

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 110/TT/2017

Coram:

**Shri P. K.Pujari, Chairperson
Shri A. K. Singhal, Member
Shri A. S. Bakshi, Member
Dr. M. K. Iyer, Member**

Date of Order: 29.06.2018

In the matter of:

Approval of transmission tariff from anticipated COD to 31.3.2019 for “Extension of Kudankulam APP- Tirunelveli 400 kV (Quad) D/C line to Tuticorin pooling station along with associated bays at Tuticorin pooling station under Connectivity for Kudankulam 3 & 4 (2X1000 MW) with interstate transmission system” in Southern Region under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

Power Grid Corporation of India Limited
"Saudamini", Plot No.2,
Sector-29, Gurgaon -122 001

.....Petitioner

Vs

1. Karnataka Power Transmission Corporation Limited,
(KPTCL), Kaveri Bhawan,
Bangalore – 560009
2. Transmission Corporation of Andhra Pradesh Limited,
(APTRANSCO), Vidyut Soudha,
Hyderabad- 500082



3. Kerala State Electricity Board (KSEB),
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapuram - 695 004
4. Tamil Nadu Generation and Distribution Corporation Limited,
NPKRR Maaligai, 800, Anna Salai,
Chennai - 600 002
5. Electricity Department
Government of Goa, Vidyuti Bhawan,
3rd Floor, Panaji, Goa-403001
6. Electricity Department,
Government of Pondicherry,
Pondicherry - 605001
7. Eastern Power Distribution Company of Andhra Pradesh Limited,
(APEPDCL) P&T Colony, Seethmmadhara,
Vishakhapatnam, Andhra Pradesh
8. Southern Power Distribution Company of Andhra Pradesh Limited,
(APSPDCL), Srinivasasa Kalyana Mandapam Backside
Tiruchanoor Road, Kesavayana Gunta,
Tirupati-517 501, Chittoor District, Andhra Pradesh
9. Central Power Distribution Company of Andhra Pradesh Limited,
(APCPDCL), Corporate Office, Mint Compound,
Hyderabad - 500 063, Andhra Pradesh
10. Northern Power Distribution Company of Andhra Pradesh Limited,
(APNPDCL), Opp. NIT Petrol Pump,
Chaitanyapuri, Kazipet, Warangal - 506 004, Andhra Pradesh
11. Bangalore Electricity Supply Company Ltd. (BESCOM),
Corporate Office, K. R. Circle
Bangalore - 560001, Karnataka
12. Gulbarga Electricity Supply Company Ltd (GESCOM)
Station Main Road, Gulbarga, Karnataka



13. Hubli Electricity Supply Company Ltd, (HESCOM)
Navanagar, PB Road, Hubli,
Karnataka
14. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore – 575001, Karnataka
15. Chamundeswari Electricity Supply Corporation Ltd.,
(CESC), # 927,L J Avenue, Ground Floor,
New Kantharaj Urs Road, Saraswatipuram,
Mysore - 570 009, Karnataka
16. Transmission Corporation of Telangana Limited,
Vidhyut Sudha, Khairatabad,
Hyderabad-500082
17. Kudankulam Nuclear Power Plant (NPCIL)
Kudankulam – 627 106, Radhapuram (Taluk),
Tirunelveli (Dist.), Tamilnadu.

.....**Respondents**

For petitioner : Shri S. S. Raju, PGCIL
Shri S. K Venkatesan, PGCIL
Shri V.P. Rastogi, PGCIL

For respondents : Shri S. Vallinayagam, Advocate, TANGEDCO

ORDER

The petitioner, Power Grid Corporation of India Limited (PGCIL) has filed the instant petition for determination of transmission tariff from anticipated COD to 31.3.2019 for Extension of Kudankulam APP-Tirunelveli 400 kV (Quad) D/C line to Tuticorin pooling station along with associated bays at Tuticorin pooling station under



Connectivity for Kudankulam 3 & 4 (2X1000 MW) with interstate transmission system in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. The Investment Approval (IA) of the project was accorded by the Board of Directors of the petitioner company vide Memorandum Ref.: C/CP/Connectivity for Kudankulam 3 & 4 dated 14.1.2016, at an estimated cost of ₹16211 lakh including IDC of ₹948 lakh, based on August, 2015 price level. As per Investment Approval, the transmission asset was scheduled to be commissioned within 28 months from the date of IA, i.e. by 12.5.2018.

3. The scheme was discussed and agreed in the 36th SCM of Southern Region Constituents held on 4.9.2013 and 23rd SRPC meeting held on 26.10.2013. Further, Empowered Committee on Transmission during its 33rd meeting held on 30th September 2014 at CEA, New Delhi had recommended the implementation of the said Scheme by the petitioner under regulated tariff mechanism with compressed time schedule.

4. The scope of work covered under the instant transmission system is as follows:-

Transmission Lines

- i) Extension of Kudankulam APP-Tirunelveli 400 kV (Quad) D/C line to Tuticorin Pooling Station.



- a. Tuticorin Pooling station- Tirunelveli section of the agreed Tuticorin pooling station- Kudankulam 400kV (Quad) D/c line
- b. Connection of one 400kV D/c of Kudankulam – Tirunelveli 400kV 2XD/c (Quad) lines to the above line section to make Kudankulam- Tuticorin Pooling Station 400kV D/c (Quad) line

Sub Station

- ii) Extension of Tuticorin Pooling Station (existing s/s of POWERGRID)
 - a. 2 no. line bays for 400kV D/c (Quad) line

5. The instant petition covers the following asset:-

Name of Asset	Actual COD
Asset I: Extension of Kudankulam APP- Tirunelveli 400 kV (Quad) D/C line to Tuticorin Pooling station along with associated bays at Tuticorin pooling station	10.3.2018

6. Annual Fixed Charges was allowed for the instant asset in order dated 5.7.2017 under Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC computation is as under:-

(₹ in lakh)	
2017-18 (pro-rata)	2018-19
1463.04	2365.17



7. The petition was heard on 24.4.2018 and the Commission after directing the petitioner, CTU to file certain additional information, reserved the order in the petition. In compliance with the above directions, the petitioner vide affidavit dated 14.5.2018 has filed the additional information. The Respondent No. 17 (NPCIL) has filed the information/reply vide affidavit dated 31.8.2017 and the petitioner has filed its rejoinder to the said reply. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Based on the documents available on record and after considering the submission of the parties, we dispose of the claim of the petitioner in the present petition as stated in the subsequent paragraphs.

8. The details of the transmission charges claimed by the petitioner are as under:-

Particulars	(₹ in lakh)	
	2017-18 (pro-rata)	2018-19
Depreciation	44.04	782.73
Interest on Loan	45.64	778.85
Return on Equity	50.66	900.29
Interest on working capital	3.71	65.04
O & M Expenses	12.44	217.39
Total	156.49	2744.30

9. The details of the Interest on Working Capital claimed by the petitioner are as under:-



Particulars	(₹ in lakh)	
	2017-18 (pro-rata)	2018-19
Maintenance Spares	17.53	18.12
O & M Expenses	31.55	32.61
Receivables	441.02	457.38
Total	490.10	508.11
Rate of Interest	12.80%	12.80%
Interest on working capital	62.73	65.04

10. The Commission vide its provisional tariff order dated 5.7.2017 had directed NPCIL to submit the status of commissioning of Kudankulam APP. In response, NPCIL vide its affidavit dated 31.8.2017 has submitted the following “on obtaining the consent from various regulatory bodies, construction work has commenced with the First Pour of Concrete in Kudankulam Nuclear Power Project Unit-3 on 29.6.2017. Contracts with the Main Contractor (Russian Federation side) have been signed. Orders for main plant civil works have been awarded and tendering/award of work for other areas/disciplines is in progress. The scheduled period for completion of unit-3 is 69 months and for unit-4 is 75 months from the First Pour of Concrete i.e. 31.3.2023 for unit-3 and 30.9.2023 for Unit-4.”

11. In response to the above, the petitioner vide its affidavit dated 8.3.2018 has submitted the following:-

- “i) During 15th meeting of LTOA and connectivity meeting held on 04th Jan, 2013 the connectivity arrangement for Kudankulam-3&4 was finalized with suitable re-arrangements and through Kudankulam-II-Tuticorin PS 400kV D/C (Quad) line.



- ii) Further, the issue of implementation of the transmission line for connecting the Kudankulam to the ISTS was discussed in the 36th meeting of the Standing Committee on Power System Planning of Southern Region held on 04th Sept'2013 and it was agreed that the proposal of interim arrangement was technically in order and could be firmed up.
- iii) The above scheme was technically validated in the 36th SCM and at Para 23.2 of the 36th SCM following submissions were made with respect to interim arrangement.

“23.2 (i) Turicorin Pooling station – Tirunelveli section of the agreed Turicorin Pooling station – Kudankulam 400 kV Quad D/c line may be constructed ahead of Kudankulam – 3 & 4 and one of the existing Kudankulam – Tirunelveli 400 kV Quad D/c may be connected to the same making Kudankulam – Turicorin Pooling station 400kV Quad D/c line. This arrangement shall facilitate two termination points viz. Tirunelveli & Turicorin Pooling station for evacuation of power from Kudankulam – 1 & 2 and shall avoid operational difficulties in case of any bus fault at either Tirunelveli or Turicorin pooling stations.

(ii) Interim arrangement: As the above scope includes construction of about 100 km of transmission line and the Kudankulam APP – 1&2 units are ready for commissioning, therefore, an interim arrangement for safe operation in case of any untoward incidence at Tirunelveli substation is needed. In this regard it may be mentioned that, one 400 kV circuit from Kudankulam and one 400kV circuit from Madurai are terminating in the same diameter at Tirunelveli substation and therefore, through opening of two main breakers & keeping tie breaker in closed position in normal condition shall provide the required bypass arrangement. By this arrangement, 3 nos. of 400kV circuits from Kudankulam shall be terminated at Tirunelveli, however one 400kV circuits shall be going to Madurai and provide two different termination points. This shall ensure that even with both the main busses out of service at Tirunelveli, the evacuation of Kudankulam APP is not affected.”

In view of above discussions the implementation of transmission scheme was agreed due to urgency for the interim arrangement.

- iv) The scheme was also deliberated in 23rd meeting of SRPC held on 26.10.2013 in presence of all Southern region constituents.
- v) Further, Empowered Committee on Transmission during its 33rd meeting held on 30th September 2014 (Para-6.8) at CEA, New Delhi has recommended the implementation of the said Scheme by POWERGRID under regulated tariff mechanism with compressed time schedule.



“6.8.4 The issue was discussed in details and the EC recommended that the above modification involving extension of Kudankulam APP – Tirunelveli 400kV Quad D/c line to Tuticorin Pooling Station along with necessary bay modification works at Tuticorin Pooling station and Tirunelveli may be implemented by POWERGRID. Accordingly, the EC agreed to recommend the scheme to MoP, for their consideration for approval and implementation of the proposal under regulated Tariff mechanism with compressed time schedule by PGCIL.”

- vi) From the above, it can be seen that scheme was taken up for implementation after deliberation and agreement by the constituents in the standing committee meeting and subsequent RPC's and the transmission system shall facilitate two termination points (Tirunelveli & Tuticorin PS) for evacuation of power from Kudankulam-1 & 2 and shall avoid operational difficulties.”

12. The Commission vide ROP of the hearing dated 24.4.2018 directed the CTU to explain the planning philosophy followed while planning for Kudankulam Nuclear Power Project (KKNPP) 1 and 2 (connecting to sub-station) and whether the CTU has made similar proposals and risk mitigation measures in case of similarly placed generators. The Commission also directed the CTU to explain the arrangement for KKNPP 3 and 4 on its COD, keeping in view the present interim arrangement. In response, the petitioner vide affidavit dated 14.5.2018 has submitted the following:-

“1. It is submitted that the associated transmission system of Kudankulam NPP (2x1000 MW) was discussed and agreed in 17th & 18th meeting of Standing Committee of Southern Region held on 15th September 2003 and 5th March 2004 respectively. The Kudankulam NPP was envisaged with the ultimate capacity of 4000 MW which was to be developed in two stages of 2000 MW each. Out of which the first stage with 2x1000 MW units was expected by 2006-07.

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The project is located at Kudankulam in Nagarcoil district of Tamil Nadu, which is at the tip of the Indian peninsula, thereby restricting the directions in which evacuation lines could be taken off. Further, the location of project was such that it is close to the boundary between Tamil Nadu & Kerala rendering it ideal to connect it to both the Tamil Nadu and



Kerala grids from where the share of rest of the constituents may be delivered through principle of displacement.

2. The Kudankulam project had considerable forest stretches in the close vicinity thereby making ROW a major consideration in evolving the transmission system for evacuation of power. The ROW problems, in fact, was so severe (especially in Kerala) that the existing 220 kV transmission lines corridor was utilised by replacing them with high capacity 400 kV transmission lines with multi circuit towers. Further as per the practice, the evacuation transmission lines from the Atomic power plants are terminated at two different substations.

3. The power from the Kudankulam project was planned to be pooled at 400/220 kV substation at Tirunelveli enroute the route alignment of Madurai – Trivandrum 400 kV double circuit line through two numbers of 400 kV D/c lines constructed with high capacity quad conductors. Further, to enhance the reliability of power evacuation from Kudankulam APP to Tirunelveli, the two 400 kV D/c lines are envisaged to be routed apart in different physical corridors. Beyond Tirunelveli, two transmission corridors were envisaged; one towards Cochin through Tirunelveli – Muvattupuzha (near Cochin) 400 kV quad conductor D/c line and the other towards Trivandrum through construction of Tirunelveli – Edamon 400 kV twin conductor D/c line (to be initially charged at 220 kV level). To conserve ROW, the construction of Tirunelveli – Cochin 400 kV D/c line and Tirunelveli – Edamon 400 kV D/c line was proposed with utilisation of the ROW of existing interstate Kayathar – Edamon 220 kV line and a multi-circuit line from Tirunelveli to Edamon utilising the existing ROW corridor.

4. Accordingly, following transmission system was planned

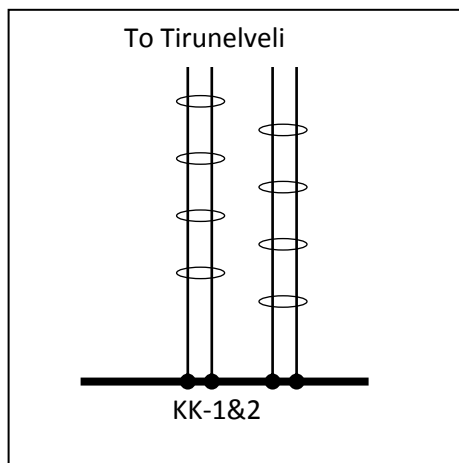
- a. Kudankulam – Tirunelveli 2x400 kV D/c lines (with Quad conductors).
- b. Tirunelveli – Udumalpet 400 kV D/c lines with twin conductors.
- c. LILO of both circuits of Madurai – Trivandrum 400 kV D/c line at Tirunelveli.
- d. Tirunelveli – Muvattupuzha 400 kV D/c line (with Quad conductors).
- e. Tirunelveli – Edamon 400 kV D/c line (with twin conductors and initially charged at 220 kV) on multi circuit with Tirunelveli – Muvattupuzha 400 kV D/c line.
- f. Muvattupuzha - North Trichur 400 kV D/c line (with quad conductor).
- g. Establishment of new 400/220 kV substations with 2x315 MVA transformers at Tirunelveli, and Muvattupuzha.
- h. Augmentation of transformation capacity at Udumalpet and Trivandrum 400/220 kV substation by 1x315 MVA, 400/220 kV transformer each.

5. However, with the commissioning of the Transmission System and the Unit-1 (1000 MW) of the generation project, on numerous occasions, entire Tirunelveli substation was tripped and due to which the KKNPP generation was also required to backed down the generation. Under such scenario, as interim arrangement, one circuit of one of the KAPP – Tirunelveli 400kV Quad line and the one LILO of Madurai – Trivandrum 400 kV D/c line

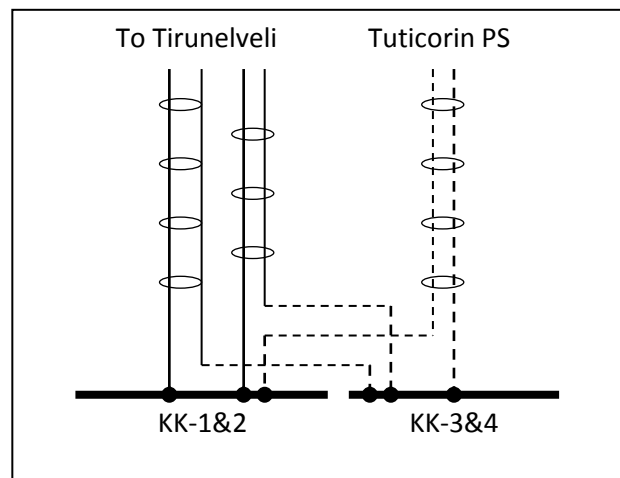


was bypassed at Tirunelveli substation and for making the Kudankulam – Madurai 400kV line, part of the line is quad conductor and part is twin moose conductor. With this arrangement the KKNPP was connected with two different stations one with Tirunelveli and other with Madurai.

6. In January, 2011, NPCIL submitted application for grant of Connectivity for KKNPP-3&4 with the commissioning schedule of 2016/2017. Initially it was considered to grant the Connectivity for KKNPP-3&4 at KKNPP-1&2 through extension of generation switchyard, however NPCIL stated that considering the limitations of current ratings as well as switch gear rating of 400 KV KK-1&2 switchyard, it is not advisable to have a common switchyard for KKNPP-1&2 and KKNPP-3&4. Accordingly Connectivity was granted to KKNPP-3&4 through 400kV D/c transmission lines with following arrangement:



Existing Arrangement with only unit 1 & 2 in operation



Proposed Arrangement after COD of Unit 3 & 4.



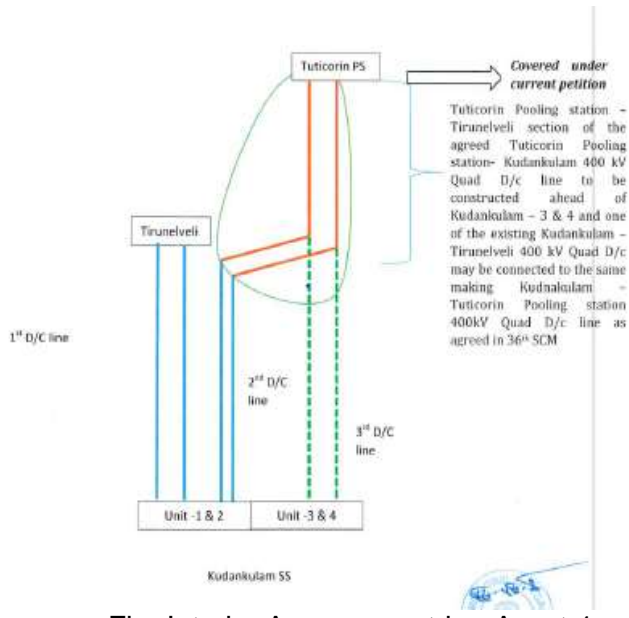


Fig: Interim Arrangement i.e. Asset-1, put in place in absence of commissioning of Unit 3 & 4.

The above arrangement requires re-arrangement of existing connections at KKNPP-1&2 switchyard. Further, such arrangement shall facilitate two 400kV quad lines to Tirunelveli & one 400kV quad line to Tuticorin pooling station from both the phases of KKNPP generation. This arrangement shall also facilitate two 400kv lines available even during contingency of tower outages on any of the three 400kV D/c lines. Further 6 nos. of quad conductor 400kV lines shall generally be adequate for immediate evacuation of power from KKNPP-1&2 and KKNPP-3&4, however any additional transmission system, if required, shall be planned alongwith LTA application for KKNPP-3&4 to be submitted by NPCIL.

7. Further, as the Unit-3&4 of the Kudankulam generation project is getting delayed, it was decided during 36th Meeting of Standing Committee of Southern region held in September, 2013, Turicorin PS – Tirunelveli section of the agreed Turicorin PS – Kudankulam 400 kV Quad D/c line may be constructed ahead of KKNPP-3&4 and one of the existing Kudankulam – Tirunelveli 400 kV Quad D/c is to be connected to the same making Kudankulam – Turicorin PS 400kV Quad D/c line. This arrangement shall facilitate two termination points viz. Tirunelveli & Turicorin PS for evacuation of power from KKNPP-1&2 and shall avoid operational difficulties in case of any bus fault at either Tirunelveli or Tuticorin pooling stations.

8. With regard to the planning of transmission system incorporating risk mitigation measures in case of similarly placed generators is as per CEA transmission planning criteria.



“In case of transmission system associated with a nuclear power station there shall be two independent sources of power supply for the purpose of providing start-up power. Further, the angle between start-up power source and the generation switchyard should be, as far as possible, maintained within 10 degrees.

The evacuation system for sensitive power stations viz., nuclear power stations, shall generally be planned so as to terminate it at large load centres to facilitate islanding of the power station in case of contingency.”

Accordingly, the evacuation system for Kaiga APP stage-I was also planned at two points i.e. Kaiga – Davangere 400kV D/c line and Kaiga – Narendra 400kV D/c line. The minutes of the 8th SCM of SR are enclosed.

Further, the evacuation system for RAPP Unit 5&6 (440 MW) was also planned in similar lines consisting of RAPP – Kankroli 400 kV D/c line & RAPP – Kota 400 kV S/c line to meet any single as well as double contingency of 400kV line.”

13. Based on the above submission, we proceed to determine the tariff of Asset-I in terms of the provisions of the 2014 Tariff Regulations.

Date of Commercial operation

14. Regulation 4(3) of the 2014 Tariff Regulations provides as follows:-

“4. Date of Commercial Operation: The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

xxx]

(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end: (i) where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with Regulation 12(2) of these Regulations : (ii) in case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in



commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof.”

15. The petitioner vide affidavit dated 20.4.2018 has submitted that the Asset-I has been commissioned and the date of the commercial operation of the said transmission asset is 10.3.2018. The petitioner was directed to submit the RLDC certificate for the trial run operation for the transmission asset, CMD certificate under grid code and CEA certificate under Regulation 43 of CEA (Measures Relating to safety and Electric supply) Regulations, 2010 certificate for instant asset. In response, the petitioner vide affidavit dated 20.4.2018 has submitted the RLDC certificate dated 3.4.2018 issued by SRLDC in support of the claim of commercial operation in accordance with Regulation 5(2) of the 2014 Tariff Regulations which indicates the completion of successful trial operation. The petitioner has submitted the CEA inspection certificate dated 6.11.2017, 22.12.2017 and CMD certificate as required under Grid Code. The petitioner has submitted the self-declaration certificate stating that the transmission line, substation and communication system are capable of operation to their full capacity w.ef. 7.3.2018.

16. Accordingly, taking into consideration the RLDC certificate, CEA certificate and CMD certificate for the instant asset, the COD of the Asset-I is approved as 10.3.2018 and has been considered for the purpose of tariff computation, from COD till 31.3.2019.



There is no time over-run since COD was achieved on 10.3.2018 as against SCOD of 12.5.2018.

Capital cost

17. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-

“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.”

(2) The Capital Cost of a new project shall include the following:

(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;

(c) Increase in cost in contract packages as approved by the Commission;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;

(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations; 39

(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the COD as specified under Regulation 18 of these regulations; and

(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.”



18. The details of capital cost claimed by the petitioner in terms of the Cost Accountant (CA) certificate dated 17.4.2018 (submitted vide affidavit dated 20.4.2018) as on actual COD and the estimated additional capital expenditure projected to be incurred for the said transmission asset is summarized below:-

(₹ in lakh)

Apportioned Approved Cost	Expenditure as on COD	Actual Expenditure	Estimated Expenditure		Total Estimated Completion cost
		2017-18	2018-19	2019-20	
16211.00	14237.79	129.27	1113.59	489.86	15970.51

19. According to the Auditor Certificate, the expenditure up to COD has been verified from the books of accounts of the project and the projected expenditure is on the basis of estimates as furnished by the Management.

Cost over-run

20. The total estimated completion cost of the transmission assets is ₹15970.51 lakh as against the apportioned approved cost of ₹16211.00 lakh. Hence, there is no cost over-run in commissioning of the instant transmission assets.

Time Over-run

21. As per the investment approval dated 14.1.2016, the assets covered in the instant petition were scheduled to be commissioned within 28 months from the date of investment approval (i.e. 12.1.2016). The scheduled date of commissioning of the asset



works out to 12.5.2018 as against which, Asset-I was commissioned on 10.3.2018. Accordingly, there is no delay in commissioning of the instant transmission assets.

Treatment of IDC and IEDC

22. The petitioner has claimed Interest during Construction (IDC) of ₹691.19 lakh for Asset-I on accrual basis. The petitioner submitted the discharge details of IDC as under:-

(₹ in lakh)

IDC As per Auditor certificate	IDC discharged up to COD	IDC discharged in 2018-19
691.19	493.02	198.17

23. The petitioner has further submitted the statement showing IDC discharged up to COD for the asset in which the loan wise drawl date has also been mentioned. For the purpose of determining IDC, the loan wise drawl date as furnished by the petitioner has been considered as the date of infusion of debt fund for the concerned loan. IDC amounting to ₹493.02 lakh have been worked out and allowed as on COD, on cash basis, for Asset-I. The balance IDC of ₹198.17 lakh has been discharged after COD (i.e. in 2018-19) and the same has been considered in the additional capital expenditure for the year 2018-19.



24. The petitioner has claimed Incidental Expenditure During Construction (IEDC) of ₹543.27 lakh for Asset-I. The year wise details of the actual amount of IEDC discharged i.e. Form-12A has been submitted by the petitioner. However, the petitioner vide affidavit dated 20.04.2018 has submitted that the entire IEDC claimed as per Auditor Certificate is on cash basis and has been paid up to COD of the assets. Accordingly, the entire amount of IEDC has been considered.

Treatment of initial spares

25. Regulation 13 of the 2014 Tariff Regulations specifies ceiling norms for capitalization of initial spares in respect of transmission system as under:-

“13. Initial Spares

Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

(d) Transmission system

(i) Transmission line -1.00%

(ii) Transmission Sub-station (Green Field) -4.00%

(iii) Transmission Sub-station (Brown Field) -6.00%

(iv) Series Compensation devices and HVDC Station -4.00%

(v) Gas Insulated Sub-station (GIS)-5.00%

(vi) Communication system-3.5%.

Provided that:

(i) where the benchmark norms for initial spares have been published apart of the benchmark norms for capital cost by the Commission, such norms shall apply to the exclusion of the norms specified above:



(ii) where the generating station has any transmission equipment forming part of the generation project, the ceiling norm for initial spares for such equipments shall be as per the ceiling norms specified for transmission system under these regulations:

(iii) Once the transmission project is commissioned, the cost of initial spares shall be restricted on the basis of plant and machinery cost corresponding to the transmission project at the time of truing up:

(iv) for the purpose of computing the cost of initial spares, plant and machinery cost shall be considered as project cost as on cut-off date excluding IDC, IEDC, Land Cost and cost of civil works. The transmission licensee shall submit the break-up of head wise IDC & IEDC in its tariff application.

26. The details of initial spares claimed by the petitioner vide affidavit dated 20.4.2018 in terms of the CA certificate dated 17.4.2018 is as under:-

(₹ in lakh)

Particulars	Cost for calculation of initial spares#	Initial spares claimed	Initial spares claimed (%)
Asset-1	493.26	27.90	5.66

#Total Cost (Plant and machinery cost excluding IDC, IEDC, land cost and cost of civil works for the purpose of initial spares)

27. The initial spares claimed by the petitioner is not within the ceiling limits as specified under the 2014 Tariff Regulations. Accordingly, initial spares has been worked out by considering 4% of the cost (₹493.26 lakh) i.e. ₹19.39 lakh and the same is allowed for the purpose of tariff.



Capital cost as on COD

28. The detail of the capital cost considered as on COD after adjustment of IDC and IEDC is as follows:-

(₹ in lakh)			
Capital cost as on COD claimed	Un- discharged IDC as on COD.	Excess initial spares disallowed	Capital cost as on COD considered for tariff calculation
14237.79	198.17	8.51	14031.11

29. However, as per Form-5, the actual capital expenditure incurred as on COD is ₹13963.62 lakh. As per Form-4A, the actual cash expenditure as on COD is ₹14039.62 lakh (i.e. ₹14237.79 lakh **minus** ₹198.17 lakh). Thus, the capital cost claimed on cash basis as per Form-4A is in excess of the actual capital expenditure as per Form-5 by ₹76.00 lakh. Accordingly, the amount of ₹76.00 lakh has been disallowed from the capital cost of ₹14031.11 lakh. However, no adjustment has been made with regard to IDC, IEDC and initial spares on account of un-reconciled disallowance of ₹76.00 lakh. This is however, subject to revision based on truing-up. The Petitioner is however directed to provide reconciliation of the capital cost as per Form-5, Form-4A and the Auditor certificate and submit the same at the time of truing-up in terms of Regulation 8 of the 2014 Tariff Regulations.

30. Based on the above, the capital cost of ₹13955.11 lakh has been allowed for the purpose of tariff.



Additional capital expenditure

31. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“ (1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities recognised to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law or compliance of any existing law.”

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

32. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” date as under:-

“cut-off date” means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under_{st} commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation”.

33. Accordingly, the cut-off date for the above mentioned asset is considered as 31.3.2021.



34. The details of additional capital expenditure claimed by the petitioner vide affidavit dated 20.4.2018 under Regulation 14(1) of 2014 Tariff Regulations are as under:-

(₹ in lakh)		
2017-18	2018-19	2019-20
129.27	1311.75*	489.86

* including discharges of IDC amounting to ₹198.17 lakh

35. We have considered the submissions of the parties. The additional capital expenditure incurred by the petitioner and projected to be incurred by the petitioner for the transmission asset is on the account of balance and retention payments. Moreover, the same is within the approved apportioned cost and is within the cut-off date. However, the claim of the petitioner for additional capitalization for the year 2019-20 has been considered since the same is beyond the scope of the 2014 Tariff Regulations. The petitioner is at liberty to claim the same during the tariff period 2019-24 and the same will be dealt with in accordance with law.

36. The additional capital expenditure for 2018-19 as per Form-4A is ₹963.58 lakh (i.e. projected additional capital expenditure of ₹626.44 lakh plus discharges of ₹337.14 lakh). Accordingly, the additional capital expenditure claimed for the year 2018-19 has been restricted to ₹963.58 lakh. Based on the above, the additional capital expenditure allowed for 2017-19 is as under:-



(₹ in lakh)

2017-18	2018-19
129.27	963.58

Capital cost as on 31.3.2019

37. Accordingly, the capital cost considered for the year 2017-19 (10.3.2018) till 31.3.2019 is as under:-

(₹ in lakh)

Cost on COD	Additional capital expenditure for 2017-18	Additional capital expenditure for 2018-19	Total estimated cost as on 31.3.2019
13955.11	129.27	963.58	15047.96

Debt-Equity Ratio

38. Clauses 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. 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:

ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.



Explanation.-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

39. Considering the details of debt and equity as on COD as submitted by the petitioner, the debt-equity ratio as on COD works out to 70:30 and the same is allowed. Further, the admitted additional capital expenditure has been considered in the debt-equity ratio of 70:30. Accordingly, the details of debt-equity considered in respect of the assets are as under:-

(₹ in lakh)

Asset-I			
Particulars	%	As on COD	As on 31.3.2019
Debt	70.00	9768.58	10533.57
Equity	30.00	4186.53	4514.39
Total	100.00	13955.11	15047.96

Return on equity

40. Clause (1) and (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify asunder:-

“ 24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the



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:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50kilometers.”

“25. Tax on Return on Equity: (1) The base rate of return on equity as allowed by the Commission under Regulation 24 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 the 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 income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered 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.”

Additional Return on Equity

41. The petitioner has submitted that RoE has been calculated at the rate of 20.243% after grossing up the RoE with MAT rate in terms of the above Regulations. The petitioner has further submitted that the grossed up RoE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

42. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.



43. The petitioner has also claimed Additional RoE of 0.5% for the instant assets. The petitioner has submitted that the whole project has been actually commissioned within the timeline for claiming additional RoE under Regulation 24(2) of the 2014 Tariff Regulations.

44. In the absence of commissioning of Units 3 and 4 of KKNPP, Asset-1 is an interim arrangement, which has been put in place for providing additional operational flexibility for Unit-1 and Unit-2 of the Kudankulam plant. In this background, we are not inclined to allow additional ROE.

45. ROE has been computed at the rate of 19.610% for the period 2014-19 after grossing up the ROE with MAT rate in terms of the above Regulations. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity. This is however subject to truing-up based on the actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, ROE has been allowed as under:-



(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Opening Equity	4186.53	4225.31
Addition due to Additional Capitalisation	38.78	289.07
Closing Equity	4225.31	4514.39
Average Equity	4205.92	4369.85
Return on Equity (Base Rate)	15.500%	15.500%
Tax rate (MAT)	20.961%	20.961%
Rate of Return on Equity (pre-tax)	19.610%	19.610%
Return on Equity (pre-tax)	49.71	856.93

Interest on loan

46. Regulation 26 of the 2014 Tariff Regulations provides as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalisation 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 decapitalisation 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.”

47. In terms of the provisions of Regulation 26 of the 2014 Tariff Regulations, the petitioner entitlement to interest on loan has been calculated on the following basis:-

- (i) Gross normative loan of ₹9768.58 lakh has been considered as on COD;
- (ii) Gross actual loan, repayment of installments and rate of interest as provided at Form-9C has been considered to arrive at the weighted average rate of interest;
- (iii) The normative repayment for the tariff period 2014-19 shall deemed to be equal to the depreciation allowed for that period;

48. Based on the above, interest on loan has been calculated as follows:-

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Gross Normative Loan	9768.58	9859.07
Cumulative Repayment up to Previous year	-	44.62
Net Loan-Opening	9768.58	9814.45
Addition due to Additional Capitalization	90.49	674.51



Repayment during the year	44.62	769.07
Net Loan-Closing	9814.45	9719.88
Average Loan	9791.51	9767.17
Weighted Avg Rate of Interest	7.834%	7.834%
Interest on Loan	46.23	765.16

Depreciation

49. Regulation 27 of the 2014 Tariff Regulations provide as follows:-

"27. Depreciation:

Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. 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 or elements thereof.

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 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) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** 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.



(4) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

50. The instant transmission assets were put under commercial operation during 2017-18 (10.3.2018). Accordingly, the same will complete 12 years, during the year 2030 i.e. after the tariff period 2014-19. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II of the 2014 Tariff Regulations. Based on the above, the depreciation has been considered and allowed as under:-

(₹ in lakh)		
Particulars	2017-18	2018-19
Opening Capital Cost	13955.11	14084.38
Addition during 2009-14 due to Additional Capitalisation	129.27	963.58
Closing Capital Cost	14084.38	15047.96
Average Capital Cost	14019.74	14566.17
Rate of Depreciation	5.2799%	5.2798%
Depreciable Value	12617.77	13109.55
Remaining Depreciable Value	12617.77	13109.55
Depreciation	44.62	769.07

Operation & Maintenance Expenses (O&M Expenses)

51. Regulation 29 (4) (a) of the 2014 Tariff Regulations specifies the norms for O & M Expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as under:-



Element	2014-15	2015-16	2016-17	2017-18	2018-19
D/C (four conductor T/L (₹ lakh/km)	1.062	1.097	1.133	1.171	1.210
400 kV bay AIS (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71

52. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (4) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the petitioner's entitlement to O&M Expenses has been worked out as hereunder:-

(₹ in lakh)		
Extension of Kudankulam APP- Tirunelveli 400 kV (Quad) D/C line to Tuticorin Pooling station along with associated bays at Tuticorin pooling station		
Elements	2017-18 (pro-rata)	2018-19
Kudankulam APP- Tirunelveli 400kV (Quad) D/c line to Tuticorin Pooling station (66.09 KM)	4.66	79.96
02 nos. 400 kV bays (AIS)	8.02	137.42
Total :	12.68	217.39
O&M Expenses allowed	12.44	217.39

53. The O&M expenses claimed by petitioner is within the limit specified under the 2014 Tariff Regulations. The O&M expenses allowed for Asset-1 for 2017-18 is ₹12.44 lakh (pro-rata) and for 2018-19 is ₹217.39 lakh.

54. The petitioner has submitted that the O&M Expenses for the period 2014-19 had been arrived at on the basis of normalized actual O&M Expenses during the period 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees is due during 2014-19 and actual impact of wage hike effective from a future



date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

55. The O&M Expenses have been worked out and allowed as per the O&M Expenses norms specified under the 2014 Tariff Regulations. As regards, the prayer of the petitioner for considering the impact of wage revision, liberty is granted to the petitioner to file separate application and the same may be considered in advance with law.

Interest on Working Capital

56. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-

“28. Interest on Working Capital

(c)(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29;and

(iii) Operation and maintenance expenses for one month”

“(5) “Bank Rate” means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”



57. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

(i) Receivables

Receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months' annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(ii) Maintenance spares

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.

(iii) O & M expenses

Operation and maintenance expenses have been considered for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.



(iv) Rate of interest on working capital

The rate of interest on working capital considered is 12.80% (SBI Base Rate of 9.30% plus 350 basis points).

58. The interest on working capital has been worked out and allowed as under:-

Particulars	(₹ in lakh)	
	2017-18 (pro-rata)	2018-19
Maintenance Spares	1.87	32.61
O & M expenses	1.04	18.12
Receivables	26.12	445.34
Total	29.02	496.06
Interest	3.71	63.50

Annual Transmission charges

59. The transmission charges allowed for the Asset-I are as follows:-

Particulars	(₹ in lakh)	
	2017-18 (pro-rata)	2018-19
Depreciation	44.62	769.07
Interest on Loan	46.23	765.16
Return on Equity	49.71	856.93
Interest on Working Capital	3.71	63.50
O & M Expenses	12.44	217.39
Total	156.72	2672.04

Filing fee and the publication expenses

60. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses



in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.

License fee and RLDC Fees and Charges

61. The petitioner has prayed to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. We are of the view that the petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) of Regulation 52 of the 2014 Tariff Regulations.

Service tax

62. The petitioner has prayed to allowed to bill and recover the service tax on transmission charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list at any time in future. The petitioner has further prayed that if any taxes and duties including cess etc. are imposed by any statutory/Government/municipal authorities, it shall be allowed to be recovered from the beneficiaries. Service Tax is not levied on transmission. Further, Service Tax is subsumed by GST and hence the prayer of the petitioner is infructuous.

Goods and Services Tax

63. The petitioner has prayed for reimbursement of tax, if any, on account of proposed implementation of GST. The petitioner has submitted that the Commission should allow



to recover GST from the beneficiaries, if imposed on transmission charges under the proposed GST when implemented by Government of India. We are of the view that petitioner's prayer is premature.

Sharing of Transmission Charges

64. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time, as provided in Regulation 43 of the 2014 Tariff Regulations.

65. This order disposes of Petition No. 110/TT/2017.

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

**Sd/-
(A. S. Bakshi)
Member**

**Sd/-
(A. K. Singhal)
Member**

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

