terms of the TSA is not supported by the documents on record.
- 32. We observe that the Committee formed by ERPC comprising of representatives of OPTCL, Sterlite, Powergrid, ERPC and BSPTCL in its site report dated 26.6.2019

has noted as follows:

"The followings are observed:

- 1) Site location is about 17 km from the main road of Suryagarha, Lakhisarai and around 7 Km from the village road.
- 2) As per information gathered from villagers, the area of around 7-10 Km in and around the affected site location is low lying area of River Ganga and lies submerged form July to January during the year.
- 3) Mobilization of man and materials to the locations is difficult during that period.
- 4) As intimated by the villagers as well as site people the river Ganga is continuously shifting towards the right bank during last few years and meandering is about 150m per annum.
- 5) The pile foundation of both the lines which had collapsed were the last pile foundations on the right bank of the river, now comes under the mid-stream of the River."

As per above, it can be inferred that course change of Ganga towards right bank was not so abnormal phenomenon since last few years. We observe that Report of "Sinha & Associates" has not covered this aspect of regular shifting of Ganga.

33. The Petitioner has relied upon 149th meeting of the Operations and Coordination Committee of the ERPC held on 18.9.2018 to contend that the ERPC, in the said meeting, had also noted that the collapse of towers of PB Line constituted a Force Majeure event which was beyond the control of the Petitioner. Relevant portion of the minutes of meeting of ERPC is extracted as under:

"After detailed deliberations, the Committee recommend the following:

- 1. Based on the facts provided by ENICL the above outage may be considered under the category of acts of God and force majeure events beyond the control of the transmission licensee.
- 2. Considering the continuous erosion due to change in course of river Ganga since last few years, the transmission line needs to be diverted from the present river crossing to avoid the above threat.
- 3. Keeping in view of all the facts, the zero date for commencement of the

restoration works may be considered as the completion of approach road for carrying the construction material & equipment i.e. 14.01.2019."

In the above mentioned ERPC meeting also, it is mentioned that there is

continuous erosion due to change in course of river Ganga since last few years. It is also evident from the minutes of ERPC meeting that its observations were in the context of the outage of the transmission lines due to tower collapse based on the materials furnished by the Petitioner. ERPC has neither undertaken any on the spot study nor examined any technical data to determine the real causes of the tower failure and to

what extent the Petitioner had taken reasonable care or complied with Prudent Utility

Practices to prevent such incidents. Therefore, the minutes of ERPC cannot be

considered as the conclusive evidence to establish that tower failure was on account of

the natural Force Majeure event in terms of the TSA.

34.

35. The Petitioner was directed in the ROP for the hearing dated 14.10.2021 to place

on record the findings of a Government Body including Central Electricity Authority

regarding collapse of the transmission towers. The Petitioner has not placed on record

any such report. However, we have noticed that there is one report available in public

domain on the website of Central Electricity Authority (CEA), namely "Report of the

Standing Committee of Experts on Failure of EHV Transmission line Towers (April,

2018-March-2019)" (hereinafter referred to as the 'Standing Committee Report') issued

by CEA, Government of India, Ministry of Power. In the said report, the reasons for

collapse of BP Line has been discussed as under:

"4.5 400 kV D/C (Quad) Patna-Kishanganj transmission line (PGCIL) & 400 kV D/C Purnea- Bihar Sharif transmission line [M/s Sterlite Power]

Both the transmission lines are running almost parallel to each other and are crossing the river Ganga. The failed towers were located near bank of Ganga River. New water course was created due to flash / heavy flood and the soil below the foundation of towers were eroded causing damage to the

foundation and failure of towers. Change in course of river due to flood, improper assessment of change in river course, lack of provision of Proper Protection (retaining wall, Gabion wall etc.) for towers near the river was observed as cause of failure. In view of above, it was observed that towers erected near river banks should be frequently patrolled and proper assessment should be made about the change in course of river based on trend of soil erosion and necessary protection should be provided to towers to avoid damage during such incident."

- 36. As per the above Standing Committee Report, the failed towers were located near the bank of river Ganga. The cause of failure of towers has been attributed to "change in course of river due to flood, improper assessment of change in river course, lack of provision of Proper Protection (retaining wall, Gabion wall, etc.) for towers near the river". The Standing Committee has observed that towers erected near river banks should be frequently patrolled and proper assessment should be made about the change in course of river due to soil erosion and necessary protections should be provided to the towers to avoid damage. It is apparent from the above observations of the Standing Committee that the failure of towers was to a large extent attributable to the failure on the part of the Petitioner to assess the change in river course and lack of provision for protection of towers near the river. Thus, the Petitioner has failed to establish the mandate provided by the definition of Force Majeure i.e. "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". Further, the observation of the Standing Committee establishes that the case of the Petitioner is covered in the Force Majeure exclusion under Article 11.4.1 (f)(i) "Nonperformance caused by the Affected Party's negligent or intentional acts, errors or omissions".
- 37. It would be also relevant to note that the Petitioner has acknowledged and agreed that it shall not be relieved from any of its obligations under the TSA on account of

unsuitability of the site or transmission line route(s) for whatever reasons as per the provision of Article 5 of the TSA. The relevant extract of the TSA is reproduced as under:

"Article: 5

- 5. Construction of the Project 5.1 TSP's Construction Responsibilities: 5.1.1. The TSP, at its own cost and expense, shall be responsible for designing, constructing, erecting, completing and commissioning each Element of the Project by the Scheduled COD in accordance with the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007, Central Electricity Authority(Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010 Central Electricity (Grid Standards) Regulations, 2010, Central Electricity Authority (Safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations, 2011 and Central Electricity Authority (Measure relating to Safety and Electricity Supply) Regulations, 2010, Prudent Utility Practices and other applicable Laws.
- 5.1.2 The TSP acknowledges and agrees that it shall not be relieved from any of its obligations under this Agreement or be entitled to any extension of time by reason of the unsuitability of the Site or Transmission Line route(s) for whatever reasons. The TSP further acknowledges and agrees that it shall not be entitled to any financial compensation in this regard."
- 38. In view of the foregoing discussions, viz (a) the Report of Sinha & Associates which lacks substantial data to prove that right routing of line and right type & design of towers adopted while constructing the line, and there is "unpredicted course change" while actual water level was below HFL (b) fact that the line was laid near banks of the river Ganga (c) Observation that change of course of river is not an abnormal phenomenon, rather a regular phenomenon as noted in Site report dated 26.6.2019 of Committee formed by ERPC where villagers and site people have observed that Ganga is regularly shifting towards right bank since last few years, (d) observations of CEA Standing Committee where CEA concluded that "Change in course of river due to flood, improper assessment of change in river course, lack of provision of Proper Protection (retaining wall, Gabion wall etc.) for towers near the river was observed as cause of failure", and other reasons as noted in foregoing paragraphs, we are of the view that the event of collapse of towers in PB Line claimed by the Petitioner is not covered under the provisions of the Force Majeure clause.

Issue No. 3: Whether the claims of the Petitioner are covered under Change in Law in terms of the TSA?

- 39. The Petitioner has submitted that collapse of the towers forming part of the PB Line and the consequent expenditure incurred in carrying out the restoration of the PB Line was unavoidable and that the Petitioner was left with no choice but to carry out the diversion in order to prevent further damage to the PB Line. The Petitioner has submitted that it has incurred additional expenditure of Rs. 94.58 crore for restoration of PB Line. Since, the Petitioner had insured the PB Line against any potential loss or damage, the Petitioner upon the occurrence of the said event approached the New India Assurance Company Limited ("Insurer") and filed its claim for damages suffered due to collapse of the transmission towers. The Petitioner has submitted that Insurer after due assessment of the damage suffered has awarded the Petitioner an amount of Rs. 12 crore in furtherance of the aforesaid insurance claim. As such, the Petitioner is only claiming the remaining additional expenditure of Rs. 82.58 crore, incurred by it on account of restoration of the PB Line. The Petitioner has submitted that the said expenditure was unforeseen and unavoidable and was required in order to restore the operations of the PB Line.
- 40. Further, the Petitioner has submitted that restoration of PB Line by construction of additional towers along the revised route on the directions of the ERPC amounts to additional scope of work not attributable to the Petitioner and not contemplated at the time of submission of bid. Since, the same constitutes a deviation from the bid documents, it amounts to a Change in Law event under Article 12 of the TSA.
- 41. We have considered the submission of the Petitioner. We have perused the provisions of the TSA with regard to Change in Law which are extracted as under:

"12.1 Change in Law

- 12.1.1 Change in Law means the occurrence of any of the following after the date, which is seven (7) days prior to the Bid Deadline resulting into any additional recurring/non-recurring expenditure by the TSP or any income to the TSP:
- The enactment, coming into effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any Law, including rules and regulations framed pursuant to such Law;
- A change in the interpretation or application of any Law by Indian Governmental Instrumentality having the legal power to interpret or apply such Law, or any Competent Court of Law;
- The imposition of a requirement for obtaining any Consents, Clearances and Permits which was not required earlier:
- A change in the terms and conditions prescribed for obtaining any Consents, Clearances and Permits or the inclusion of any new terms or conditions for obtaining such Consents Clearances and Permits;
- Any change in the licensing regulations of the Appropriate Commission, under which the Transmission License for the Project was granted if made applicable by such Appropriate Commission to the TSP:
- · any change in the Acquisition Price; or
- any change in tax or introduction of any tax made applicable for providing
 Transmission Service by the TSP as per the terms of this Agreement.
- 42. Perusal of the above provisions of Article 12 in the TSA reveals that for an event to be 'Change in Law', its occurrence has to be after the seven days prior to the bid deadline and should result into any additional recurring/ non-recurring expenditure by TSP or any income to TSP. The events broadly covered under Change in Law are following:
 - (a) Any enactment, coming into effect, adoption, promulgation, amendment, modification or repeal, of any Law;
 - (b) Any change in interpretation of any law by a Competent Court of law, or Indian Governmental Instrumentality having the legal power for such interpretation; or
 - (c) Imposition of a requirement for obtaining any consents, clearances and permits which was not required earlier;
 - (d) A change in terms and conditions prescribed or inclusion of any new terms and conditions for obtaining consents, clearances and permits or the inclusion of new terms and conditions for obtaining such consents, clearances and permits;

- (e) Any change in the Transmission Licence Regulations issued by the Commission:
- (f) Any change in the Acquisition price; and
- (g) Any change in tax or introduction of any tax made applicable for providing transmission service by the TSP as per the terms of the agreement.
- 43. Indian Government Instrumentality as defined in the TSA is as under:

"Indian Governmental Instrumentality" shall mean Government of India, Government of any State in India or any ministry, department, board, authority, agency, corporation, commission under the direct or indirect control of Government of India or any State Government or both, any political sub-division of any of them including any court or Appropriate Commission or tribunal or judicial or quasi-judicial body in India but excluding TSP and Long Term Transmission Customers"

44. Further, "Law" has been defined in the TSA as under:

"Law" or "Laws" in relation to this Agreement, shall mean all laws including electricity laws in force in India and any statute, ordinance, rule, regulation, notification, order or code, or any interpretation of any of them by an Indian Governmental Instrumentality having force of law and shall include all rules, regulations, decisions and orders of the Appropriate Commission;"

"Law" or "Laws" has been defined in the TSA as "all laws including electricity laws in force in India and any statute, ordinance, rule, regulation, notification, order or code, or any interpretation of any of them by an Indian Governmental Instrumentality having force of law and shall include all rules, regulations, decisions and orders of the Appropriate Commission".

- 45. Cut-off date for Change in Law events i.e. the date which is seven days prior to the bid deadline was 8.9.2009. In the light of the above provisions of Change in Law, the claims of the Petitioner which have occurred after cut-off date during the construction and operating period have been examined as under:
- 46. We have perused the minutes of 149th OCC meeting held on 18.9.2018. The

relevant extract is given as under:

"Item No. B.6: Multiple Contingency due to the Tower Collapse of 400 kV Purnea-Biharsharif D/C and 400 kV Kishenganj-Patna D/C in the Eastern Region- ERLDC

Deliberation in the meeting

ENCIL informed that one more tower of 400 kV Purnea-Biharsharif D/C line had collapsed and restoration of the line using interim arrangement is not possible now. They are planning for permanent restoration of the line, which would take long time. ENCIL agreed to communicate the schedule to ERPC and ERLDC.

Item No. B.7: Long Outage of transmission elements in Eastern Region

c) 400kV Purnea-Biharsariff-DC:

Line was out of service from 10/08/18 due to tower collapse as Ganga River has changed its course. ENICL informed that restoration of the line is in progress using a temporary arrangement and the restoration of the line would take 50 days approximately. ENICL may please update the current status and also submit fortnight status report to ERLDC/ERPC through mail.

ENICL may update.

Deliberation in the meeting

ENCIL was advised submit the schedule of restoration plan.

47. Further, we have also perused minutes of 1st meeting of the Committee constituted by ERPC for 'Analysing the major outages of ISTS elements of Eastern Region – regarding held on 13.2.2019'. The relevant portion of the minutes of meeting is extracted as under:

"Item No. 1. Outage of 400kV D/C Purnia-Biharsharif line of ENICL.

400kV Purnia-Biharsharif D/C line was out of service from 10/08/18 due to the change of course of the river Ganges and heavy velocity of flow of water which leads to tower collapse. ENICL informed that restoration of the line is in progress using a temporary arrangement and the restoration of the line would take 50 days approximately.

Further, in 149th OCC, ENCIL informed that one more tower of 400 kV Purnea-Biharsharif D/C line had collapsed and restoration of the line using interim arrangement is also not possible. They are planning for permanent restoration of the line, which would be restored by June 2019. ENICL requested to consider the restoration period as force majeure condition

149th OCC in principle agreed to consider the restoration period as force majeure condition. However, the period of forced majeure condition is to be decided judiciously.

Deliberation in the meeting

ENICL gave a detail presentation on outage of 400 kV Purnia-Biharshariff D/C line highlighting the change of course of the river Ganges and heavy velocity of flow of water which leads to tower collapse. The salient points emerged during the presentation of ENICL are as follows (Presentation is enclosed at Annexure-II):

- On 10.08.2018 at 10:28 the tower no 47/0 of 400kV D/C Purnia-Biharsharif was collapsed due to change in course of river Ganga & water flow with high velocity near the tower location which was a pile foundation tower (DD+18).
- Further, more soil erosion occurred due to change in course of river Ganga and the high velocity & heavy water flow lead to collapse of one more tower location no 46/9 (open cast type) on 21.08.2018 which was earlier situated on land.
- The possibility of line restoration using ERS towers got set back due to increase in the span (due to collapse of 2nd tower) and enhancement of water level and soil conditions.
- In view of too much erosion of the river bank due to change of course of river Ganges, the nine towers from location no 46 to location no 47 were under threat of collapse in the next few years. So the total restoration plan had to be changed considering the continuous erosion due to change of course of Ganges.
- Therefore, the transmission line has to be diverted from the present river crossing to avoid the above threat which requires extra four (4) number pile foundation (3 number on ground and 1 number in water) and five (5) number open cast foundation to prevent it from the endanger of further soil erosion.
- The area was under flooding conditions and receding of water started from 22.09.2018. Further, due to muddy and mire soil, it was difficult to start the restoration work. The restoration works has started from 14.10.2018 and temporary approach road to site location was constructed by 15.12.2018 and the final approach road for carrying the construction material and equipment was completed on 13.01.2019.
- Since, the main work started from 14th January, 2019 only after the completion of approach road, the same may be considered as zero date for restoration work.
- As per the restoration schedule given by ENICL, the line would be restored permanently by **July'2019**.

After detailed deliberations the Committee recommended the followings:

- i) Based on the facts provided by ENICL the above outage may be considered under the category of acts of God and force majeure events beyond the control of the transmission licensee.
- ii) Considering the continuous erosion due to change of course of river Ganges since last few years, the transmission line needs to be diverted from the present river crossing to avoid the above threat.
- iii) Keeping in view of all the facts, the zero date for commencement of the restoration work may be considered as the completion of approach road for carrying the construction material & equipments i.e. 14.01.2019.
- iv) The reasonable restoration time allowable should not exceed six months from the zero date of the restoration work."

From the above quoted minutes, we note that Petitioner informed the ERPC that the PB Line could not be restored through interim arrangements. Further, Petitioner in its presentation informed that the said line to the extent of 9 towers had to be diverted from the present river crossing to avoid the threat arising out to the erosion of river bank. It is worthwhile to mention that existing route of the transmission line was chosen by Petitioner itself near to bank of Gana river where its change in course is very common. Further, it is the Petitioner who suggested the alternate route when its tower collapsed stating that "in view of too much erosion of the river bank due to change of course of river Ganges, the nine towers from location no 46 to location no 47 were under threat of collapse in the next few years." In the presentation given by the Petitioner, it was suggested that the transmission line has to be diverted from the present river crossing to avoid the threat. It is also noticed that none of the documents indicate any concerns of the Petitioner regarding additional expenditure arising out of so-called direction of ERLDC for re-routing of the PB Line for its restoration. There is no direction as far as ERPC is concerned which could qualify as Change in Law under the quoted provisions of the TSA. In fact, nothing on contrary has been placed on record by the Petitioner that it was not its responsibility for restoration of towers and that the need of re-routing arose on account of 'Change in Law' as defined in the TSA.

48. In view of the above, and the fact that selection of route of line was petitioner's own decision, the additional expenditure incurred by the Petitioner on account for restoration of PB Line by construction of addition towers on the revised route doesn't fall under Change in Law clause of the TSA. The tower restoration was the responsibility of the Petitioner and it cannot argue that it undertook restoration of towers on the directions of ERPC. The selection of alternate route for restoration of PB Line which entailed the construction of addition towers was the Petitioner's own decision taken after assessing

the soil erosion along the river bank. Ratification of such restoration works/plan of the Petitioner and the time schedule for restoration by the Committee does not make it a direction of ERPC. In any event, the Petitioner was mandated to restore the PB Line under the provisions of TSA be it on the original route/location or by selecting the alternate route/location and in the present case, as already noted above, the alternate route for restoration of PB Line was proposed by the Petitioner itself. In the competitive bid project, TSP is liable to bear all expenditure after cut-off date unless it is covered under Change in law. It cannot argue that the restoration plan proposed in the ERPC meeting by the Petitioner itself was beyond the scope of the original Project and it is entitled to be compensated for additional expenditure on account of this events.

- 49. In view of the above, the claim of the Petitioner that the restoration of PB Line by construction of additional towers along with the revised route on the direction of ERPC amounts to additional scope of work and consequently, a Change in Law event under the TSA deserves to be rejected.
- 50. In the light of the above discussion, it is held that the Petitioner's case is covered neither under Force Majeure nor under Change in Law provisions of the TSA.

Issue No. 4: What reliefs, if any, should be granted to the Petitioner in the light of the answers to the above issues?

- 51. Since in above issues we have held that the said events does not falls under Force Majeure and Change in Law, no relief is granted to the Petitioner.
- 52. The Petition No. 514/MP/2020 is disposed of in terms of the above.

Sd/- sd/- sd/- (P.K. Singh) (Arun Goyal) (I.S. Jha) Member Member