

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 118/TL/2019**

**Coram:**

**Shri P.K.Pujari, Chairperson**

**Dr. M.K.Iyer, Member**

**Shri I.S.Jha, Member**

**Date of Order : 7<sup>th</sup> of October, 2019**

**In the matter of**

Application for Amendment of Transmission Licence No. 20/Transmission/2013/CERC of Adani Transmission (India) Limited granted under Section 14 of the Electricity Act, 2003 and the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of Transmission Licence and other related matters) Regulations, 2009.

**And**

**In the matter of**

Adani transmission (India) Limited  
Adani House, Mithakhali Six Roads  
Navarangpura  
Ahmedabad-380009

**....Petitioner**

Vs

- 1) Power Grid Corporation of India Limited  
Saudamini, Plot-2, Sector-29,  
Near IFFCO Chowk  
Gurgaon-122001  
Haryana
- 2) National Load Despatch Centre  
B-9 Qutab Industrial Area  
Katwaria Sarai  
New Delhi-110016
- 3) Northern Regional Load Despatch Centre  
18-A, Shaheed Jeet Singh Sansanwal Marg  
Katwaria Sarai  
New Delhi-110016
- 4) Western Regional Power Committee  
F-3, MIDC Area, Marol, Opp. SEEPZ  
Central Road, Andheri (East)  
Mumbai-400093

- 5) Central Electricity Authority  
Sewa Bhawan, Sector-1, R.K. Puram  
New Delhi-110066
- 6) Gujarat Energy Transmission Company Limited  
Sardar Patel Vidyut Bhavan, Race Course  
Vadodra-390007
- 7) Haryana Vidyut Prasaran Nigam Limited  
1<sup>st</sup> Floor, Shakti Bhawan, Sector-6  
Panchkula-134109  
Haryana
- 8) Gujarat Urja Vikas Nigam Limited  
Sardar Patel Vidyut Bhawan, Race Course  
Vadodra-390007
- 9) Maharashtra State Electricity Distribution Co. Limited  
"Prakashgarh", Bandra (East)  
Mumbai-400051, Maharashtra
- 10) Madhya Pradesh Power Management Company Limited  
Shakti Bhawan, Vidyut Nagar, Rampur  
Jabalpur (MP)- 482008
- 11) M.P. Audyokik Kendra Vikas Nigam Limited  
Free Press House, 1<sup>st</sup> Floor, 3/54-Press Complex  
A.B. Road, Indore-452008  
Madhya Pradesh
- 12) Chattisgarh State Power Distribution Company Limited  
Vidyut Seva Bhawan Parisar, Dangania  
Raipur-492013  
Chattisgarh
- 13) Goa State Electricity Department  
Vidyut Bhawan, Panaji  
Goa-403001
- 14) Daman and Diu Electricity Department  
Administration of Daman & Diu  
Near Satya Narayan Temple  
Nani Daman-396210
- 15) Electricity Department  
Administration of Dadra Nagar Haveli  
Dadra Nagar Haveli UT  
Silvasa-396230

16) Heavy Water Projects  
Department of Atomic Energy  
Heavy Water Board  
Vikram Sarabhai Bhawan  
Anushakti Nagar  
Mumbai-400094

17) Jindal Power Limited  
Tamnar, Raigarh  
Chattisgarh-496001

18) Torrent Power Limited  
Torrent House, Opp. Ashram Road  
Ahmedabad-380009

19) PTC India Limited  
2<sup>nd</sup> Floor, NBCC Tower  
Bhikaji Complex  
New Delhi-110066

20) Haryana Power Purchase Centre  
Shakti Bhawan, Sector-6  
Panchkuka, (Haryana)-134109

21) Rajasthan Power Procurement Centre  
Room No. 24, Vidyut Bhawan, Janpath  
Jyoti Nagar, Jaipur-302005  
Rajasthan

22) Jodhpur Vidyut Vitran Nigam Limited  
New Power House Industrial Area  
Jodhpur-342003  
Rajasthan

23) Jaipur Vidyut Vitran Nigam Limited  
Vidyut Bhawan, Janpath, Jyoti Nagar  
Jyoti Marg, Jaipur-302005  
Rajasthan

24) Ajmer Vidyut Vitran Nigam Limited  
Old Power House, Hathi Bhatta  
Jaipur Road, Ajmer-305001  
Rajasthan

25) BSES Yamuna Power Limited  
Shakti Kiran Building, Karkardooma  
Delhi-110092

- 26) BSES Rajdhani Power Limited  
BSES Bhawan, Nehru Place  
New Delhi-110019
- 27) Tata Power Delhi Distribution Limited  
Cennet Building, 33 kV Sub-station building  
Hudson Limes, Kingsway Camp  
Delhi-110009
- 28) New Delhi Municipal Council  
Palika Kendra Building, Opp. Jantar Mantra  
Parliament Street, New Delhi-110001
- 29) Uttarakhand Power Corporation Limited  
Urja Bhawan, Kanwali Road  
Dehradun-248001
- 30) Uttar Pradesh Power Corporation Limited  
Shakti Bhawan, 14, Ashok Marg  
Lucknow-226001, UP
- 31) North Central Railway  
Allahabad, Uttar Pradesh
- 32) Punjab State Power Corporation Limited  
The Mall, Ablowal, Patiala-147001
- 33) Power Developmetn Department  
Jammu and Kashmir  
Civil Secretariat  
Jammu-180001
- 34) Himachal Pradesh State Electricity Board  
Vidyut Bhawan, Shimla-171004
- 35) Electricity Department UT Chandigarh  
Sector-9, Chandigarh
- 36) Northern Regional Power Committee  
18-A, Qutab Institutional Area  
Shaheed Jeet Singh Marg  
Katwaria Sarai  
New Delhi-110016
- 37) Western Regional Power Committee  
F-3, M.I.D.C. Area, Marol  
Andheri (East)  
Mumbai-400093

38) Kanpur Electricity Supply Company Limited (NR)  
14/71, Civil Lines, Kanpur-208001

39) Rajasthan Rajya Vidyut Prasaran Nigam Limited  
Vidyut Bhawan, Vidyut Marg  
Jaipur-302005

40) Delhi Transco Limited  
Shakti Sadan, Kotla Road  
New Delhi-110002

.....Respondents

**Parties present:**

Shri Tanmaya Vyas, ATIL  
Ms. Kavita Parihar, NRLDC  
Shri Gajendra Singh

**ORDER**

The Petitioner, Adani Transmission (India) Limited (hereinafter referred to as "ATIL") has filed the present Petition for amendment of the transmission licence granted by the Commission vide order dated 29.7.2013 in Petition No. 44/TL/2012, by including 12 ohm Series Line Reactor in Mohindergarh-Dhanonda 400 kV D/C line ckt I & II at Mohindergarh end. The Commission in its order dated 29.7.2013, granted transmission licence to the Petitioner in respect of the dedicated transmission lines and associated bays for the following assets as part of ISTS:

**Transmission Line:**

Sr. No.	Name (end-point location)	Voltage (kV)	Length (km)	Type
1.	Mundra-Mohindergarh	+/-500 kV	990	HVDC bipole
2.	Electrode line at Mundra Station	33 kV	32	---
3.	Mohindergarh-Dhanonda	400 kV	5	D/C
4.	Mohindergarh – Bhiwani	400 kV	50	D/C
5.	Electrode line at Mohindergarh Station	33 kV	185	---
6.	Mundra – Sami	400 kV	282	D/C
7.	Sami – Dehgam	400 kV	152	D/C

**Sub-Stations:**

Sr. No.	Name (Location)	Voltage Level (s) (kV)	Transformer (Nos. and MVA capacity)	Reactive / capacitive compensation (device with MVAR capacity)	No. of bays
1.	HVDC Terminal Station at Mundra TPS				
1.1	AC Yard	400 kV		AC sub filters – (8x120 MVAR + 3x150 MVAR capacitors)	21 (Twenty one)
1.2	DC Yard	+/-500 kV DC	2 x 1494 MVA Converter Transformer (7 x 498 MVA, 1-ph including 1 spare unit)		11 (Eleven)
1.3	Electrode Station				-
2.	Mundra TPS Switchyard	400 kV	2X315 MVA 400/220 kV ICT	Bus Reactor : 3 x 42 MVAR	21 (Twenty one)
3.	Sami Switching Station	400 kV	-	Bus Reactor : 1 x 50 MVAR Line Reactor : 2 x 50 MVAR FSC: 38% series compensation	10 (Ten)
4.	HVDC Terminal Station at Mohindergarh, Haryana				
4.1	AC Yard	400 kV		AC sub filters (8x120 MVAR + 5x150 MVAR capacitors)	34 (Thirty Four)
4.2	DC Yard	+/-500 kV DC	2 x 1494 MVA Converter Transformer (7 x 498 MVA, 1-ph including 1 spare unit)		11 (Eleven)
4.3	Electrode Station				-
5	OPGW Repeater Station at Radhanpur (Gujarat)				
6	OPGW Repeater Station at Sikar (Rajasthan)				
7	OPGW Repeater Station at Pali (Rajasthan)				
8	Bhiwani (PG)	400 kV			4

Sr. No.	Name (Location)	Voltage Level (s) (kV)	Transformer (Nos. and MVA capacity)	Reactive / capacitive compensation (device with MVAR capacity)	No. of bays
	Substation				(Four)
9	Dehgam (PG) Substation	400 kV			4 (Four)

2. The Empowered Committee on Transmission (ECT) in its 3<sup>rd</sup> Meeting, held on 21.12.2018, recommended that as part of scheme to control fault level in Northern Region, installation of 12 ohm Series Line Reactor in Mohindergarh-Dhanonda 400 kV D/C line ckt I & II at Mohindergarh end is required under compressed time schedule through regulated tariff mechanism (RTM). Thereafter, ATIL received an Office Memorandum dated 30.1.2019 from Ministry of Power requesting needful action under compressed time schedule for providing 12 ohm Series Line Reactor in Mohindergarh-Dhanonda 400 kV D/C line ckt I & II at Mohindergarh end as approved in the 3<sup>rd</sup> meeting of ECT. Accordingly, the Petitioner has filed the present Petition for inclusion of 12 ohm Series Line Reactor in the Transmission Licence No. 20/Transmission/2013/CERC in the light of decision taken during the 3<sup>rd</sup> meeting of ECT.

### **Analysis and Decision**

3. The Commission after considering the application of the Petitioner in the light of the provisions of the Electricity Act, 2003 (hereinafter referred to as “the Act”) and the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of Transmission Licence and other related matters) Regulations, 2009 (hereinafter referred to as “the Transmission Licence Regulations”) *prima facie* proposed to amend the licence of the Petitioner and directed to publish notice

under Section 18 (2) (c) of the Act to invite suggestion or objections on the proposal of the Commission. Relevant para of the order of the Commission dated 20.8.2019 is extracted as under:

*“13. Considering that the installation of 12 ohm reactor has been proposed by ECT to control fault level in Northern Region (Phase-II), it is in the public interest to amend the transmission licence granted to the Petitioner for inclusion of the 12 ohm Series Line Reactor in Mohindergarh-Dhanonda 400kV D/c line ckt I & II at Mohindergarh end. We are prima facie of the view that the Petitioner satisfies the conditions for amendment of licence under Section 18 of the Act read with Transmission Licence Regulations. We, therefore, direct that a public notice under Section 18(2) (c) of the Act be published to invite suggestions or objections to amendment of transmission licence granted to the Petitioner. The objections or suggestions, if any, be filed by any person before the Commission by 6.9.2019.”*

4. A public notice under Section 18 (2) (c) of the Act was published on 31.8.2019 in all editions of Indian Express and Hindustan (Hindi). In response to the public notice, no objections/suggestions have been received from the general public.

5. NRLDC vide its letter dated 13.9.2019 has submitted additional information for the consideration of the operational issues being faced due to non-commensurate rating of different elements of the segment of transmission system under consideration in the present Petition. NRLDC has further submitted that there are other lines too in the Northern Region wherein such operational issues have been observed. NRLDC has submitted that these issues have been conveyed to the planning agencies. Relevant extract of the letter dated 13.9.2019 highlighting the issue is as under:

*“This has reference to above referred Petition No. 118/TL/2019 filed by Adani Transmission (India) Limited for amendment in Transmission Licence for installation of 12-ohm Series Line Reactor in Mohindergarh-Dhanonda D/C line ckt-I and II at Mohindergarh end. NRLDC wishes to submit some additional information for the consideration of the Commission regarding operational issues being faced due to non-commensurate rating of different elements of the segment of transmission system under consideration in the Petition No.*



118/TL/2019. The issue is detailed at Annexure-I along with the extracts from the Minutes of 3<sup>rd</sup> Meeting of Northern Region Standing Committee on Transmission (NRSCT) held on 24.6.2019.

In addition to 400 kV Mohindergarh-Dhanonda D/C line, there are other lines too in the Northern Region wherein such operational issues have been observed. These have already been conveyed to planning agencies.

In view of the above facts, it is requested that the Commission:

- a. May be pleased to direct that the switchgear/isolator capacity shall be commensurate with the line capacity for efficient operation and optimum utilization of the transmission assets and wherever it not, actions shall be initiated by the concerned utilities.
- b. May be pleased to pass a generic order mandating the construction of the bay of such capacity that is not less than the capacity of the line.

Annexure I

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400 kV Mohindergarh-Dhanonda D/C line has Quad Moose conductor. As per the Transmission Planning Criterion, the thermal capacity of Quad- Moose line is 2211 MVA at 45° ambient temperature. The switchgear capacity at both the ends of the line i.e. at 400 kV Mohindergarh and Dhanonda Stations is rated at 2kA. Due to limitation of the switchgear capacity at 400 KV Mohindergarh (Adani) and Dhanonda (HVPNL) Stations, the thermal capacity of 400 kV Mohindergarh- Dhanonda D/C line gets limited to only 1384 MVA despite the actual thermal capacity being 2211 MVA at 45° ambient temperature.

The isolator /switchgear capacity limitation of 2 kA is causing transmission constraint on this line. There have been quite a few instances of tripping of both the circuits of 400 kV Mohindergarh -Dhanonda D/C line one followed by the other when the total loading on both the circuits of the said line is 1400 MW or above. Once such event recently occurred on 7<sup>th</sup> May 2019. Consequently, power order of ±500 kV Mundra-Mohindergarh HVDC Bipole transmission line had to be reduced. The low switchgear capacity is thus resulting in limiting the power order of ±500 kV Mundra-Mohindergarh HVDC Bipole transmission line.

The issue has also been raised by NRLDC and deliberated in the Meeting of Northern Region Standing Committee on Transmission (NRSCT). In this regard the relevant excerpts from the Minutes of 3<sup>rd</sup> Meeting of Northern Region Standing Committee on Transmission (NRSCT) are quoted below:

.....  
29.7 After deliberations, member agreed with proposal of switchgear upgradation works at Dadri, Greater Noida, Mohindergarh, Dhanonda and Nawada. Switchgear upgradation at G. Noida has already been taken up by UPPTCL. Nawada switchgear upgradation works have already been agreed by HVPNL. HVPNL was requested to take up the upgradation works at Dhanonda and Nawada at the earliest. HVPNL agreed for the same and stated that they would also explore PSDF funding for the scheme.”

6. The matter was heard on 17.9.2019. During the hearing, the Representative of NRLDC reiterated the issue highlighted in its letter dated 13.9.2019. However, it was clarified by the Representative of NRLDC that NRLDC has no objection to the present amendment of the Petitioner's licence.

7. We have considered the submission of NRLDC. The Petitioner has filed the present Petition for amendment of licence as per direction of ECT for installation of 12 ohm reactor at Mohindergarh end. With regard to NRLDC submission regarding direction regarding commensurate capacity of switchgear vis-a- vis line, it is noted that up-gradation works has already been agreed to be taken up as per 3<sup>rd</sup> NRSCT minutes. Accordingly, the Petitioner shall ensure up-gradation works at Mohindergarh as agreed in 3<sup>rd</sup> NRSCT.

8. As regard amendment of transmission licence, Regulation 19(2) of the Transmission Licence Regulations provides that the procedure specified in Regulation 7 shall mutatis mutandis be applicable in case the licensee makes an application for any alteration of or modification to the terms and conditions of the licence. Further, clauses (15) and (16) of Regulation 7 of Transmission Licence Regulations provides as under:

*“(15) The Commission may after consideration of the further suggestions and objections, if any, received in response to the public notice as aforesaid, grant licence as nearly as practicable in Form-III attached to these regulations or for reasons to be recorded in writing, reject the application if such application is not in accordance with the provisions of the Act, the rules or regulations made thereunder or any other law for the time being in force or for any other valid reasons.*

*(16) The Commission may, before granting licence or rejecting the application, provide an opportunity of hearing to the applicant, the Central Transmission*

*Utility, the long-term customers, or the person who has filed suggestions and objections, or any other person:*

*Provided further that the applicant shall always be given a reasonable opportunity of being heard before rejecting the application.”*

9. We have examined the matter. The Petitioner has fulfilled the requirements of the Act and the Transmission Licence Regulations for amendment to the Transmission Licence No. 20/Transmission/2013/CERC dated 29.7.2013. The Petitioner has published the public notice of the proposed amendment to the licence in terms of Section 18 (2) (c) of the Act and Regulation 19 (3) of the Transmission Licence Regulations. In response, no objections and suggestions have been received from the general public. In our order dated 20.8.2019, we had proposed to amend the transmission licence to the Petitioner company and had directed for issuance of public notice. In response to the public notice published by the Commission, no suggestions/objections have been received except for the additional issue highlighted by NRLDC. The Representative of NRLDC during the hearing on 27.9.2019 submitted that NLRDC has no objection to the amendment of licence proposed in the Petition. Central Transmission Utility vide its letter dated 10.5.2019 has submitted that in order to control the fault level at 400 kV Mohindergarh sub-station developed by ATIL through TBCB route, installation of 12 ohm Series Line Reactor in each circuit of Mohindergarh-Dhanonda 400 kV D/C line at Mohindergarh end was agreed in the 39<sup>th</sup> meeting of the Standing Committee on Power System Planning of Northern Region held at 29/30-5.2017. CTU has further submitted that the scheme was also discussed in the 2nd Meeting of National Committee on Transmission (NCT) held on 4.12.2018 and NCT recommended implementation of above work. Considering all the materials on record, we are of view that it is in the

public interest to approve amendment to the transmission licence granted to the Petitioner, Adani Transmission (India) Ltd. to include 12 ohm Series Line Reactor in Mohindergarh-Dhanonda 400 kV D/c line ckt I & II at Mohindergarh end. Accordingly, we direct to include the above scope of work in the transmission licence granted to the Petitioner vide Transmission Licence No. 20/Transmission/2013/CERC dated 29.7.2013. The licensee shall remain bound by the terms and conditions contained in the order dated 29.7.2013.

10. A copy of this order be sent to the Central Government in Ministry of Power and CEA in terms of sub-section (7) of Section 15 of the Act for their information and record.

11. Petition No. 118/TL/2019 is disposed of in terms of the above.

Sd/-  
**(I.S.Jha)**  
**Member**

sd/-  
**(Dr. M.K. Iyer)**  
**Member**

sd/-  
**(P.K. Pujari)**  
**Chairperson**