

BEFORE
THE CENTRAL ELECTRICITY REGULATORY
COMMISSION
NEW DELHI

Filing No. _____

Petition No. _____

IN THE MATTER OF:

Identification of Maharashtra State Electricity Transmission Company Limited (MSETCL) 132kV Nepanagar (from 220kV Nepanagar Substation, Madhya Pradesh) to Dharni (132/33kV Dharni Substation, MSETCL Amaravati Zone, Maharashtra) line as Inter-State Transmission System and further Determination of Inter-State Transmission Tariff for the Tariff Period 2019-24, under Section 79(1)(d) of the Electricity Act, 2003 read with Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, for inclusion in the POC Transmission Charges as determined by the Central Electricity Regulatory Commission (CERC) time to time.

Maharashtra State Electricity Transmission Company Limited,

Prakashganga, Plot No. C-19, E-Block,

Bandra Kurla Complex, Bandra (East),

Mumbai – 400 051.

..... Petitioner

Power Grid Corporation of India Ltd.,

Saudamini, Plot No. 2, Sector-29, Near IFFCO Chowk,



Gurgaon (Haryana) – 122 001 and Others ... Respondent 1

Western Regional Power Committee

Karntiveer Lakhui Salve Marg,
Santacruz Electronic Export Processing Zone,
Jogeshwari East, Mumbai – 400 093, Maharashtra. ... Respondent 2

Western Regional Load Despatch Centre

Karntiveer Lakhui Salve Marg,
Santacruz Electronic Export Processing Zone,
Jogeshwari East, Mumbai – 400 093, Maharashtra. ... Respondent 3

Madhya Pradesh Power Transmission Company Ltd.,

Block No. 2, Shakti Bhawan, Rampur,
Jabalpur – 482 008, Madhya Pradesh. ... Respondent 4

Maharashtra State Electricity Distribution Company Ltd.,

Prakashgad, Plot No. G-9, Anant Kanekar Marg,
Bandra (East), Mumbai – 400 051, Maharashtra. ... Respondent 5



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FILED BY

Maharashtra State Electricity Transmission Company Ltd

Represented by



MEMO OF PARTIES

Maharashtra State Electricity Transmission Company Limited,

..... **Petitioner**

v/s

Power Grid Corporation of India Ltd.,

Saudamini, Plot No. 2, Sector-29, Near IFFCO Chowk,

Gurgaon (Haryana) – 122 001 and Others ... **Respondent 1**

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Madhya Pradesh Power Transmission Company Ltd.,

Block No. 2, Shakti Bhawan, Rampur,

Jabalpur – 482 008, Madhya Pradesh. ... **Respondent 4**

Maharashtra State Electricity Distribution Company Ltd.,

Prakashgadh, Plot No. G-9, Anant Kanekar Marg,

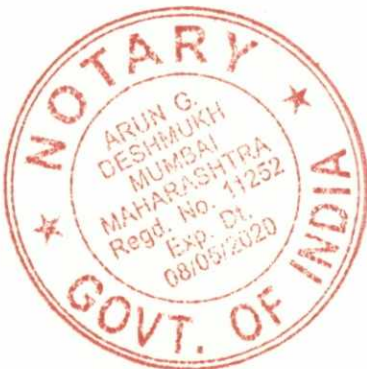
Bandra (East), Mumbai – 400 051, Maharashtra. ... **Respondent 5**



Affidavit on behalf of Maharashtra State Electricity Transmission Company Limited

I, Shashank s/o Shri Subhashrao Jewalikar, aged 47 years, having my office at **4th Floor, 'Prakashganga', Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East), Mumbai-4000051** does solemnly affirm and say as follows: -

1. I am the Chief Engineer (State Transmission Utility) of the Maharashtra State Electricity Transmission Company Limited and the Petitioner in the above matter and I am duly Authorised by the said petitioner to make this affidavit.
2. I submit that an enclosed Petition is being filed for Determination of Transmission Tariff of 132 kV Nepanagar (M.P.)- Dharni (M.S.) line as Interstate Line.
3. I submit that no other Petition except this Petition has been filed directly or indirectly for Determination of Transmission Tariff of 132 kV Nepanagar (MP)- Dharni (MS) line as Interstate Line.
4. The statements made in the enclosed submissions are based on the information from the concerned officers of the Company and I believe them to be true.
5. I say that there are no proceedings pending in any court of law/ tribunal or arbitrator or any other authority, wherein the Petitioners are a party and where issues arising and/or reliefs sought are identical or similar to the issues arising in the matter pending before the Commission.

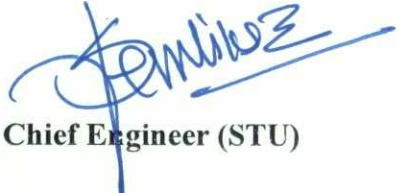


I solemnly affirm at Mumbai on this ^{26th} day of June, 2019 that, the contents of the above affidavit are true to my knowledge, no part of it is false, and nothing material has been concealed there from.

Identified before me

Mumbai

Date: ^{26th} day of June, 2019


Chief Engineer (STU)
MSETCL



BEFORE
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Identification of Maharashtra State Electricity Transmission Company Limited (MSETCL) 132kV Nepanagar (from 220kV Nepanagar Substation, Madhya Pradesh) to Dharni (132/33kV Dharni Substation, MSETCL Amaravati Zone, Maharashtra) line as Inter-State Transmission System and further Determination of Inter-State Transmission Tariff for the Tariff Period 2019-24, under Section 79(1)(d) of the Electricity Act, 2003 read with Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, for inclusion in the POC Transmission Charges as determined by the Central Electricity Regulatory Commission (CERC) time to time.

Maharashtra State Electricity Transmission Company Limited,

‘Prakashganga’, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East),
Mumbai – 400 051.

..... Petitioner

Power Grid Corporation of India Ltd.,

Saudamini, Plot No. 2, Sector-29, Near IFFCO Chowk,



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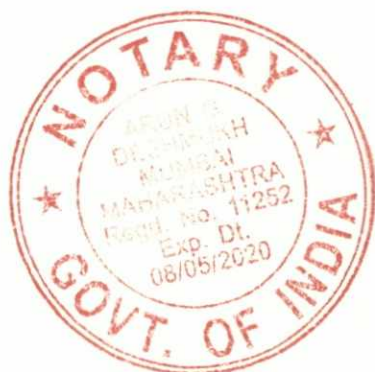
Maharashtra State Electricity Distribution Company Ltd.,

Prakashgad, Plot No. G-9, Anant Kanekar Marg,

Bandra (East), Mumbai – 400 051, Maharashtra. ... Respondent 5

MOST RESPECTFULLY SHOWETH:

1. The Petitioner, namely, Maharashtra State Electricity Transmission Company Limited (“**MSETCL/Petitioner**”) is filling the present Petition for the Identification of Maharashtra State Electricity Transmission Company Limited (MSETCL) 132kV Nepanagar (from 220kV Nepanagar Substation, Madhya Pradesh) to Dharni (132/33kV Dharni Substation, MSETCL Amaravati Zone, Maharashtra) line as Inter-State Transmission System and for the determination/approval of Inter-State Transmission Tariff under Section 79(1)(d) of the Electricity Act, 2003 read with Regulation



86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulation, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

2. The Petitioner is a company incorporated and registered under the Companies Act, 1956 having registered office at 'Prakashganga', Plot No. C-19, E-Block, Bandra-Kurla Complex, Bandra (East), Mumbai – 400 051. It is engaged in the business Inter-State Transmission of Electricity as well as Intra-State Transmission of Electricity in the State of Maharashtra. MSETCL is also performs the role of State Transmission Utility with a dedicated responsibility of planning developing, operation and maintaining the State Transmission System in order to facilitate transmission of electricity from its source to Load Centres.
3. The Respondent 1 is a Government Company within the meaning of Companies Act, 1956. It is the Central Transmission Utility ('CTU'). It is deemed to be a transmission licensee under Section 14 of the Electricity Act, 2003.
4. Respondent 2 is a Regional Power Committee, established by resolution by the Central Government under Section 2 (55) of the Electricity Act, 2003, for Western Region in order to facilitate the integrated operation of the power system in the Western Region.
5. Respondent 3 is a Centre established Load Despatch Centre for Western Region under Section 2(56) read with Section 27(1) of the Electricity Act, 2003, who is an apex body to ensure integrated operation of the power systems in the Western Region.
6. Respondent 4 is a State Government Company within the meaning of Companies Act, 1956. It is the State Transmission Utility in the

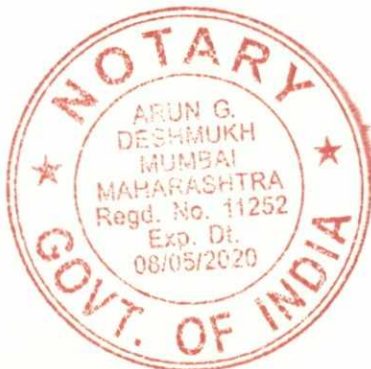


Madhya Pradesh State. It is deemed to be transmission licensee under Section 14 of the Electricity Act, 2003.

7. Respondent 5 is a State Government Company within the meaning of Companies Act, 1956. It is the State Distribution Company in the State of Maharashtra.

BACKGROUND

8. The Dharni City of Amravati District, Maharashtra, is situated in the Melghat area which is very close to the Madhya Pradesh State border. As per Census 2011, the city has a total population of 15,671 people. Most of the area near the Dharni City is hilly and covered with dense forest. This city is also well connected to some of the major cities of Madhya Pradesh such as Khandwa, Burhanpur and Indore.
9. Prior to the commissioning of the 132 kV Nepanagar – Dharni Transmission Line Project (**“Nepanagar –Dharni Transmission Project”**), Dharni City area was supplied power through two 33/11 kV Sub-station (S/s) both of which were fed from MSETCL’s 132 kV/33 kV Hiwarkhed S/s. The 33 kV line of Maharashtra State Electricity Distribution Company Ltd. (MSEDCL) emerging from the Hiwarkhed S/s passes through a dense forest to reach Dharni city area. The frequent breakdowns on these lines passing through the dense forest area have caused severe supply interruptions and have always posed a major challenge for the MSEDCL’s staffs for restoration. The situations turn worse during rainy seasons, which ultimately impacts the turn-around time for the line repair works.
10. Apart from the geographical challenges, there were also technical challenges in terms of power quality, faced by MSEDCL, where



there always used be a situation of voltage drop at receiving end i.e. at Dharni S/s. While the sending end voltage at Hiwarkhed S/s is 33 kV, the voltage at receiving end always ranges between 23 kV to 25 kV. It is given to understand that, MSEDCL despite having made several efforts to improve the voltage profile, there were no satisfactory improvements.

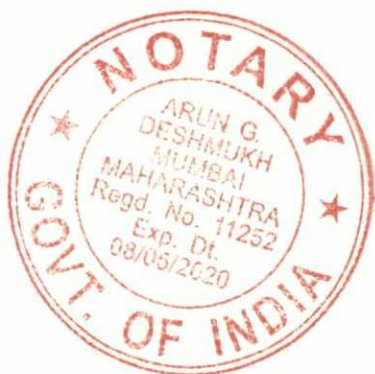
11. Dharni City being connected to the major cities of Maharashtra and Madhya Pradesh, also has a favorable agriculture economy, because of good land fertility and ample water source for agriculture farming. Due to poor voltage profile and interrupted power supply, this has posed a major barrier for the development of the Dharni City and nearby villages.
12. In order to provide the reliable and uninterrupted power supply, it was proposed to erect 132/33 kV S/s at Dharni, whose primary source of 132 kV supply was identified to be sourced from 220/132 kV Nepanagar S/s in Madhya Pradesh, which is approximately 55 km from the proposed 132 kV Dharni S/s.
13. In order to discuss various issues involved in extending supply from Madhya Pradesh to the proposed 132 kV Dharni S/s, MSETCL and Madhya Pradesh Power Transmission Company Ltd. (MPPTCL) held a joint meeting on 10th May, 2011 at MPPTCL Office, Jabalpur, where following points were discussed and decided:
 - MPPTCL suggested that, Nepanagar is nearest to the Dharni Substation for sourcing 132 kV Dharni S/s and 132 kV bay is available at Nepanagar S/S to source power to Dharni substation.



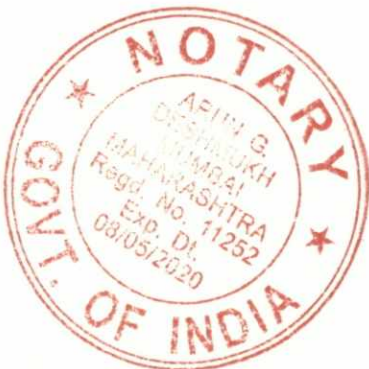
- Further, MSETCL would construct the said line and all the statutory approvals by Forest department, PTCC and other clearances will be obtained by MSETCL from the concern authorities. In addition, MPPTCL agreed to provide assistance to MSETCL, for seeking official approvals required from MP Govt. and Central Govt.
- For procurement of power from the said line, MPPTCL suggested that, Maharashtra State Electricity Distribution Company Limited (MSEDCL) should approach Madhya Pradesh Electricity Regulatory Commission (MPERC) for the grant of Long Term Open Access from MPPTCL.
- MPPTCL further suggested that, O&M charges of the proposed 132 kV bay and line will be applicable and will be finalized by separate mutual agreement.

14. Accordingly, the feasibility of the project was confirmed by MSETCL and MPPTCL in the Minutes of Meeting of Joint meeting. The MoM of the Joint Meeting held at Jabalpur, Madhya Pradesh is enclosed as **Annexure A**.

15. Further, based on consensus between MSETCL and MPPTCL regarding the erection of 132 kV Neapanagar – Dharni Transmission Line, followed by Board approval for the said Transmission Project vide Board Resolution No. 65/17, dated 30 August, 2011, MSETCL filed its Detailed Project Report (DPR) vide letter dated, 31 October, 2011 (Letter No. “MSETCL/CO/Trans.Proj/S&C-II/MERC/01/15969”), with an estimated project cost of Rs. 3398.00 Lakh, before the Maharashtra Electricity Regulatory Commission (MERC) for seeking in-principal approval. The referred DPR has been enclosed as **Annexure B** to this Petition.



16. Further, the Hon'ble Commission vide letter dated 22 May, 2013 (Letter No. "MERC/CAPEX/20132014/0451) had in principally approved the submitted DPR for the same estimated cost of Rs. 3398.00 Lakh.
17. Further, in order to execute the Nepanagar – Dharni Line Project, Petitioner has awarded the works related to erection and supply of 132/33kV Dhanri S/s to M/s Pratibha Electricals Ltd. and 132 kV SCDC Transmission Line from Nepanagar to Dharni to M/s Neha Constructions Ltd., through competitive bidding mode. The said Transmission Project was completed and commissioned on 10 February, 2017. The Letter of Award (LoA) allotted to the winning Bidders/Agency for establishment of Dhanri S/s and 132 kV SCDC Transmission Lines is enclosed as **Annexure C & C1** to this Petition.
18. Post CoD of the Nepanagar – Dharni Line, MSEDCL vide its letter (No. MSEDCL/CE/PP/9551), dated 26 April, 2017 raised its concern to the State Transmission Utility (STU) for initiating the procedure for declaration 132 kV Nepanagar – Dharni Line as Inter-State line. The reason cited by MSEDCL for the same are a) for ease of power drawl from Madhya Pradesh and b) in order to initiate a proper power purchase arrangement at Inter-State level.
19. In view of above, the said matter was deliberated before the Western Regional Power Committee (WRPC) during the various Technical Co-ordination Sub-Committee (TCC)/ WRPC meetings as well as during Commercial Committee Meeting (CCM) held on respective dates as referred hereunder. The said meetings were attended by representatives mainly from MSETCL, MPPTCL, MSEDCL, WRPC & Western Regional Load Despatch Centre (WRLDC) and



Madhya Pradesh Power Management Company Limited (MPPMCL). The summary of the deliberations with WPRC, as recorded in the respective Minutes of Meeting is provided as under:

- a. **Minutes of the 33rd TCC/ WRPC meeting held on 31.01.2017 and 1.02.2017**, MSETCL requested WRPC to accord approval for commissioning of the Nepanagar-Dharni Transmission line subject to commercial settlement as per bilateral agreement. With respect to this request, WRPC stated that for accounting either the line can be treated as deemed Inter-State Transmission (ISTS) line as per PoC regulations and accounted for in the accounts of WRPC or the arrangement can be considered as a standalone transmission line/network where the energy drawn by Maharashtra through this line be settled bilaterally by Maharashtra and Madhya Pradesh, for which MPPMCL & MSEDCL shall sign an agreement.

Where, WRLDC stated that, deemed ISTS status for the said line is not possible, since the deemed ISTS status is only given to those lines which were in system before PoC regulations came into effect. The said line constructed by MSETCL, which was commissioned after the PoC regulations came into effect and thus, the said line cannot be considered as deemed ISTS.

Accordingly, TCC members deliberated the issue and gave the following opinions:

- 132 kV Nepanagar-Dharni line will be operated in radial mode.
- Commercial settlement of power between MSEDCL and MP DISCOM will be decided as per mutual agreement.



- This line will not be treated as ISTS or deemed ISTS line, which was agreed by MSETCL.

WRPC agreed to the recommendations of the TCC in this meeting.

The Minutes of the 33rd TCC/ WRPC meeting held on 31.01.2017 and 1.02.2017 is enclosed as **Annexure D** to this Petition.

- b. **Minutes of the 75th CCM held on 28.06.2017**, CCM opined that, 132 kV Nepanagar- Dharni line will not be treated as ISTS line, which was agreed by MSETCL. Further, MPPMCL also took objection on declaration of 132 kV Nepanagar- Dharni line as ISTS line, since it is a radial line and hence there is no reverse power flow. In addition, General Manager, WRLDC stated that, the issue has already been decided in 33rd WRPC meeting, and hence CCM cannot take further decision on this.

In view of the above, the Committee recommended that the MPPMCL and MSETCL resolve the commercial issue bilaterally and intimate the progress in next CCM.

The Minutes of the 75th CCM meeting held on 28.06.2017 is enclosed as **Annexure E** to this Petition.

- c. Minutes of the 34th WRPC meeting held on 11.09.2017, same issue was raised by MSETCL regarding the declaration of 132 kV Nepanagar - Dharni line as ISTS line. **Further, General Manager, WRLDC stated that as the ownership of line is with Maharashtra, Maharashtra only can opt whether it can be considered as ISTS or STU line. WRPC recommended MSETCL to approach Hon'ble CERC to address the issue.**



The Minutes of the 34th WRPC meeting held on 11.09.2017, is enclosed as **Annexure F** to this Petition.

- d. **Minutes of 42nd Standing Committee Meeting (SCM) held on 17.11.2017**, where the committee members opined that, *“as this line interconnects two states it is a natural ISTS line. However, MSETCL should approach Hon’ble CERC to address the issue.”*

The Minutes of 42nd SCM held on 17.11.2017, is enclosed as **Annexure G** to this Petition.

- e. **Minutes of 77th CCM meeting held on 20.04.2018**, MSEDCL has requested WRPC to certify the 132 kV Nepanagar-Dharni line as ISTS line, so that scheduling of central sector (ISGS) power to MSEDCL is possible through this line. Also, MSEDCL submitted that, as per CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, the line has to be certified by WRPC as ISTS line.

During discussion regarding this issue, SE (c), WRPC stated that, as per section 2 (36) of Electricity Act, 2003, 132 KV Nepanagar- Dharni line qualifies as Natural ISTS and hence there is no need to give separate ISTS certification from WRPC.

MPPTCL representative was not present during the meeting and hence WRPC requested MPPTCL to send comments on issues raised during this meeting. Accordingly, MPPTCL submitted their comments. MPPTCL submitted that, *“there is no central sector power flow on Nepanagar-Dharni line from MP state to Maharashtra. Therefore, status of this line cannot be considered as ISTS line for installation of meters by PGCIL at Nepanagar.”*



Further, MPPTCL informed that, *“in order to file petition before CERC, certification of WRPC for all the inter-state lines as natural ISTS lines shall be necessary. Once these lines are certified as natural ISTS lines by WRPC, MPPTCL shall approach CERC for approval of tariff for these lines.”*

The Minutes of 77th CCM meeting held on 20.04.2018, is enclosed as **Annexure H** to this Petition.

- f. **Minutes of 36th WRPC meeting held on 22.06.2018 and 23.06.2018**, MPPTCL stated that, although the line connects two states and hence qualifies for ISTS status, it is a radial line. Portion of Maharashtra is radial to MP network. So whatever power flows through this line also flows through MP network. Therefor MP should get transmission charges and losses for the intervening network. If it is acceptable to Maharashtra, MP will not have any problem.

Further, CGM, MPPMCL stated that, as per section 2 (36) (i) of Electricity Act 2003 for natural ISTS is applicable for ‘main’ transmission line and not for radial line. Therefore, it cannot be considered as natural ISTS line. WRPC stated that, as there is no consensus between MP and Maharashtra on the issue of declaration of 132 KV Nepanagar-Dharni as ISTS line, Maharashtra may take up the issue to Hon’ble CERC.

The Minutes of 36th WRPC meeting held on 22.06.2018 and 23.06.2018, is enclosed as **Annexure I** to this Petition.

20. In view of the above, Petitioner would like to refer the Hon’ble CERC’s Order (Order No. 15/Suo-Motu/2012) dated 14.3.2012 in the matter of *“Determination of tariff of the inter-State transmission lines connecting two States”*, the Hon’ble Commission has



identified Region-wise Transmission Systems as the ISTS, the relevant extract of the referred Order is reproduced as under:

"3. "Inter-State transmission system" has been defined under Section 2(36) of the Act as under:

"2(36) inter-State transmission system includes-

(i) any system for the conveyance of electricity by means of main transmission line from the territory of one State to another state;

(ii) the conveyance of electricity across the territory of any intervening State as well as conveyance within the State which is incidental to such inter-State transmission of electricity;

(iii) the transmission of electricity within the territory of a State on a system built, owned, operated, maintained or controlled by a Central Transmission Utility;"

***Under the above provision, the conveyance of electricity from territory of one state to another State is also considered to be a part of inter-State transmission system. In terms of Section 79(1)(d) of the Act, the tariff of these lines are also required to be determined by the Central Commission."* Emphasis added.**

21. Thus, with reference to the aforementioned extract of the referred under the Hon'ble CERC's Order, the said transmission system is qualified for the ISTS status, as per the Section 2(36) of the Electricity Act, which was also acknowledged in various deliberations/meetings with WRPC. Further, in the 42nd Standing Committee Meeting (SCM) and in the 77th CCM meeting it was also acknowledged that, the said transmission line is a **natural ISTS** and thus does not require any separate certification from the WRPC.

22. With respect to the issue of whether transmission line of the nature of radial line qualifies under the definition of Inter-State



transmission line, the Section 2(42) of the Electricity Act, 2003, providing the definition for 'main' as under needs to be referred:

"2(42) "main" means any electric supply-line though which electricity is, or is intended to be supplied" Emphasis added.

23. Thus, referring to the above definition, provides the sufficient clarity, that there is no classification between Main or Radial Transmission network in the aforesaid definitions provided under the Electricity Act, 2003. In addition, the Hon'ble CERC in its Order (Order No.237/TT/2016), dated 21 July, 2018 has also provided the ISTS status to all the 38 transmission lines of APTRANSCO, which also acknowledges that the definition provided under Section 2(36) of the Act, does not differentiate between the meshed or the radial network of the transmission line. The relevant extract of the Order is provided as under:

"a. The 132 kV lines are inter-state lines as per Section 2(36)(i) of the Electricity Act, 2003 as the instant lines are the interconnecting transmission lines between two States. The said definition does not differentiate between part of meshed network and radial lines. SRPC has also certified the above mentioned lines as inter-State lines vide letters dated 31.10.2016 and 23.11.2016. As per the Section 79(1)(d) of the Electricity Act, 2003, the Central commission has an obligation to determine tariff for inter-State transmission of electricity. Hence, the tariff of these lines is to be determined by the Commission. In view of the above, APTRANSCO has filed the instant petition for determination of tariff for the same and the 132 kV lines need to be included in the PoC methodology, so that the yearly transmission charges of the



said lines be recovered. The 2010 Sharing Regulations also does not differentiate between meshed lines and radial lines, if the lines are ISTS lines, they need to be included in PoC mechanism. The tariff may be determined for the instant transmission lines so as to include the same in the PoC methodology." Emphasis added

24. Thus, in view of the above facts and findings, the 132 kV Nepanagar – Dharni Transmission System evidently qualifies the criteria for getting the status of natural ISTS. Thus, Petitioner humbly requests Hon'ble CERC to identify and provide the Status of Inter-State Transmission System to the 132 kV Nepanagar – Dharni Transmission Line in line with the statutory provision under the Electricity Act, 2003 and approve the Annual Transmission Tariff for the said Transmission Line in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2019 for the Tariff Period 2019-24.

Determination of Annual Transmission Charges for the Tariff Period 2019-2024

25. The Regulation 14(5) and 15 of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff) Regulation, 2019 ("CERC Tariff Regulations, 2019") specifies the components of Annual Fixed Cost. The relevant extract of the Regulations is provided as under:

"14...

...

(5) The tariff for transmission of electricity on inter-State transmission system shall comprise transmission charges for



recovery of annual fixed cost consisting of the components specified in Regulation 15 of these regulations.

15. Capacity Charges: The capacity charges shall be derived on the basis of annual fixed cost. The Annual Fixed Cost (AFC) of a generating station or a transmission system including communication system shall consist of the following components:

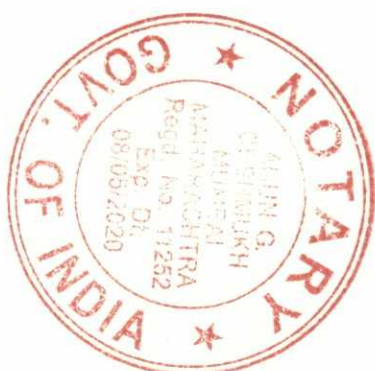
- (a) Return on equity;*
- (b) Interest on loan capital;*
- (c) Depreciation; Interest on working capital; and*
- (d) Operation and maintenance expenses:*

Provided that Special Allowance in lieu of R&M, where opted in accordance with Regulation 28 of these regulations, shall be recovered separately and shall not be considered for computation of working capital." (Emphasis added)

26. Thus, in view of the aforesaid Regulations, Petitioner has calculated the AFC components of its Nepanagar- Dharni Transmission Line for the Tariff Period 2019-24.

OPERATION AND MAINTENANCE EXPENSES (O&M Expenses)

27. Regulation 35(3)(a) of the CERC Tariff Regulation, 2019 specifies the norms for the Transmission Lines, Bays & Transformers. Following are the details of Bays, Transformer and Transmission Lines of the Nepanagar – Dharni Line, for which Petitioner has claimed the O&M Expenses in line with the norms provided in the referred Regulations:



Sr. No.	Particulars	Quantity
1	132 kV Line Bays	2 Nos.
2	Transformer Bays	1 Nos.
3	33 kV Bays	2 Nos.
4	25 MVA Transformer	1 Nos.
5	132 kV Single Circuit Transmission Line	60 Ckt. Km

28. Thus, the Petitioner has worked out the O&M Expenses for the said transmission system as under:

O&M Expenses for the Substations covered in the instant Petition	2019-20	2020-21	2021-22	2022-23	2023-24
Normative rate of O&M - S/s Bays as per Regulation (in Rs. Lakh)	16.08	16.64	17.23	17.83	18.46
No. of Bays	5.00	5.00	5.00	5.00	5.00
O&M Claimed for - S/s Bays (in Rs. Lakh) [a]	80.40	83.20	86.15	89.15	92.30
Normative rate of O&M - Transformers as per Regulation (in Rs. Lakh)	0.25	0.25	0.26	0.27	0.28
No. of Transformers	1.00	1.00	1.00	1.00	1.00
O&M Claimed for - Transformers (in Rs. Lakh) [b]	0.25	0.25	0.26	0.27	0.28
Total O&M Claimed - S/s (in Rs. Lakh) [a+b]	80.65	83.45	86.41	89.42	92.58

29. Further, Regulation 35(4) of the CERC Tariff Regulations, 2019 specifies the methodology for computation of the O&M Expenses for the Communication System. The relevant provision is provided as under:



“35....

....

(4) *Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”*

30. Thus, in view of above, Petitioner has worked out the O&M Expenses for the Communication System for the Tariff Period 2019-24

O&M Expenses for the Communication System covered in the instant Petition	2019-20	2020-21	2021-22	2022-23	2023-24
The original project cost/Asset related to the Communication System	90.14				
O&M Expenses as per Regulations (2% of the Original Project Cost) (In Rs. Lakh)	1.80	1.80	1.80	1.80	1.80

31. The total O&M Expenses claimed for the Tariff Period 2019-24 is provided as under:

Rs. Lakh						
Sr. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	A) Normative O&M					
1	Transmission Line	15.12	15.60	16.20	16.74	17.34
2	Substation	80.65	83.45	86.41	89.42	92.58



Sr. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
3	Communication System	1.80	1.80	1.80	1.80	1.80
4	Total Normative O&M Expenses	97.57	100.86	104.42	107.96	111.72
	B) O&M claimed under Regulation 35 (3)(c)					
1	Security Expenses	-	-	-	-	-
2	Actual Capital Spare consumed	-	-	-	-	-
3	Total O&M Expenses	97.57	100.86	104.42	107.96	111.72

32. The detailed working of the O&M Expenses claimed for the Tariff Period 2019-24 is provided under Form 2 of the CERC Tariff Formats, which is enclosed as **Annexure A1** to this Petition.

33. **Thus, Petitioner humbly request Hon'ble Commission to approve the O&M Expenses worked out for the Tariff Period 2019-24, in accordance with the CERC Tariff Regulation, 2019.**

CAPITAL COST

34. Petitioner humbly submits that, MSETCL's Board vide 'Board Resolution No. 65/17', dated 30 August, 2011, provided the approval for the Scheme "Establishment of 2 x 25 MVA, 132/33 kV Sub-Station (S/s) at Dharni, Dist. Amravati" (Nepanagar – Dharni Line) at an estimated cost of Rs. 3398.00 Lakhs (including IDC component of Rs. 165.00 Lakhs) covering following works as under:

- Establishment of 2 x 25 MVA, 132/33 kV Transformers with Bays.



- Construction of 132 kV SCDC Line from 220/132kV Nepanagar (M.P.) S/s to proposed 132/33kV Dharni S/s (Inter-State Line) – 55 km.
- 132 kV Line Bays – 2 Nos. (1 No. at 132 kV Dharni S/s and 1 No. at 220 kV Nepanagar (M.P.) S/s).
- 33 kV Outlets – 6 Nos.

The referred Board Resolution 65/17 is enclosed as **Annexure J** to this Petition.

35. Based on the aforementioned Board Resolution, the Petition submitted its Detailed Project Report (DPR) for the said Transmission Project before the Hon'ble Maharashtra Electricity Regulatory Commission ("**Hon'ble MERC**") vide letter "MSETCL/CO/Trans. Proj/S&C-II/MERC/01/15969", dated 31 October, 2011, with an estimated project cost of Rs. 3398.00 Lakh.

36. The Hon'ble MERC vide letter "MERC/CAPEX/20132014/0451, dated 22 May, 2013 had in principally approved the submitted DPR for the same estimated cost of Rs. 3398.00 Lakh with a following break up as under:

Sr. No.	Particulars	Unit	Rate	Qty.	Estimated by MSETCL
1	Civil Works	No.	324.88	1	324.88
2	Transmission Lines				
	a. 132kV SCDC line from 220 kV Nepanagar S/s to 132 kV proposed	km	26.81	55	1474.55



Sr. No.	Particulars	Unit	Rate	Qty.	Estimated by MSETCL
	Dharni Interstate line with 0.2 Sq. Inch ACSR (Panther)				
3	2 x 25 MVA, 132/33 kV Power Transformers with bays.	No.	589.36	-	589.36
4.	132 kV Line Bays	No.	90.42	2	180.84
5.	PLCC Equipments				
	a. 132 kV Station Equipment	No.	12.16	1	12.16
	b. 132 kV Line Equipment	No.	16.64	2	33.28
6	SCADA System	No.	70.00	1	70.00
7	33 kV Outlets	No.	22.40	6	134.40
8	132 kV Bus-bar Protection		14.00	-	14.00
9	Sub Total – I				2833.73
10	Add Contingencies 3% on Sub Total - I				85.01
11	Sub Total – II				2918.74
12	Add Centages 10.75% on Sub Total – II				313.76
13	Sub Total – III				3232.51
14	IDC Component				165.00
15	Total				3398.00
16	Total Rs. in Cr.				33.98

37. Further, the Hon'ble MERC in the same in-principal approval letter, dated 22 May, 2013 had also provided the Time Frame/Phasing of expenditure as under:

Year	Amount (Rs. Crore)
2013-14	20.72
2014-15	13.26
Total	33.98

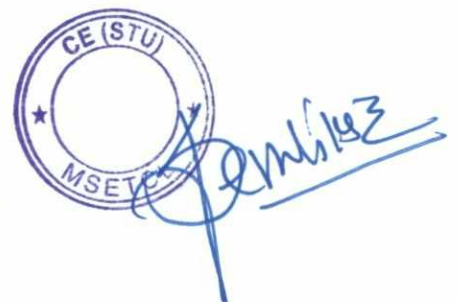


38. The Petitioner further submits that, the project supply and erection work as defined under the Scope of DPR was expected to start from 20 October, 2014 (Zero Date) and was estimated to be completed within a stipulated time period of 12 months from the zero date i.e. 19 October, 2015. However, the Nepanagar – Dharni Line Project was finally Commissioned on 10 February, 2017 i.e. in FY 2016-17, resulting in overall delay of 480 days in completion of project work.

39. The detailed reasons for the overall delay in project commissioning is provided in the following table:

40. Reason for delay in transmission substation work:

- a. **Land availability:** The Dharni S/s site was proposed to be handed over to the appointed Agency on 20 October, 2014. Due to unavailability of Land, the actual civil work was started on 27 February, 2015. This has resulted in a delay of **130 days**.
- b. **Delay on account of Supply of materials for Dharni S/s:** Supply of material for Dharni S/s was expected to be completed in May, 2015. However, the supply of materials was started by the appointed Agency from March, 2016 to 27 January, 2017. Further, the supply of 132/33 kV Power Transformer was supplied by MSETCL on 25 September, 2016.
- c. **Delay on account of Erection of Dharni S/s:** Consequent to delay in material supply, Erection work at Dharni S/s which was expected to be completed by July, 2015, could be completed only by January, 2017. Additional time was incurred in installation of ABT Meters which was initially not under the scope of the appointed Agency for Dharni S/s works, but later was undertaken by the appointed Agency based on agreement with MSETCL.



41. Reason for delay in transmission line work:

- a) There was delay in erection of 132 kV SCDC Transmission Line, which was on account of delay in getting Forest Clearance. The area covered between Nepanagar to Dharni consist of the Forest Land and thus the completion of the erection works for the SCDC Line was only possible after getting the in-principal approval of the Forest Department. The same was provided by Ministry of Environment, Forest and Climate Change vide letter "MPC007/2016-BHO/590", dated 2 June, 2016. The in-principal approval letter for the Forest Clearance has been enclosed as **Annexure K** to this Petition.
- b) In addition, Petitioner would also like to highlight that, in order to cover minimum forest area during the erection works of the SCDC line, the actual line length of the Nepanagar – Dharni SCDC Line has been increased from 55 km to 60 km.

42. Thus, in view of aforementioned facts, Petitioner submits that, there is a time-overflow of 480 days, which also resulted in increase of the project cost. In addition, there was a cost overrun to the Project, which was on account of Crop Compensation to the farmers and Railway Crossing Expenses towards Indian Railways in order to carry out stringing work over the railway lines. The detailed break of the in-principally approved cost by the Hon'ble MERC v/s the actual capitalisation as on 10 February, 2017 is provided as under:



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(Rs Lakh)

Sr. No.	Particulars	Estimated by MSETCL	Actual Capitalisation	Deviation
		A	B	C = B-A
1	Civil Works	324.88	285.32	(39.56)
2	Transmission Lines			
	a. 132kV SCDC line from 220 kV Nepanagar S/s to 132 kV proposed Dharni Interstate line with 0.2 Sq. Inch ACSR (Panther)	1474.55	1871.00	(396.45)
3	2 x 25 MVA, 132/33 kV Power Transformers with bays.	589.36	72.56	(516.80)
4.	132 kV Line Bays*	180.84	300.10	119.26
5.	PLCC Equipments			
	b. 132 kV Station Equipment	12.16	7.55	(4.61)
	c. 132 kV Line Equipment	33.28	10.97	(22.31)
6	SCADA System	70.00	71.62	1.62
7	33 kV Outlets	134.40	64.02	(70.38)
8	132 kV Bus-bar Protection	14.00	22.83	8.83
9	Sub Total – I	2833.73	2702.77	(130.96)
10	Add Contingencies 3% on Sub Total – I (Crop Compensation + Railway Crossing)	85.01	452.66	367.65
11	Sub Total – II	2918.74	3155.43	236.69
12	Add Centages 10.75% on Sub Total – II (General Expenditures Cost – GEC)	313.76	434.00	120.24
13	Sub Total – III	3232.51	3589.43	356.92
14	IDC Component	165.00	131.60	(33.40)
15	Total	3398.00	3724.23	326.23
16	Total Rs. in Cr.	33.98	37.24	3.26



43. Thus, from the table above, it is clear that, the major cost overrun was mainly on account of Crop compensation to the farmers and General Expenditure Cost due to overall delay of 480 days. Further, as discussed above due for minimum coverage of forest land the planned route of the said Transmission line from Nepanagar to Dharni was changed and the actual line length is now revised to 60 km. This change in line length has also impacted the overall erection and supply cost of Transmission Line. The aforementioned actual Capitalisation of Nepanagar – Dharni Transmission Project duly certified by the Auditor is enclosed as **Annexure L** to this Petition.

44. Petitioner would further like to highlight that, at present the demand at Dharni S/s is below 25 MVA, since there is no long term power arrangement in place by MSEDCL yet. Efforts are being made by MSEDCL for the steady power supply arrangement at Dharni City. Once, the same is in place, the demand of Dharni City is expected to increase in the subsequent years over the Control Period. Thus, after understanding the present demand supply condition of Dharni City, the Petitioner has not capitalized all the assets, covered under the original scope of the Project. Thus, there is no cost projections with respect to such assets/elements which are not capitalized on CoD.

45. Following table shows the elements covered under the original scope versus the actual capitalisation as per CoD.

Sr. No.	Particulars	As per Original Scope of DPR	Actual Capitalisation/Put to use
1.	132 kV Line Bays (1 Bay at Dharni S/s & 1 Bay at Nepanagar S/s)	2 Nos.	2 Nos.
2.	25 MVA Power Transformer	2 Nos.	1 No.



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Sr. No.	Particulars	As per Original Scope of DPR	Actual Capitalisation/Put to use
3.	Transformer Bay	2 Nos.	1 No.
4.	33 kV Outlets	6 Nos.	2 Nos.

46. Thus, in view of above, the Hon'ble MERC has approved the actual capitalisation of Rs. 37.30 Crore under the Mid-term Review Order of MSETCL in Case No. 168 of 2017, dated 12 September, 2018, and the approved capitalization towards the project was factored in determination of the Intra-State Transmission Tariff for FY 2018-19 and FY 2019-20.

47. However, in view of the subsequent developments as elaborated in this Petition and this transmission project of MSETCL being a case of natural Inter-State Line, in line with the statutory provision provided under the Electricity Act, 2003, the Petitioner humbly requests the Hon'ble CERC to identify and provide the status of ISTS to the Neapanagar – Dharni Transmission Line and further consider the actual Capital Cost of Rs. 37.24 Crore for the said transmission line in order to determine the Annual Transmission Charges for the Tariff Period 2019-2024 in line with CERC (Terms and Condition of Tariff) Regulations, 2019.

48. In addition, as highlighted in Para. 41 above, since not all the assets have been capitalized as per the original scope of project, due to low power demand scenario at Dharni S/s. The same is expected to increase once there is a proper power supply arrangement made by MSEDCL in the subsequent years over the Control Period. However, capitalization towards such assets/elements in the original scope of work will be taken up



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during the control period as it is linked to demand condition at Dharni, which is not known as of now. Thus, Petitioner humbly requests Hon'ble CERC to allow Additional Capitalisation in the subsequent years, towards such un-capitalized assets/elements covered under the original scope of the Project.

DEPRECIATION

49. Regulation 33 of the CERC Tariff Regulations, 2019 specifies methodology of computing Depreciation Expenses. The relevant provisions are provided as under:

“(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a



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transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

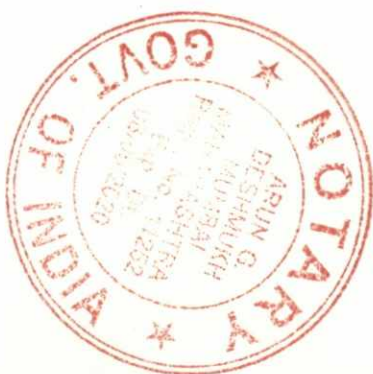
Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.



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(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

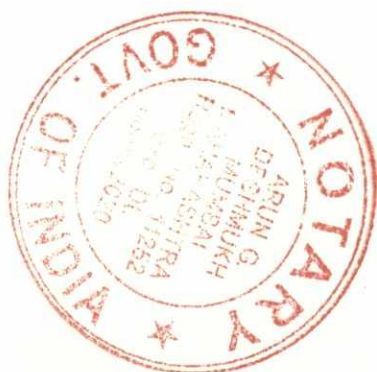
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"Emphasis Added

50. Thus, the Petitioner has claimed the Depreciation for the Tariff Period 2019-24, in accordance with the aforesaid Regulations, where the weighted average rate of depreciation (WAROD) has been worked out as 5.15% for the period 2019-24. Detail calculations regarding depreciation has been provided in the Tariff Format Form 10 and 10A.

51. Further, the summary for the Depreciation claimed for the Tariff Period 2019-24 is provided as under:

Rs. Lakh						
Sr. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	Average Capital Cost	3,724.23	3,724.23	3,724.23	3,724.23	3,724.23
2	Depreciable value	3,348.92	3,348.92	3,348.92	3,348.92	3,348.92



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Sr. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
3	Weighted Average Rate of Depreciation	5.15%	5.15%	5.15%	5.15%	5.15%
4	Depreciation (for the Period)	172.60	172.60	172.60	172.60	172.60
5	Depreciation (annualized)	172.60	172.60	172.60	172.60	172.60

52. The detailed working of the Depreciation claimed for the Tariff Period 2019-24 is provided under Form 10 & 10 A of the CERC Tariff Formats, which is enclosed as **Annexure A1** to this Petition.

53. Petitioner therefore, humbly requests the Hon'ble CERC to approve the Depreciation Expenses claimed in accordance with the CERC Tariff Regulations, 2019.

DEBT-EQUITY RATIO

54. Regulation 18 of the CERC Tariff Regulations, 2019 is provided as under:

"(1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:

.....



(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

....." **Emphasis added**



55. The Petitioner would like to highlight that, the actual Debt-Equity ratio for the Nepanagar – Dharni Line is 63:37 i.e. the actual equity infused by Petitioner is more than the normative benchmark of 30% in accordance with the aforesaid Regulations.

56. Thus, for determination of Annual Transmission Tariff for the said Transmission Project, Petitioner has considered the Debt – Equity as 70:30, which is in accordance with Regulation 18 of the CERC Tariff Regulations, where the additional 7% Equity infused by Petitioner has been considered as Normative Debt and the Interest on Loan for such normative debt portion has been worked out in accordance with the relevant CERC Tariff Regulations, 2019, which has been separately discussed in this Petition.

INTEREST ON LOAN

57. Regulation 32 of the CERC Tariff Regulations, 2019 is provided as under:

“(1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment



should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest."

58. Petitioner submits that, based on the estimated Capital Cost of Rs. 3398 Lakh, Petitioner has approached REC for seeking the Long Term Loan for the Nepanagar – Dharni Transmission Line Project Scheme. REC's Sanction Letter vide "REC/MUM/116(SI)/756" dated 30 July, 2012 had sanctioned the Principal Loan Amount of Rs. 2486.58 Lakhs for the tenure of 13 years, with an interest rate of 12.50% per annum and also with a



moratorium period of 3 years. The REC Sanction Letter and Loan Agreement between REC and MSETCL is enclosed as **Annexure M** to this Petition.

59. Petitioner would further like to highlight that, the actual draw-down of the debt component upto the CoD of the Transmission Line i.e. 10 February, 2017 is Rs. 2346.29 Lakh, which is marginally less than the sanctioned amount. There is no actual repayment of the loan, because of 3 years moratorium period. The first actual repayment is proposed to be done in the month of December, 2019 for the next 10 years.

60. Thus, the Petitioner has worked out the Interest on Loan for the actual debt portion, in accordance with the aforesaid Regulations, where the Rate of Interest has been worked out as 11.12% by taking the weighted average of loans.

61. Further, as discussed in para. 35 above, the additional 7% Equity infused by Petitioner has been considered as Normative Loan and the Interest on Normative Loan has also been worked out in line with the aforementioned Regulations, with the same rate of interest of 11.12% as worked out for the Actual Debt Portion.

62. The summary of Interest on Loan for the Tariff Period 2019-24 is provided as under:

Interest on Loan: Actual Debt Portion (63%) (Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	3	4	5	6	7
No. of Days in the year	366.00	365.00	365.00	365.00	366.00
No. of Days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
Loan - 1 (Actual Loan - REC)					



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	3	4	5	6	7
Gross Loan - Opening	2,346.30	2,346.30	2,346.30	2,346.30	2,346.30
Cumulative repayments of Loans up to previous year	331.97	487.31	642.65	797.99	953.34
Net Loan - Opening	2,014.33	1,858.99	1,703.65	1,548.30	1,392.96
Add: Drawl(s) during the year	-	-	-	-	-
Less: Repayment(s) of Loans during the year	155.34	155.34	155.34	155.34	155.34
Net Loan - Closing	1,858.99	1,703.65	1,548.30	1,392.96	1,237.62
Average Net Loan	1,936.66	1,781.32	1,625.97	1,470.63	1,315.29
Rate of Interest on Loan on Annual Basis	11.12%	11.12%	11.12%	11.12%	11.12%
Interest on Loan	215.32	198.05	180.78	163.51	146.24

Interest on Loan: Normative Debt Portion (7%) (Rs. Lakh)

Sr. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	4	5	6	7	8
	No. of Days in the year	366.00	365.00	365.00	365.00	366.00
	No. of Days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
1	Gross Normative Loan - Opening	260.66	260.66	260.66	260.66	260.66
2	Less: Cumulative repayment of Normative Loan upto previous year	36.88	54.14	71.40	88.65	105.91
3	Net Normative Loan - Opening	223.78	206.52	189.27	172.01	154.75
4	Addition in Normative Loan towards the ACE	-	-	-	-	-
5	Less: Adjustment of Normative Gross Loan pertaining to the decapitalized asset.	-	-	-	-	-
6	Less: Normative Repayments of Normative Loan during the year	17.26	17.26	17.26	17.26	17.26
7	Less: Adjustment of Cumulative repayment pertaining	-	-	-	-	-



Sr. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	4	5	6	7	8
	to the decapitalized asset					
8	Net Normative Loan - Closing	206.52	189.27	172.01	154.75	137.49
9	Average Normative Loan	215.15	197.89	180.64	163.38	146.12
10	Weighted Average Rate of Interest on Actual Loans	11.12%	11.12%	11.12%	11.12%	11.12%
14	Interest on Normative Loan	23.92	22.00	20.08	18.16	16.25

Total Interest on Loan Claimed for Tariff Period 2019-24
(Rs. Lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Actual Debt Portion	215.32	198.05	180.78	163.51	146.24
Interest on Normative Loan	23.92	22.00	20.08	18.16	16.25
Total Interest on Loan	239.24	220.05	200.86	181.67	162.48

63. The year-wise actual loan drawl along with interest rate is enclosed as **Annexure N** to this Petition. Further, the detailed working of the Interest on Loan claimed for the Tariff Period 2019-24 is provided under Form 9 to 9E of the CERC Tariff Formats, which is enclosed as **Annexure A1** to this Petition.

64. **Petitioner therefore requests the Hon'ble CERC to approve the claimed Interest on Loan for the actual Debt Portion and Normative Loan in accordance with the CERC Tariff Regulations, 2019.**

RETURN ON EQUITY

65. Regulation 30 of the CERC Tariff Regulations, 2019 is provided as under:



“(1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

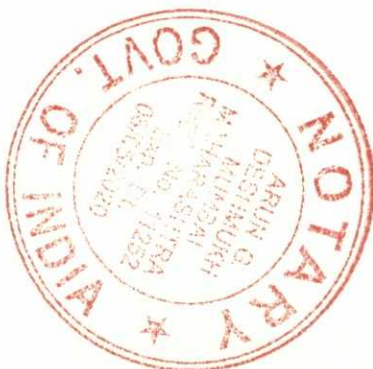
.....”

66. Further, for the considering the Tax on Return on Equity, the provisions under the Regulation 31 is provided as under:

“(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be exclude for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)



Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.”

67. Thus, in view of the aforesaid provisions under Regulation 30 read with Regulation 31 of the CERC Tariff Regulations, 2019, the Return on Equity (RoE) – Pre Tax has been worked out as 23.83%, after considering the Corporate Tax Rate of 34.94%.

68. The summary of the RoE for the Tariff Period 2019-24 is provided as under:



(Rs. Lakh)

Sr. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
1	Opening Normative Equity	1,117.27	1,117.27	1,117.27	1,117.27	1,117.27
2	Less: Adjustment in Equity	-	-	-	-	-
3	Adjustment during the year	-	-	-	-	-
4	Net Opening Equity (Normal)	1,117.27	1,117.27	1,117.27	1,117.27	1,117.27
5	Add: Increase in Equity due to addition during the year/period	-	-	-	-	-
6	Less: Decrease due to de-capitalisation during the year	-	-	-	-	-
7	Add: Increase due to discharges during the year/period	-	-	-	-	-
8	Closing Normative Equity	1,117.27	1,117.27	1,117.27	1,117.27	1,117.27
9	Average Normative Equity	1,117.27	1,117.27	1,117.27	1,117.27	1,117.27
10	Rate of Return on Equity	15.50%	15.50%	15.50%	15.50%	15.50%
11	Reduced rate of 1% decided by the Commission under Regulation 30 (2) (if any)	-	-	-	-	-
12	Effective tax rate/MAT rate for the respective years	34.94%	34.94%	34.94%	34.94%	34.94%
13	Rate of Return on Equity (Pre-Tax)	23.83%	23.83%	23.83%	23.83%	23.83%
14	Return on Equity on Project Cost till Cut-Off Date (Pre-Tax)	266.20	266.20	266.20	266.20	266.20

69. The detailed working of the RoE claimed for the Tariff Period 2019-24 is provided under Form 8 of the CERC Tariff Formats, which is enclosed as **Annexure A1** to this Petition.

70. **Petitioner therefore requests the Hon'ble CERC to approve the RoE worked out for the Tariff Period 2019-24 in accordance with the CERC Tariff Regulations, 2019.**



INTEREST ON WORKING CAPITAL

71. Regulation 34 (c) of the CERC Tariff Regulations, 2019 is provided as under:

“(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

(i) Receivables equivalent to 45 days of annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

(iii) Operation and maintenance expenses, including security expenses for one month.

.....

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

.....

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

72. Thus, in accordance with the aforesaid provisions under the Regulation 34 (c) of the CERC Tariff Regulations, 2019, the Petitioner has worked out the Interest on Working Capital (IoWC) for the Tariff Period 2019-24, where the Rate of Interest on Working Capital has been worked as 12.01% (8.51% + 350 Basis Points).



73. The summary of Interest on Working Capital for the Tariff Period 2019-24 is provided as under:

Rs. Lakh

Sr. No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
I	No. of Days in the year	366.00	365.00	365.00	365.00	366.00
II	No. of Days for which tariff claimed	366.00	365.00	365.00	365.00	366.00
1	O&M Expenses - One Month	8.13	8.40	8.70	9.00	9.31
2	Maintenance Spares @ 15% of O&M Expenses	14.64	15.13	15.66	16.19	16.76
3	Receivables equivalent to 45 days of AFC	97.13	95.42	93.48	91.54	89.37
4	Total Working Capital	119.90	118.96	117.84	116.73	115.44
5	Bank rate as on 01-04-2019 or as on 01 April of the CoD year, whichever is later	12.01%	12.01%	12.01%	12.01%	12.01%
6	Interest on Working Capital	14.40	14.29	14.15	14.02	13.87

74. The detailed working of the IoWC claimed for the Tariff Period 2019-24 is provided under Form 11 of the CERC Tariff Formats, which is enclosed as **Annexure A1** to this Petition.

75. **Petitioner therefore requests the Hon'ble CERC to approve the IoWC claimed for the Tariff Period 2019-24 in accordance with the CERC Tariff Regulations, 2019.**

NON TARIFF INCOME

76. Petitioner has not claimed any Non-Tariff Income for the Tariff Period 2019-24.

REIMBURSEMENT OF APPLICATION FEES AND PUBLICATION EXPENSES

77. Regulation 70 of the CERC Tariff Regulations, 2019 is provided as under:



"Application fee and the publication expenses: The following fees, charges and expenses shall be reimbursed directly by the beneficiary in the manner specified herein:

(1) The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating company or the transmission licensee, as the case may be, directly from the beneficiaries or the long term customers, as the case may be.

(2) The following fees and charges shall be reimbursed directly by the beneficiaries in proportion of their allocation in the generating stations or by the long term customers in proportion to their share in the inter-State transmission systems determined in accordance with the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time."

Emphasis Added

78. Thus, Petitioner humbly requests the Hon'ble CERC to allow the recovery of Filing Fees and Publication Expenses paid for filing the Present Petition from the beneficiaries over the Tariff Period in accordance with the CERC Tariff Regulations, 2019.

ANNUAL TRANSMISSION CHARGES

79. The summary of estimated Annual Transmission Charges for the Nepanagar – Dharni Transmission Line for the Tariff Period 2019-24 is provided as under:



Rs. Lakh

Sr. No.	Particulars	Form No.	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8
1	Depreciation	FORM 10 A	172.60	172.60	172.60	172.60	172.60
2	Interest on Loan	FORM 9E	239.24	220.05	200.86	181.67	162.48
3	Return on Equity	FORM 8	266.20	266.20	266.20	266.20	266.20
4	Interest on Working Capital	FORM 11	14.40	14.29	14.15	14.02	13.87
5	O&M Expenses	FORM 2	97.57	100.86	104.42	107.96	111.72
6	Non-Tariff Income	FORM 14	-	-	-	-	-
Total AFC			790.01	774.00	758.23	742.46	726.87

80. Petitioner therefore requests the Hon'ble CERC to approve the Annual Transmission Charges estimated for the Tariff Period 2019-24 in accordance with the CERC Tariff Regulations, 2019 for this project and further consider the approved Annual Transmission Charges of the said Transmission Project in its Quarterly Point of Connection (PoC) Charges determined in lines with the Central Electricity Regulatory Commission (Sharing of Transmission Charges & Losses) Regulations, 2010, and amendments thereof.

PRAYERS

1. To identify and provide the Status of Inter-State Transmission System to the 132 kV Nepanagar-Dharni Transmission Line in accordance with the statutory provisions provided under the Electricity Act, 2003.
2. To admit the application for determination of Annual Transmission Tariff for the 132 kV Nepanagar –Dharni Transmission Project of MSETCL, which shall form part of the



Inter-State Transmission System, which achieved CoD on 10 February, 2017

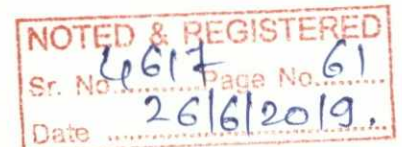
3. To approve the Capital Cost of Rs. 37.24 Crore for the 132 kV Nepanagar –Dharni Transmission Project of MSETCL.
4. To approve the estimated Annual Transmission Charges determined for the Tariff Period 2019-24.
5. To condone any inadvertent omissions, errors, short comings and permit the Petitioner to add/change/modify/alter this filing and make further submissions as may be required by the Hon'ble CERC.
6. Pass such Order and further Orders as are deemed fit and proper in the facts and circumstances of the case.



[Signature]
Chief Engineer (STU)

BEFORE ME

[Signature]
ARUN G. DESHMUKH
REGD. No. 11252 B.Com., LL.B.,
ADVOCATE HIGH COURT
NOTARY GOVT. OF INDIA
Office : Shop No. 1, Vinayak Darshan, Apartment,
Ganesh Peth Lane, Dadar (W), Mumbai-400 028.



LIST OF ANNEXURES

Sr. No	List of Annexures	Annexure No.
1	Transmission Tariff Format for Tariff Period 2019-24	A1
2	Minutes of the Joint Meeting held at Jabalpur, Madhya Pradesh dated 10th May, 2011	A
3	MSETCL DPR dated 31 October, 2011	B
4	Letter of Award provided to M/s Pratibha Electricals Ltd.	C
5	Letter of Award provided to M/s Neha Constructions Ltd.	C1
6	Minutes of the 33rd TCC/ WRPC meeting held on 31.01.2017 and 1.02.2017	D
7	Minutes of the 75th CCM meeting held on 28.06.2017	E
8	Minutes of the 34th WRPC meeting held on 11.09.2017	F
9	Minutes of 42 SCM held on 17.11.2017	G
10	Minutes of 77th CCM meeting held on 20.04.2018	H
11	Minutes of 36th WRPC meeting held on 22.06.2018 and 23.06.2018	I
12	MSETCL Board Resolution 65/17	J
13	Approval letter for the Forest Clearance	K
14	Auditor Certificate for Actual Capitalisation of the Project	L
15	REC Sanction Letter and Loan Agreement between REC and MSETCL	M
16	Auditor Certificate for actual loan drawl and IDC capitalisation.	N

