

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 404/TT/2014**

**Coram:**

**Shri A.S. Bakshi, Member  
Dr. M.K. Iyer, Member**

**Date of Hearing : 14.03.2016  
Date of Order : 28.03.2016**

**In the matter of:**

Determination of transmission tariff of 400/220 kV, 2x315 MVA GIS and LILO of 400 kV D/C Navsari-Boisar T/L at 400/220 kV GIS S/S (New) at Magarwada in UT of D&D along with associated bays and 80 MVAR Bus Reactor under "Establishment of 400/220 kV GIS at Magarwada in Union Territory of Daman & Diu in Western Region for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

**And in the matter of:**

Power Grid Corporation of India Ltd.  
'SAUDAMINI', Plot No-2,  
Sector-29, Gurgaon -122 001 (Haryana).

.....**Petitioner**

**Versus**

1. Madhya Pradesh Power Management Company Ltd.  
Shakti Bhawan, Rampur, Jabalpur-482008
2. Maharashtra State Electricity Distribution Co. Ltd.  
Prakashgad, 4<sup>th</sup> Floor, Bandra (East), Mumbai-400052
3. Gujarat Urja Vikas Nigam Ltd.  
Sardar Patel Vidyut Bhawan,  
Race Course Road  
Vadodara- 390007



4. Electricity Department  
Govt. of Goa,  
Vidyut Bhawan, Panaji- 403001
5. Electricity Department  
Administration of Daman & Diu,  
Daman- 396210
6. Electricity Department  
Administration of Dadra Nagar Haveli,  
U.T., Silvassa- 396230
7. Chhattisgarh State Electricity Board  
P.O Sunder Nagar, Dangania, Raipur  
Chhattisgarh-492013
8. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.  
3/54, Press Complex, Agra-Bombay Road  
Indore-452008

.....**Respondents**

The following were present:

For Petitioner : Shri Piyush Awasthi, PGCIL  
Shri Mohd. Mohsin, PGCIL  
Shri Pankaj Sharma, PGCIL  
Shri A. M. Pavgi, PGCIL  
Shri P.V. Nath, PGCIL  
Smt. Archana Kumari, PGCIL  
Shri Amit Yadav, PGCIL  
Shri S.S. Raju, PGCIL  
Shri Rakesh Prasad, PGCIL  
Shri Jasbir Singh, PGCIL  
Shri Aryaman Saxena, PGCIL  
Shri M.M. Mondal, PGCIL

For Respondent: None

### **ORDER**

The present petition has been preferred by Power Grid Corporation of India Ltd. ("the petitioner") for determination of tariff for 400/220 kV, 2x315 MVA GIS



and LILO of 400 kV D/C Navsari-Boisar T/L at 400/220 kV GIS Sub-station (New) at Magarwada in UT of D&D along with associated bays and 80 MVAR Bus Reactor under “Establishment of 400/220 kV GIS at Magarwada in Union Territory of Daman & Diu in Western Region (hereinafter referred as “transmission asset”) for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from COD to 31.3.2019.

2. The respondents are distribution licensees, electricity departments and centralised companies who are procuring transmission service from the petitioner, mainly beneficiaries of the Western Region.

3. The petitioner has served the petition to the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of Electricity Act, 2003 (“the Act”).

4. The petitioner initially claimed the tariff for the instant asset as a whole on the basis of anticipated COD of 1.11.2014. The petitioner was directed vide letter dated 8.12.2014 to provide the Management Certificate or Auditor’s certificate, along with all the tariff forms as per the actual COD, in case of change in COD. The petitioner vide affidavit dated 8.12.2014 has submitted that the asset was commissioned on 9.11.2014. Accordingly, Annual Fixed Cost was allowed for the asset under Regulation 7(7) of the 2014 Tariff Regulations vide order dated



24.12.2014. Further, the petitioner has submitted, vide affidavit dated 7.3.2016 that the 400/220 kV, 2x315 MVA GIS and LILO of 400 kV D/C Navsari-Boisar T/L at 400/220 kV GIS Sub-station (New) at Magarwada along with associated bays and 80 MVAR Bus Reactor under “Establishment of 400/220 kV GIS at Magarwada in Union Territory of Daman & Diu” has been split into three assets on the basis of commercial operation. The details of the assets along with date of commercial operation and approved apportioned cost is given in the table below. It has been observed that the petitioner has submitted again on affidavit dated 8.12.2014 that the actual commissioning of the asset was 9.11.2014 and later on vide affidavit dated 7.3.2016 submitted that the asset has been split into three parts and commissioned on 9.11.2015, 11.1.2015 and 1.3.2015. Once this discrepancy was brought to the notice of the petitioner, the petitioner, vide affidavit dated 29.3.2016, has submitted that in affidavit dated 8.12.2014, the description of the asset was inadvertently recorded as “400/220 kV, 2x315 MVA GIS alongwith Bus Reactor and LILO of 400 kV D/C Navsari-Boisar T/L at 400/220 kV GIS Sub-station (New) at Magarwada in UT of D&D along with associated bays-Asset I” and it should be read as “315 MVA, 400/220 kV ICT-I & II with bays and LILO of One ckt 400 kV D/C NAVSARI-KALA TL at Magarwada S/S”. Annual Fixed Cost was allowed for the asset as a whole on the basis of the description of the asset given in affidavit dated 8.12.2014. The petitioner should have been careful while giving information on affidavit. We are not satisfied with the explanation given by the petitioner. The petitioner is directed not to repeat such errors in future and to ascertain the facts correctly before filing the same on



affidavit. It is further observed that the petitioner has not filed any documents to show that the splitting of asset has been discussed with the beneficiaries in any RPC and to show that the beneficiaries have been apprised about the segregated commissioning of the assets. We are of the considered view that the petitioner should take the beneficiaries into confidence in case of any deviation in execution of its projects. The splitting of the instant asset on the basis of date of commercial is allowed in the instant case, however, the petitioner is directed to inform the beneficiaries in future.

Asset	Description	Actual COD	Approved apportioned cost (₹ in lakh)
Asset-1	315 MVA, 400/220 kV ICT - I & II with bays and LILO of one ckt 400 kV D/C Navsari-Kala T/L at Magarwada Sub-station	9.11.2014	23138.47
Asset-2	400 kV, 80 MVAR Bus Reactor along with associated bays at GIS Magarwada (New)	11.1.2015	1194.22
Asset-3	LILO of 2 <sup>nd</sup> ckt 400 kV D/C Navsari-Boisser T/L at Magarwada Sub-station	1.3.2015	1595.62

5. The petitioner, vide its affidavit dated 7.3.2016, has submitted the revised tariff forms for **Asset-1**: 315 MVA, 400/220 kV ICT - I & II with bays and LILO of one ckt 400 kV D/C Navsari-Kala T/L at Magarwada Sub-station, **Asset-2**: 400 kV, 80 MVAR Bus Reactor along with associated bays at GIS Magarwada (New), and **Asset-3**: LILO of 2<sup>nd</sup> ckt 400 kV D/C Navsari-Boisser T/L at Magarwada Sub-station for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from COD (9.11.2014 for **Asset-1**, 11.1.2015 for **Asset-2** and 1.3.2015 for **Asset-3**) to 31.3.2019.



6. The petitioner has also submitted the COD letters in case of the instant assets. No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003. None of the respondents have filed any reply to the petition. The hearing in this matter was held on 14.3.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

7. The brief facts of the case are as follows:-

(a) Investment approval was accorded by Board of Directors of POWERGRID, vide the Memorandum No. C/CP/Magarwada-GIS dated 24.1.2012 at an estimated cost of ₹25928.31 lakh, which included IDC of ₹833 lakh (based on 3<sup>rd</sup> quarter, 2011 price level).

(b) The approved apportioned cost of Asset-I, II and III is ₹23138.47 lakh ₹1194.22 lakh and ₹1595.62 lakh respectively.

(c) The scope of work scope of the instant project is as follows:-

**Transmission Line:**

(i) LILO of 4000 kV D/C Navasari-Boisar line at Magarwada Sub-station (multi-circuit tower)

**Substation:**

(i) Establishment of 2x315 MVA, 400/220 kV GIS Sub-station at Magarwada in UT of D&D.

(d) The transmission asset was scheduled to be commissioned within 24 months from the date of investment approval i.e. 24.1.2012. Therefore, the scheduled date of commissioning (SCOD) of the transmission system works out to 24.1.2014 against which the Assets-1, 2 and 3 were put



under commercial operation with effect from 9.11.2014, 11.1.2015 and 1.3.2015, respectively. Thus, there is delay of 9 months and 16 days in case of Asset-1, 11 months and 18 days in case of Asset-2 and 13 months and 5 days days in case of Asset-3 in commissioning of subject transmission assets.

(e) The Annual Fixed Charges for the instant assets was allowed for inclusion in the PoC charges vide order dated 24.12.2014 in Petition No. 404/TT/2014.

8. The petitioner vide is affidavit dated 7.3.2016 has claimed the revised transmission charges as under:-

(₹ in lakh)

Asset-I					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	376.42	1068.39	1099.31	1109.77	1109.77
Interest on Loan	114.17	338.51	325.87	303.86	275.95
Return on equity	444.90	1263.83	1311.69	1328.63	1328.63
Interest on Working Capital	33.98	93.58	96.17	97.39	97.89
O & M Expenses	225.37	581.16	600.48	620.34	640.98
<b>Total</b>	<b>1194.84</b>	<b>3345.47</b>	<b>3433.52</b>	<b>3459.99</b>	<b>3453.22</b>

(₹ in lakh)

Asset-II					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	8.19	43.61	52.36	54.40	54.40
Interest on Loan	9.55	48.66	54.69	52.38	47.59
Return on equity	9.12	48.60	58.34	60.61	60.61
Interest on Working Capital	1.25	6.18	6.85	6.99	6.99
O & M Expenses	11.50	53.25	55.02	56.84	58.73
<b>Total</b>	<b>39.61</b>	<b>200.30</b>	<b>227.26</b>	<b>231.22</b>	<b>228.32</b>

(₹ in lakh)



Asset-III					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	3.96	48.91	50.68	51.04	51.04
Interest on Loan	4.21	49.79	47.50	43.80	39.73
Return on equity	4.38	53.98	55.79	56.19	56.19
Interest on Working Capital	0.38	4.64	4.70	4.68	4.62
O & M Expenses	1.64	20.36	21.03	21.73	22.44
<b>Total</b>	<b>14.57</b>	<b>177.68</b>	<b>179.70</b>	<b>177.44</b>	<b>174.02</b>

9. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

(₹ in lakh)

Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	85.70	87.17	90.07	93.05	96.15
O & M Expenses	47.61	48.43	50.04	51.70	53.42
Receivables	504.87	557.58	572.25	576.67	575.54
Total	638.18	693.18	712.36	721.42	725.11
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	86.15	93.58	96.17	97.39	97.89
<b>Pro-rata Interest</b>	<b>33.98</b>	<b>93.58</b>	<b>96.17</b>	<b>97.39</b>	<b>97.89</b>

(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	7.73	7.99	8.25	8.53	8.81
O & M Expenses	4.30	4.44	4.59	4.74	4.89
Receivables	29.59	33.38	37.88	38.54	38.06
Total	41.62	45.81	50.72	51.81	51.76
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest	5.62	6.18	6.85	6.99	6.99
<b>Pro-rata Interest</b>	<b>1.25</b>	<b>6.18</b>	<b>6.85</b>	<b>6.99</b>	<b>6.99</b>

(₹ in lakh)

Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	2.95	3.05	3.15	3.26	3.37
O & M Expenses	1.64	1.70	1.75	1.81	1.87
Receivables	29.14	29.61	29.95	29.57	29.00
Total	33.73	34.36	34.85	34.64	34.24
Rate of Interest	13.50	13.50	13.50	13.50	13.50





Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest	4.55	4.64	4.70	4.68	4.62
<b>Pro-rata Interest</b>	<b>0.38</b>	<b>4.64</b>	<b>4.70</b>	<b>4.68</b>	<b>4.62</b>

### Date of Commercial Operation (COD)

10. The petitioner has claimed the date of the commercial operation of the Asset-I, II and III as 9.11.2014, 11.1.2015 and 1.3.2015, respectively. 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.”

9. The petitioner, vide its affidavit dated 7.3.2016, has submitted RLDC certificate issued by WRLDC, POSOCO vide letter dated 15.1.2015 for Asset-2 and 19.3.2015 for Asset-3 in support of the successful trial operation in



accordance with Regulation 5(2) of the 2014 Tariff Regulations for declaring commercial operation of the subject assets. Further, the petitioner has also provide the energisation certificate issued by Regional Inspectorial Organisation, Central Electricity Authority for the assets. Accordingly, the commercial operation date of the transmission asset has been considered as 9.11.2014, 11.1.2015 and 1.3.2015 for Asset-1, Asset-2 and Asset-3, respectively, and the tariff is worked out from COD to 31.3.2019. As the petitioner has not provided the RLDC certificate in support of trial operation issued by WRLDC, POSOCO for Asset-1, the COD has been admitted subjected to submission of the RLDC certificate for Asset-1 at the time of truing up.

### **Capital Cost**

11. The petitioner has submitted capital expenditure of ₹17388.44 lakh, ₹691.26 lakh and ₹893.54 lakh as on COD of 9.11.2014, 11.1.2015 and 1.3.2015 for Asset-1 Asset-2 and Asset-3, respectively. Also, the petitioner has submitted Auditor's Certificate dated 23.10.2015 for all the assets in support of capital cost incurred up to COD.

12. Regulations 9 and 10 of the 2014 Tariff Regulations specify as follows:-

**“9. Capital Cost:** (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;
- 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.

...

(6) The following shall be excluded or removed from the capital cost of the existing and new project:

- a) The assets forming part of the project, but not in use;
- b) Decapitalisation of Asset;
- c) In case of hydro generating station any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State government by following a two stage transparent process of bidding; and
- d) the proportionate cost of land which is being used for generating power from generating station based on renewable energy:

Provided that any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation;

**10. Prudence Check of Capital Expenditure:** The following principles shall be adopted for prudence check of capital cost of the existing or new projects:

(1) In case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified/to be specified by the Commission from time to time: Provided that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the capital expenditure, financing plan, interest during construction, incidental expenditure during construction for its reasonableness, use of efficient technology, cost over-run and time over-run, competitive bidding for procurement and such other matters as may be considered appropriate by the Commission for determination of tariff.”

### Time over-run



13. As per the investment approval dated 24.1.2012, the instant assets were scheduled to be commissioned within 24 months from the date of investment approval. Accordingly, the schedule completion date works out to 24.1.2014. However, the actual commissioning of Asset-1, Asset-2 and Asset-3 was 9.11.2014, 11.1.2015 and 1.3.2015, respectively. Thus, the petitioner has submitted a delay of 9 months and 16 days for Asset-1, 11 months and 18 days for Asset-2 and 13 months and 5 days for Asset-3 in commissioning of subject transmission assets.

14. The petitioner has submitted the following reasons for time over-run:-

**GIS in Magarwada**

- a) There had been a delay in handling over of land. The request for allotment of 9-12 acres of land for construction of GIS at Magarwada in UT of D&D was sent on 16.4.2010. Land was handed over to the petitioner on 23.4.2012.
- b) Delay in permission of tree cutting: Frequent requests were made to the Forest Department, UT of D&D for permission to cut the trees on acquired land from June, 2012 to May, 2012. The plantation was cleared from the construction area by 12.9.2013.
- c) Public resistance: The turnkey contract was awarded vide LOA dated 29.6.2012. Resistance from local public was faced at site on number of occasions. The work was carried out with police protection.
- d) Heavy rains: The ongoing civil construction works were stopped due to heavy monsoon from June, 2013 to September, 2013 and again



from August, 2014 to September, 2014. The erection activities at GIS was frequently stopped for several days as the GIS system is essentially required to be erected in total dry atmosphere.

### **LILO in Magarwada Sub-station**

Severe RoW issues were encountered during construction of LILO of 400 kV D/C Navsari-Boisar T/L at Magarwada GIS as given below:

- a) The application of overhead crossing of line to Western Railway between Vapi-Karembeli railway stations was submitted on 21.11.2012. The NOC for the same was received on 24.9.2014. The block for the same was provided by Western Railway officers after October, 2014.
- b) The application for overhead crossing of line to National Highway No. 8 on 20.11.2012. The NOC/compliance letter was received on 8.7.2014 and compliance for the same was submitted on 28.8.2014.
- c) The work at five nos. locations, i.e. AP31, AP32, AP33, AP34 and AP35 at UT of Daman & Diu was stopped by the villagers and sitting MPs. This was informed to police department of Administration of UT of D&D vide letter no. WRTS-II/Kala/TLC/261 dated 12.12.2012. These five locations were cleared amicably through local administrations and senior persons. The work at these locations was delayed for around 3 months.



15. The petitioner has further submitted the following supporting documents and correspondences seeking condonation of the time over-run in case of the instant assets.

- a) Request letter dated 16.4.2010 to administration of UT of D&D to allot land for construction of sub-station,
- b) Notification dated 9.6.2011 for land acquisition by Administration,
- c) Letter dated 31.1.2012 for land award by Collector, Daman,
- d) Letter dated 23.4.2012 for land possession to Powergrid,
- e) Letter dated 16.6.2012 for request to Deputy Conservator of Forest, UT of D&D for clearing of plantation,
- f) Correspondences dated 13.8.2012, 29.10.2012, 18.4.2013 and 6.5.2013 with Forest Department,
- g) Application letter dated 20.11.2012 for over-head crossing of National Highway No. 8 to NHAI,
- h) Application letter dated 21.11.2012 for over-head crossing to Western Railways,
- i) NOC/Compliance letter dated 8.7.2014 from NHAI,
- j) NOC letter dated 24.9.2014 from Western Railways,
- k) Correspondences dated 3.7.2012, 12.12.2012, 11.3.2013 and 26.2.2014 with Police Department of UT of D&D for providing police protection against local protests and miscreants,
- l) Hindrance Register for various events which hindered the construction activities,



- m) Newspaper cuttings of various newspapers depicting heavy rainfall during June, 2013 to September, 2013 and August, 2014 to September, 2014.
- n) Photographs of actual site condition taken during heavy rainfall.

16. We have considered the submissions of the petitioner. The time over-run in case of GIS at Magarwada was on account of delay in cutting of trees and interruption by heavy monsoon. The matter for permission of tree cutting was made to Deputy Conservator of Forest, UT of D&D on 16.6.2012. Thereafter, there were continuous correspondences with Forest Department, D&D on the same on 13.8.2012, 29.10.2012, 18.4.2013 and 6.5.2013. Because of the continuous efforts by the petitioner, the plantation was cleared from the construction area by 12.9.2013. It is observed from the petitioner's letter dated 18.4.2013, that the petitioner had already started the work of sub-station and work in the area where the trees were there was only affected. The petitioner could get the clear possession of part of the land only on 12.9.2013 and the petitioner could not carry out any work from 16.6.2012 to 12.9.2013. We are of the view that time over-run of six months (i.e. 180 days) is on account of delay in cutting of trees and hence six months of time over-run is condoned.

15. The petitioner has submitted that ongoing civil construction works were halted due to heavy monsoon from June, 2013 to September, 2013 and August, 2014 and September, 2013. We are of the view that such rains are normal and the petitioner should have taken into account the seasonal rains at the time of



planning. The photographs submitted by the petitioner shows that the effect of rains was heavy during two months i.e. July, 2013 and August, 2013. Therefore, the delay of two months of July, 2013 and August, 2013 (i.e. 62 days) has been condoned on account of heavy rains. Accordingly, delay of 8 months in case of Asset-1 and Asset-2, is condoned.

16. With regard to works of LILO in Magarwada Sub-station, i.e. Asset-3, the petitioner has submitted that the substantial time was lost on account of RoW issues with overhead crossing of line between Vapi-Karembeli railway stations and National Highway No. 8 of National Highway Authority of India (NHAI). It is observed that the petitioner had applied for over-head crossing of line in November, 2012. NOC/clearance letters for the same was received in 8.7.2014 from NHAI and 24.9.2014 from Western Railways. Thus, there was delay of around 21 months in getting clearance from Railways and NHAI.

17. We have considered the submission of the petitioner regarding time over-run. The delay of 8 months (=242 days) out of 9 months 16 days (=289 days) in case of Asset 1 and 8 months (=242 days) out of 11 months 18 days (=352 days) in case of Asset-2 due to tree cutting and heavy rains was beyond the control of the petitioner. Similarly, the entire delay of 13 months and 5 days (=401 days) in commissioning of the Asset 3 was due to ROW problem and railway crossing and it is beyond the control of the petitioner.





18. The Hon'ble Appellate Tribunal for Electricity in its judgement dated 27.4.2011 in Appeal No.72/2010 has laid down the principle to be followed to determine the liability for time over-run in three scenarios as under:-

- (a) Due to factors entirely attributable to the project developer;
- (b) Due to the factors beyond the control of project developer; and
- (c) Not covered under (a) and (b).

19. In the first scenario, the additional cost due to time over-run would be entirely borne by the project developer and the LD amount, if any, would be retained by them. In the second scenario, the additional cost due to time over-run shall be capitalized, however, the benefit of LD and the insurance proceeds, if any, to be reduced from the capital cost. In the last scenario, the additional cost due to time over-run including LD and insurance proceeds could be shared between the project developer and the beneficiaries

20. As discussed above, the time over-run 8 months (i.e. 242 days) in commissioning of Asset-1 and Asset-2 and 21 months for Asset-3 is beyond the control of the petitioner and it cannot be attributed to the petitioner. As per the judgement of Hon'ble Tribunal, the additional cost due to time over-run not attributable to the petitioner shall be capitalized. Accordingly, the time over-run of 242 days out of 289 days in case of Asset-1 and 242 days out of 352 days in case of Asset-2 is condoned and accordingly IDC and IEDC for 242 days is allowed to be capitalised. Further, in case of Asset-3, the time over-run of 13 months and 5 days (i.e. 401 days) is allowed to be capitalised.



### **Cost variation**

21. The petitioner was directed to submit the reason and justification for cost variation along with documentary evidence. The petitioner, vide its affidavit dated 7.3.2016, has submitted that major increase in cost of preliminary Investigation, Right of Way, Forest clearance, PTCC, general civil works, etc. was due to increase in compensation cost (₹46 lakh to ₹1500 lakh). The compensation amount is as per the assessment of revenue authorities, which are higher w.r.t. FR cost. As regards increase in cost of excavation, concreting, reinforcement steel, erection, stringing, cost of survey and soil investigation including benching, the petitioner submitted that the actual awarded cost is higher (competitive bidding) with respect to FR cost. The quantities pertaining to various erection activities got increased due to actual soil strata encountered during execution which resulted into increase of foundation and erection quantities and completion cost. Also, erection cost is inclusive of painting cost of ₹184.6 lakh which was not considered in FR cost. The cost of structure for switchyard was due to inadvertent typographical error as the apportioned FR cost was wrongly written as ₹(-)254.7 lakh and the same has been corrected. Further, cost of township and colony increased as the actual awarded cost was due to competitive bidding.

22. Although there is no overall cost over-run, as there is large variation in completion cost, in certain items, the petitioner was directed to explain the basis on which FR estimates were prepared. The petitioner, vide affidavit dated



7.3.2016, has submitted that FR estimates are prepared in accordance with well defined procedures for cost estimate. The cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts. In the instant petition, the FR was prepared on the basis of 3<sup>rd</sup> quarter 2011 (September, 2011) price level schedule of rates (SOR) which turn was prepared on the basis of LoAs. The cost variation in certain items is due to reasons not attributable to the petitioner and hence the same is allowed.

23. In accordance with the Auditor's Certificate dated 23.10.2015, the capital cost (including total IDC/IEDC and initial spares) as on COD is ₹17496.94 lakh, ₹705.31 lakh and ₹893.54 lakh as on COD of 9.11.2014, 11.1.2015 and 1.3.2015 for Asset-1 Asset-2 and Asset-3, respectively. Accordingly, we have considered the capital cost (including total IDC/IEDC and initial spares) as on COD is ₹17496.94 lakh, ₹705.31 lakh and ₹893.54 lakh as on COD of 9.11.2014, 11.1.2015 and 1.3.2015 for Asset-1 Asset-2 and Asset-3, respectively.

### **IDC/IEDC**

24. As per investment approval dated 24.1.2012, the asset was scheduled to be commissioned within 24 months from the date of investment approval. Therefore, the SCOD of the transmission system works out to 24.1.2014 against which the **Asset-1**, **Asset-2** and **Asset-3** was put under commercial operation with effect from 9.11.2014, 11.1.2015 and 1.3.2015, respectively, i.e., delay of 289 days for Asset-1, 352 days for Asset-2 and 401 days for Asset-3 in commissioning of subject transmission assets.



25. The petitioner was directed to submit the computation of IDC for the periods from (i) date of infusion of debt fund upto SCOD and (ii) from SCOD to actual COD. Further, the Commission asked the petitioner to provide the details of incidental expenditure incurred during the period of delay (i.e. from SCOD to actual COD) along with the liquidated damages recovered or recoverable. The petitioner in response vide its affidavit dated 7.3.2016 submitted the Auditor's Certificates dated 23.10.2015 for all the assets along with IDC and IEDC details as given below:-

(₹ in lakh)

	Asset-1		
Statement showing IDC & IEDC	IDC	IEDC	Total
Total IDC/IEDC as per Auditor Certificate	511.53	411.89	923.42
IDC/IEDC discharged upto COD	403.03	411.89	814.92
IDC/IEDC discharged in 2014-15	105.88	0.00	105.88
IDC/IEDC discharged in 2015-16	2.62	0.00	2.62

(₹ in lakh)

	Asset-2		
Statement showing IDC & IEDC	IDC	IEDC	Total
Total IDC/IEDC as per Auditor Certificate	36.71	26.21	62.92
IDC/IEDC discharged upto COD	22.66	26.21	48.87
IDC/IEDC discharged in 2014-15	7.62	0.00	7.62
IDC/IEDC discharged in 2015-16	6.43	0.00	6.43

(₹ in lakh)

	Asset-3		
Statement showing IDC & IEDC	IDC	IEDC	Total
Total IDC/IEDC as per Auditor Certificate	20.10	17.69	37.79
IDC/IEDC discharged upto COD	20.10	17.69	37.79
IDC/IEDC to be discharged in 2014-15	0.00	0.00	0.00
IDC/IEDC to be discharged in 2015-16	0.00	0.00	0.00



26. Further, the petitioner submitted that entire IEDC amount mentioned in the Auditor's Certificate is on cash basis and is paid upto COD for all the assets. The details of IDC from the date of infusion of debt fund upto SCOD (i.e. 24.1.2014) and from SCOD to COD is as given below:

(₹ in lakh)

Scheduled COD: 24.1.2014				
Asset	Actual COD	IDC as per certificate	From date of infusion of debt fund upto SCOD	From SCOD to actual COD
Asset-1	9.11.2014	511.53	270.98	240.55
Asset-2	11.1.2015	36.71	1.88	34.83
Asset-3	1.3.2015	20.10	20.10	0.00

27. As discussed above, the Commission has disallowed the delay of 47 days, 110 days out of total delay of 289 days, 352 days for Asset-I, Asset-2 respectively. The delay in commissioning of Asset 3 has been allowed. Accordingly, we have worked out the IDC/IEDC as follows:-

(₹ in lakh)

Asset-1			
Particulars	IDC	IEDC	Total
Delay in days (from SCOD to COD)	289	289	
Total IDC/IEDC from date of infusion of debt fund to SCOD	270.98	411.89	682.87
Total IDC/IEDC from SCOD to COD (in Rs lakh)	240.55	0.00	240.55
Total delay in days disallowed by the Commission	47	47	
IDC and IEDC disallowed (Rs lakh)	39.12	0.46	39.58
IDC and IEDC allowed by the Commission (Rs lakh)	472.41	411.43	883.84
<b>As worked out (after adjustment of above IDC/IEDC disallowed by the commission due to time-overrun):</b>			
Total IDC/IEDC upto COD	403.03	411.43	814.46
Accruel IDC/IEDC to be discharged in 2014-15	69.38	0.00	69.38
Accruel IDC/IEDC to be discharged in 2015-16	0.00	0.00	0.00



(₹ in lakh)

Asset-2			
Particulars	IDC	IEDC	Total
Delay in days (from SCOD to COD)	352	352	
Total IDC/IEDC from date of infusion of debt fund to SCOD	1.88	26.21	28.09
Total IDC/IEDC from SCOD to COD (in ₹ lakh)	34.83	0.00	34.83
Total delay in months disallowed by the Commission	110	110	
IDC and IEDC disallowed	10.88	0.07	10.95
IDC and IEDC allowed by the Commission	25.83	26.14	51.97
<b>As worked out (after adjustment of above IDC/IEDC disallowed by the commission due to time-overrun):</b>			
Total IDC/IEDC upto COD	22.66	26.14	48.80
IDC/IEDC discharged in 2014-15	3.17	0.00	3.17
IDC/IEDC discharged in 2015-16	0.00	0.00	0.00

(₹ in lakh)

Asset-3			
Particulars	IDC	IEDC	Total
Delay in days (from SCOD to COD)	401	401	
Total IDC/IEDC from date of infusion of debt fund to SCOD	20.10	17.69	37.79
Total IDC/IEDC from SCOD to COD (in Rs lakh)	0.00	0.00	0.00
Total delay in months disallowed by the Commission	0	0	
IDC and IEDC disallowed	0.00	0.00	0.00
IDC and IEDC allowed	20.10	17.69	37.79
<b>As worked out (after adjustment of above IDC/IEDC disallowed due to time over-run):</b>			
Total IDC/IEDC upto COD	20.10	17.69	37.79
IDC/IEDC discharged in 2014-15	0.00	0.00	0.00
IDC/IEDC discharged in 2015-16	0.00	0.00	0.00

### Initial Spares

28. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalised as a percentage of plant and machinery cost upto cut-off date, subject to following ceiling norms:-



“(d) Transmission System

Transmission line:	1.00%
Transmission sub-station (Green Field):	4.00%
Transmission sub-station (Brown Field):	6.00%

29. The initial spares of ₹74.00 lakh, ₹0.00 lakh and ₹8.30 lakh for transmission line and ₹439.00 lakh, ₹41.00 lakh and ₹2.70 lakh for sub-station claimed by the petitioner for Asset-1, Asset-2 and Asset-3, respectively, are exceeding the specified ceiling limits. The calculation for the treatment of initial spares for sub-station has been shown in the table given below:-

(₹ in lakh)

Description Sub-station (including PLCC)	Cut-off date	Capital cost as on cut-off date	Initial spares claimed	Ceiling limits as per Regulation 8 of the 2009 Tariff Regulation	Initial spares worked out and allowed	Excess initial spares claimed
		(a)	(b)	(c)	(d)= ((a-b)*c)/(100-c)%	(e)=(d)-(b)
<b>Transmission Line</b>						
Asset-I	31.3.2017	9761.91	74.00	1.00%	97.86	0.00
Asset-II	31.3.2018	0.00	0.00	1.00%	0.00	0.00
Asset-III	31.3.2018	897.35	8.30	1.00%	8.98	0.00
<b>Sub-station</b>						
Asset-I	31.3.2017	9983.24	439.00	4.00%	397.68	41.32
Asset-II	31.3.2018	1019.29	41.00	4.00%	40.76	0.24
Asset-III	31.3.2018	57.83	2.70	4.00%	2.30	0.40

30. The capital cost for Asset-I, II and III has been worked out by adjusting IDC/IEDC and excess initial spares as given below:-

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3
Capital Cost as on COD as per Auditor's Certificate	17496.94	705.31	893.54
Total IDC/IEDC disallowed by the Commission	39.58	10.95	0.00
IDC/IEDC discharged in 2014-15	69.38	3.17	0.00
IDC/IEDC discharged in 2015-16	0.00	0.00	0.00



<b>Capital Cost as on COD (after deducting disallowed IDC/IEDC and IDC discharged in 2014-16)</b>	<b>17387.98</b>	<b>691.19</b>	<b>893.54</b>
Excess Initial Spares (for sub-station)	41.32	0.24	0.40
<b>Capital Cost as on COD (after deducting IDC/IEDC and excess initial spares)</b>	<b>17346.66</b>	<b>690.95</b>	<b>893.14</b>

31. Accordingly, the capital cost of ₹17346.66 lakh, ₹690.95 lakh and ₹893.14 lakh as on COD for Asset-I, Asset-II and Asset-III, respectively, for the purpose of tariff computation for tariff period 2014-19 on provisional basis, which shall be trued up at time of truing up of tariff for 2014-19 period.

#### **Additional Capital Expenditure**

32. The petitioner has claimed additional capital expenditure of ₹5196.09 lakh, ₹338.98 lakh and ₹61.64 lakh, respectively, during the tariff period 2014-19 for Asset-1, Asset-2 and Asset-3 towards balance and retention payments under Clause 1(i) of Regulation 14 of the 2014 Tariff Regulations.

33. Clause 1, sub-clause (i) of Regulation 14 of the 2014 Tariff Regulations provides as follows:

“(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

.....

(i) Undischarged liabilities recognized to be payable at a future date;

34. As the total capital cost (including additional capital expenditure) of all the assets is within the approved apportioned cost., we have allowed following





additional capital expenditure during 2014-19 under Regulation 14(1)(i) of 2014 Tariff Regulations subject to prudence check while carrying out the truing up of tariff for 2014-19 period.

Name of the element	Approved Apportioned Cost	Expenditure upto COD	Additional Capital Expenditure				Total estimated completion cost
			2014-15	2015-16	2016-17	Total	
Asset-1	23138.47	17346.66	3532.49 (=3463.11+ accrual IDC of 69.38)	1048.47	576.01	5156.97	22503.62
Asset-2	1194.22	690.95	3.17 (=0.00+ accrual IDC of 3.17)	247.90	77.03	328.10	1019.05
Asset-3	1595.62	893.14	0.00	48.14	13.50	61.64	954.78

### **Debt : Equity Ratio**

35. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-

**“19. Debt-Equity Ratio:** (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.”

36. The petitioner has considered debt:equity ratio as 70:30 both for capital cost as on COD and for additional capitalization during the tariff period 2014-19.

37. We have considered the petitioner’s submission subject to prudence check while carrying out the truing up of tariff for 2014-19 period. The details of the debt:equity considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

(₹ in lakh)

Asset-1				
Particulars	Capital Cost as on COD		Estimated Completion cost including additional capitalization	
	Amount	(%)	Amount	(%)
Debt	12142.66	70.00	15752.54	70.00
Equity	5204.00	30.00	6751.09	30.00
<b>Total</b>	<b>17346.66</b>	<b>100.00</b>	<b>22503.62</b>	<b>100.00</b>

(₹ in lakh)

Asset-2				
Particulars	Capital Cost as on COD		Estimated Completion cost including additional capitalization	
	Amount	(%)	Amount	(%)
Debt	483.67	70.00	713.33	70.00
Equity	207.29	30.00	305.71	30.00
<b>Total</b>	<b>690.95</b>	<b>100.00</b>	<b>1019.05</b>	<b>100.00</b>

(₹ in lakh)

Asset-3				
Particulars	Capital Cost as on COD		Estimated Completion cost including additional capitalization	
	Amount	(%)	Amount	(%)
Debt	625.20	70.00	668.34	70.00
Equity	267.94	30.00	286.43	30.00
<b>Total</b>	<b>893.14</b>	<b>100.00</b>	<b>954.78</b>	<b>100.00</b>



### **Interest on Loan (“IOL”)**

38. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations are reproduced as under:-

“(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.”

39. The weighted average rate of IOL has been considered on the basis of rate prevailing as on COD. The petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted at the time of true up. In this regard, the Commission vide its letter dated 8.12.2014 directed the petitioner to provide documents in support of interest rate and repayment schedule for all the loans considered in the instant petition including Proposed Loan 2014-15. The petitioner in response vide its affidavit dated 7.3.2016 submitted the documents in support of interest rate and repayment schedule for loans considered for 2014-15.

40. We have considered the petitioner’s submissions. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. Further, with regard to floating rate of interest, variation in interest rate if any shall be considered at the time of true up. The details of weighted average rate of



interest are placed at **Annexure-I** and the IOL has been worked out and allowed as follows:-

(₹ in lakh)

Asset-1					
Details of Loan	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross loan opening	12142.66	14615.40	15349.33	15752.54	15752.54
Cumulative Repayment upto DOCO/previous year	0.00	356.19	1378.25	2431.16	3494.29
Net Loan-Opening	12142.66	14259.21	13971.08	13321.38	12258.24
Additions during the year	2472.74	733.93	403.21	0.00	0.00
Repayment during the year	356.19	1022.06	1052.91	1063.14	1063.14
Net Loan-Closing	14259.21	13971.08	13321.38	12258.24	11195.10
Average Loan	13200.94	14115.15	13646.23	12789.81	11726.67
Rate of Interest (%)	2.1875	2.3961	2.3939	2.3908	2.3789
<b>Interest</b>	<b>113.13</b>	<b>338.22</b>	<b>326.68</b>	<b>305.78</b>	<b>278.96</b>

(₹ in lakh)

Asset-2					
Details of Loan	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross loan opening	483.67	485.88	659.41	713.33	713.33
Cumulative Repayment upto DOCO/previous year	0.00	8.01	51.21	102.98	156.79
Net Loan-Opening	483.67	477.87	608.20	610.35	556.55
Additions during the year	2.22	173.53	53.92	0.00	0.00
Repayment during the year	8.01	43.19	51.77	53.81	53.81
Net Loan-Closing	477.87	608.20	610.35	556.55	502.74
Average Loan	480.77	543.04	609.28	583.45	529.64
Rate of Interest (%)	8.8750	8.8753	8.8753	8.8800	8.8883
<b>Interest</b>	<b>9.35</b>	<b>48.20</b>	<b>54.08</b>	<b>51.81</b>	<b>47.08</b>

(₹ in lakh)

Asset-3					
Details of Loan	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Gross loan opening	625.20	625.20	658.89	668.34	668.34
Cumulative Repayment upto	0.00	4.03	52.92	103.58	154.60



DOCO/previous year					
Net Loan-Opening	625.20	621.16	605.97	564.76	513.74
Additions during the year	0.00	33.70	9.45	0.00	0.00
Repayment during the year	4.03	48.89	50.66	51.02	51.02
Net Loan-Closing	621.16	605.97	564.76	513.74	462.72
Average Loan	623.18	613.57	585.37	539.25	488.23
Rate of Interest (%)	8.1104	8.1104	8.1104	8.1171	8.1322
<b>Interest</b>	<b>4.29</b>	<b>49.76</b>	<b>47.48</b>	<b>43.77</b>	<b>39.70</b>

### **Return on Equity (“ROE”)**

41. Clause (1) & (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-

**“24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.  
(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system...

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:”

**“25. Tax on Return on Equity:**

(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."

42. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE with MAT rate as per the above Regulation. 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.

43. 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.

44. We have considered the submissions made by the petitioner. 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, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE determined by the Commission is given below:-

(₹ in lakh)

Asset-1					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	5204.00	6263.74	6578.28	6751.09	6751.09
Addition due to Additional Capitalisation	1059.75	314.54	172.80	0.00	0.00
Closing Equity	6263.74	6578.28	6751.09	6751.09	6751.09
Average Equity	5733.87	6421.01	6664.69	6751.09	6751.09
Return on Equity (Base Rate ) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax ) (%)	19.610	19.610	19.610	19.610	19.610
<b>Return on Equity (Pre Tax)</b>	<b>440.52</b>	<b>1259.16</b>	<b>1306.94</b>	<b>1323.89</b>	<b>1323.89</b>

(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	207.29	208.24	282.61	305.71	305.71
Addition due to Additional Capitalisation	0.95	74.37	23.11	0.00	0.00
Closing Equity	208.24	282.61	305.71	305.71	305.71
Average Equity	207.76	245.42	294.16	305.71	305.71
Return on Equity (Base Rate ) (%)	15.500	15.500	15.500	15.500	15.500
MAT rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax ) (%)	19.610	19.610	19.610	19.610	19.610
<b>Return on Equity (Pre Tax)</b>	<b>8.93</b>	<b>48.13</b>	<b>57.68</b>	<b>59.95</b>	<b>59.95</b>



(₹ in lakh)

Asset-3					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Equity	267.94	267.94	282.38	286.43	286.43
Addition due to Additional Capitalisation	0.00	14.44	4.05	0.00	0.00
Closing Equity	267.94	282.38	286.43	286.43	286.43
Average Equity	267.94	275.16	284.41	286.43	286.43
Return on Equity (Base Rate ) (%)	15.500	15.500	15.500	15.500	15.500
MAT rate for the year (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax ) (%)	19.610	19.610	19.610	19.610	19.610
<b>Return on Equity (Pre Tax)</b>	<b>4.46</b>	<b>53.96</b>	<b>55.77</b>	<b>56.17</b>	<b>56.17</b>

### Depreciation

45. Clause (67) of Regulation 3 of the 2014 Tariff Regulations defines useful life as follows:-

“**useful life**’ in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:-

.....

- (c) AC and DC Sub-station: 25 years
- (d) Gas Insulated Sub-station: 25 years
- (e) Transmission line (including HVAC & HVDC): 35 years”

46. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

#### **"27. Depreciation:**

(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”





“(5) 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.

(6) 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.”

47. The petitioner in its petition has computed depreciation considering capital cost of ₹17388.44 lakh, ₹691.26 lakh and ₹893.54 lakh as on COD and additional capitalization of ₹ 5196.09 lakh, ₹ 338.98 lakh and ₹ 61.64 lakh during tariff period 2014-19, for Asset-1, 2 and 3 respectively.

48. As per Clause 67 of Regulation 3 of the 2014 Tariff Regulations, weighted average value of asset as on COD has been considered to work out the weighted average life of the transmission system as 31 years, 25 years and 35 years for Asset-1, Asset-2 and Asset-3, respectively.

49. We have computed depreciation considering capital cost of ₹17346.66 lakh, ₹690.95 lakh and ₹893.14 lakh as on COD and additional capital expenditure of ₹5156.97 lakh, ₹328.10 lakh and ₹61.64 lakh for Asset-2, Asset-2 and Asset-3, respectively, during tariff period 2014-19. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation claimed and allowed are given hereunder:-

(₹ in lakh)

Asset-1					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19



Asset-1					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	17346.66	20879.14	21927.61	22503.62	22503.62
Additional Capitalization	3532.49	1048.47	576.01	0.00	0.00
Closing Gross block	20879.14	21927.61	22503.62	22503.62	22503.62
Average Gross block	19112.90	21403.38	22215.62	22503.62	22503.62
Rate of Depreciation (%)	4.978	4.973	4.930	4.913	4.913
Depreciable Value	16438.51	18498.43	19222.48	19474.72	19474.72
Elapsed Life of the asset at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the asset	31	30	29	28	27
Remaining Depreciable Value	16438.51	18142.24	17844.23	17043.57	15980.43
<b>Depreciation</b>	<b>356.19</b>	<b>1022.06</b>	<b>1052.91</b>	<b>1063.14</b>	<b>1063.14</b>

(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	690.95	694.12	942.02	1019.05	1019.05
Additional Capitalization	3.17	247.90	77.03	0.00	0.00
Closing Gross block	694.12	942.02	1019.05	1019.05	1019.05
Average Gross block	692.54	818.07	980.53	1019.05	1019.05
Rate of Depreciation (%)	5.280	5.280	5.280	5.280	5.280
Depreciable Value	623.28	736.26	882.48	917.14	917.14
Elapsed Life of the asset at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the asset	25	24	23	22	21
Remaining Depreciable Value	623.28	728.25	831.27	814.16	760.36
<b>Depreciation</b>	<b>8.01</b>	<b>43.19</b>	<b>51.77</b>	<b>53.81</b>	<b>53.81</b>

(₹ in lakh)

Asset-3					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	893.14	893.14	941.28	954.78	954.78



Asset-3					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Additional Capitalization	0.00	48.14	13.50	0.00	0.00
Closing Gross block	893.14	941.28	954.78	954.78	954.78
Average Gross block	893.14	917.21	948.03	954.78	954.78
Rate of Depreciation (%)	5.315	5.330	5.344	5.344	5.344
Depreciable Value	803.82	825.49	853.22	859.30	859.30
Elapsed Life of the asset at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the asset	35	34	33	32	31
Remaining Depreciable Value	803.82	821.45	800.30	755.72	704.70
<b>Depreciation</b>	<b>4.03</b>	<b>48.89</b>	<b>50.66</b>	<b>51.02</b>	<b>51.02</b>

### **Operation & Maintenance Expenses (“O&M Expenses”)**

50. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the petitioner’s entitlement to O&M expenses for Asset-1, 2 and 3 has been worked out as given hereunder:-

(₹ in lakh)						
Asset-1						
Particulars		2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Actual (No. of bays)	GIS 400 kV Bays	6	6	6	6	6
	220 kV Bays	6	6	6	6	6
Actual line length (km)	Double circuit (twin & triple conductor (km)	15.884*				
Norms as per Regulation	GIS 400 kV Bays (₹lakh/bay)	51.54	53.25	55.02	56.84	58.73



Asset-1						
Particulars		2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
	220 kV Bays (₹lakh/bay)	42.21	43.61	45.06	46.55	48.10
	Double Circuit (Twin & Triple Conductor) (₹lakh/km)	0.303				
<b>Total (₹ in lakh)</b>		<b>221.85</b>	<b>581.16</b>	<b>600.48</b>	<b>620.34</b>	<b>640.98</b>

\*O&M charges for D/C (two & triple conductors) TL portion has been claimed for the period from 9.11.014 to 28.2.2015 only

(₹ in lakh)

Asset-2						
Particulars		2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Actual (No. of bays)	GIS 400 kV Bays	1	1	1	1	1
Norms as per Regulation	GIS 400 kV Bays (₹lakh/bay)	51.54	53.25	55.02	56.84	58.73
<b>Total (₹ in lakh)</b>		<b>11.30</b>	<b>53.25</b>	<b>55.02</b>	<b>56.84</b>	<b>58.73</b>

(₹ in lakh)

Asset-3						
Particulars		2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Actual (No. of bays)	Multi Circuit (Twin & Triple Conductor) (in km)	15.884	15.884	15.884	15.884	15.884
Norms as per Regulation	Multi Circuit (Twin & Triple Conductor) (₹lakh/km)	1.240	1.282	1.324	1.368	1.413
<b>Total (₹ in lakh)</b>		<b>1.67</b>	<b>20.36</b>	<b>21.03</b>	<b>21.73</b>	<b>22.44</b>

51. The petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner Company is due during the



2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

52. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

53. The details of O&M Expenses allowed are given hereunder:-

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Asset-1	221.85	581.16	600.48	620.34	640.98
Asset-2	11.30	53.25	55.02	56.84	58.73
Asset-3	1.67	20.36	21.03	21.73	22.44

### **Interest on Working Capital (“IWC”)**

54. As per 2014 Tariff Regulations the components of the working capital and the interest thereon are discussed hereinafter:-

#### **(i) Receivables**

As per Regulation 28(1) (c) (i) of the 2014 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months transmission charges claimed in the petition. In the tariff being



allowed, receivables have been worked out on the basis of 2 months transmission charges.

**(ii) Maintenance Spares**

Regulation 28 (1) (c) (ii) of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2014. The petitioner has claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as 15% of O&M Expenses.

**(iii) O & M Expenses**

Regulation 28 (1) (c) (iii) of the 2014 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O & M expenses for the instant asset and value of O & M expenses has accordingly been worked out by considering 1 month O&M Expenses.

**(iv) Rate of interest on working capital**

Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later. Further, the 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. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% plus 350 basis points).

55. The interest on working capital allowed is shown in the table below:-

(₹ in lakh)

Asset-1					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	33.28	87.17	90.07	93.05	96.15
O & M expenses	18.49	48.43	50.04	51.70	53.42
Receivables	194.15	548.83	563.67	568.23	567.29
Total	245.92	684.44	703.78	712.98	716.85
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>33.20</b>	<b>92.40</b>	<b>95.01</b>	<b>96.25</b>	<b>96.78</b>

(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	1.69	7.99	8.25	8.53	8.81
O & M expenses	0.94	4.44	4.59	4.74	4.89
Receivables	6.47	33.15	37.56	38.23	37.75
Total	9.11	45.58	50.40	51.49	51.46
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>1.23</b>	<b>6.15</b>	<b>6.80</b>	<b>6.95</b>	<b>6.95</b>

(₹ in lakh)

Asset-3					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	0.25	3.05	3.15	3.26	3.37
O & M expenses	0.14	1.70	1.75	1.81	1.87
Receivables	2.47	29.60	29.94	29.56	28.99
Total	2.86	34.35	34.85	34.63	34.23
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
<b>Interest</b>	<b>0.39</b>	<b>4.64</b>	<b>4.70</b>	<b>4.68</b>	<b>4.62</b>

### Annual Transmission Charges



56. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarised below:-

(₹ in lakh)

Particulars	Asset-1				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	17346.66	20879.14	21927.61	22503.62	22503.62
Additional Capitalization	3532.49	1048.47	576.01	0.00	0.00
Closing Gross Block	20879.14	21927.61	22503.62	22503.62	22503.62
Average Gross Block	19112.90	21403.38	22215.62	22503.62	22503.62
<b>Depreciation</b>					
Rate of Depreciation	4.978	4.973	4.930	4.913	4.913
Depreciable Value	16438.51	18498.43	19222.48	19474.72	19474.72
Elapsed Life of the assets at beginning of the year	0.00	1.00	2.00	3.00	4.00
Weighted Balance Useful life of the assets	31.00	30.00	29.00	28.00	27.00
Remaining Depreciable Value	16438.51	18142.24	17844.23	17043.57	15980.43
Depreciation	356.19	1022.06	1052.91	1063.14	1063.14
<b>Interest on Loan</b>					
Gross Normative Loan	12142.66	14615.40	15349.33	15752.54	15752.54
Cumulative Repayment upto Previous Year	0.00	356.19	1378.25	2431.16	3494.29
Net Loan-Opening	12142.66	14259.21	13971.08	13321.38	12258.24
Additions	2472.74	733.93	403.21	0.00	0.00
Repayment during the year	356.19	1022.06	1052.91	1063.14	1063.14
Net Loan-Closing	14259.21	13971.08	13321.38	12258.24	11195.10
Average Loan	13200.94	14115.15	13646.23	12789.81	11726.67
Weighted Average Rate of Interest on Loan (%)	2.1875	2.3961	2.3939	2.3908	2.3789
Interest	113.13	338.22	326.68	305.78	278.96





Particulars	Asset-1				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Return on Equity</b>					
Opening Equity	5204.00	6263.74	6578.28	6751.09	6751.09
Additions	1059.75	314.54	172.80	0.00	0.00
Closing Equity	6263.74	6578.28	6751.09	6751.09	6751.09
Average Equity	5733.87	6421.01	6664.69	6751.09	6751.09
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	440.52	1259.16	1306.94	1323.89	1323.89
<b>Interest on Working Capital</b>					
Maintenance Spares	33.28	87.17	90.07	93.05	96.15
O & M expenses	18.49	48.43	50.04	51.70	53.42
Receivables	194.15	548.83	563.67	568.23	567.29
Total	245.92	684.44	703.78	712.98	716.85
Interest	33.20	92.40	95.01	96.25	96.78
<b>Annual Transmission Charges</b>					
Depreciation	356.19	1022.06	1052.91	1063.14	1063.14
Interest on Loan	113.13	338.22	326.68	305.78	278.96
Return on Equity	440.52	1259.16	1306.94	1323.89	1323.89
Interest on Working Capital	33.20	92.40	95.01	96.25	96.78
O & M Expenses	221.85	581.16	600.48	620.34	640.98
<b>Total</b>	<b>1164.90</b>	<b>3293.00</b>	<b>3382.02</b>	<b>3409.40</b>	<b>3403.75</b>

(₹ in lakh)

Particulars	Asset-2				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	690.95	694.12	942.02	1019.05	1019.05
Additional Capitalisation	3.17	247.90	77.03	0.00	0.00



Particulars	Asset-2				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Closing Gross Block	694.12	942.02	1019.05	1019.05	1019.05
Average Gross Block	692.54	818.07	980.53	1019.05	1019.05
<b>Depreciation</b>					
Rate of Depreciation	5.280	5.280	5.280	5.280	5.280
Depreciable Value	623.28	736.26	882.48	917.14	917.14
Elapsed Life of the assets at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the assets	25	24	23	22	21
Remaining Depreciable Value	623.28	728.25	831.27	814.16	760.36
Depreciation	8.01	43.19	51.77	53.81	53.81
<b>Interest on Loan</b>					
Gross Normative Loan	483.67	485.88	659.41	713.33	713.33
Cumulative Repayment upto Previous Year	0.00	8.01	51.21	102.98	156.79
Net Loan-Opening	483.67	477.87	608.20	610.35	556.55
Additions	2.22	173.53	53.92	0.00	0.00
Repayment during the year	8.01	43.19	51.77	53.81	53.81
Net Loan-Closing	477.87	608.20	610.35	556.55	502.74
Average Loan	480.77	543.04	609.28	583.45	529.64
Weighted Average Rate of Interest on Loan (%)	8.8750	8.8753	8.8753	8.8800	8.8883
Interest	9.35	48.20	54.08	51.81	47.08
<b>Return on Equity</b>					
Opening Equity	207.29	208.24	282.61	305.71	305.71
Additions	0.95	74.37	23.11	0.00	0.00
Closing Equity	208.24	282.61	305.71	305.71	305.71
Average Equity	207.76	245.42	294.16	305.71	305.71
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610



Particulars	Asset-2				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Return on Equity (Pre Tax)	8.93	48.13	57.68	59.95	59.95
<b>Interest on Working Capital</b>					
Maintenance Spares	1.69	7.99	8.25	8.53	8.81
O & M expenses	0.94	4.44	4.59	4.74	4.89
Receivables	6.47	33.15	37.56	38.23	37.75
Total	9.11	45.58	50.40	51.49	51.46
Interest	1.23	6.15	6.80	6.95	6.95
<b>Annual Transmission Charges</b>					
Depreciation	8.01	43.19	51.77	53.81	53.81
Interest on Loan	9.35	48.20	54.08	51.81	47.08
Return on Equity	8.93	48.13	57.68	59.95	59.95
Interest on Working Capital	1.23	6.15	6.80	6.95	6.95
O & M Expenses	11.30	53.25	55.02	56.84	58.73
<b>Total</b>	<b>38.82</b>	<b>198.92</b>	<b>225.36</b>	<b>229.36</b>	<b>226.51</b>

(₹ in lakh)

Particulars	Asset-3				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
<b>Gross Block</b>					
Opening Gross Block	893.14	893.14	941.28	954.78	954.78
Additional Capitalisation	0.00	48.14	13.50	0.00	0.00
Closing Gross Block	893.14	941.28	954.78	954.78	954.78
Average Gross Block	893.14	917.21	948.03	954.78	954.78
<b>Depreciation</b>					
Rate of Depreciation	5.315	5.330	5.344	5.344	5.344
Depreciable Value	803.82	825.49	853.22	859.30	859.30
Elapsed Life of the assets at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the assets	35	34	33	32	31
Remaining Depreciable Value	803.82	821.45	800.30	755.72	704.70



Particulars	Asset-3				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	4.03	48.89	50.66	51.02	51.02
<b>Interest on Loan</b>					
Gross Normative Loan	625.20	625.20	658.89	668.34	668.34
Cumulative Repayment upto Previous Year	0.00	4.03	52.92	103.58	154.60
Net Loan-Opening	625.20	621.16	605.97	564.76	513.74
Additions	0.00	33.70	9.45	0.00	0.00
Repayment during the year	4.03	48.89	50.66	51.02	51.02
Net Loan-Closing	621.16	605.97	564.76	513.74	462.72
Average Loan	623.18	613.57	585.37	539.25	488.23
Weighted Average Rate of Interest on Loan (%)	8.1104	8.1104	8.1104	8.1171	8.1322
Interest	4.29	49.76	47.48	43.77	39.70
<b>Return on Equity</b>					
Opening Equity	267.94	267.94	282.38	286.43	286.43
Additions	0.00	14.44	4.05	0.00	0.00
Closing Equity	267.94	282.38	286.43	286.43	286.43
Average Equity	267.94	275.16	284.41	286.43	286.43
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for the year 2013-14 (%)	20.961	20.961	20.961	20.961	20.961
Rate of Return on Equity (Pre Tax) (%)	19.610	19.610	19.610	19.610	19.610
Return on Equity (Pre Tax)	4.46	53.96	55.77	56.17	56.17
<b>Interest on Working Capital</b>					
Maintenance Spares	0.25	3.05	3.15	3.26	3.37
O & M expenses	0.14	1.70	1.75	1.81	1.87
Receivables	2.47	29.60	29.94	29.56	28.99
Total	2.86	34.35	34.85	34.63	34.23
Interest	0.39	4.64	4.70	4.68	4.62
<b>Annual Transmission Charges</b>					
Depreciation	4.03	48.89	50.66	51.02	51.02



Particulars	Asset-3				
	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Interest on Loan	4.29	49.76	47.48	43.77	39.70
Return on Equity	4.46	53.96	55.77	56.17	56.17
Interest on Working Capital	0.39	4.64	4.70	4.68	4.62
O & M Expenses	1.67	20.36	21.03	21.73	22.44
<b>Total</b>	<b>14.85</b>	<b>177.61</b>	<b>179.65</b>	<b>177.37</b>	<b>173.96</b>

**Filing Fee and the Publication Expenses**

57. 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.

**Licence Fee and RLDC Fees and Charges**

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

**Service Tax**

59. The petitioner has sought to recover service tax on transmission charges separately from the respondents, if at any time service tax on transmission is



withdrawn from negative list in future. We are of the view that the petitioner's prayer is premature.

### **Foreign Exchange Rate Variation**

60. The petitioner has sought recovery of FERV on foreign loans deployed as provided in Clause 50 of the 2014 Tariff Regulations. The petitioner is entitled to recover the FERV directly from the beneficiaries or the long term transmission customers/DICs as the case may be, in accordance with Clause 1 of Regulation 51 of the 2014 Tariff Regulations.

### **Sharing of Transmission Charges**

61. 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.

62. This order disposes of Petition No. 404/TT/2014.

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

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



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO**

(₹ in lakh)

Particulars	ASSET-1			
	2014-19			
	Interest Rate (%)	Loan deployed as on 9.11.2014	Additions during the tariff period	Total
Bond XXVI- doco	9.35	140.00	0.00	140.00
Bond XXVIII- Addcap for 2014-15 addcap	9.25	0.00	74.12	74.12
Bond XXVIII- DOCO	9.25	140.96	0.00	140.96
ADB VI - Addcap for 2014-15 addcap 63.81	1.76	0.00	1447.34	1447.34
ADB VI - doco - 62.11	1.76	11890.96	0.00	11890.96
Bond XLIII - Addcap for 2014-15 addcap	7.93	0.00	226.00	226.00
Bond XLVII - Addcap for 2014-15 addcap	8.93	0.00	550.88	550.88
Bond XLVIII - Addcap for 2014-15 addcap	8.20	0.00	200.00	200.00
<b>Total</b>		<b>12171.92</b>	<b>2298.34</b>	<b>14670.26</b>

(₹ in lakh)

Particulars	ASSET-2			
	2014-19			
	Interest Rate (%)	Loan deployed as on 11.1.2015	Additions during the tariff period	Total
Bond XXXVIII- doco	9.25	97.60	0.00	97.60
Bond XLIII- DOCO	7.93	58.00	0.00	58.00
Bond XVII- Addcap for 2014-15 addcap	8.93	0.00	5.33	5.33
Bond XVII- doco 2	8.93	328.28	0.00	328.28
		<b>483.88</b>	<b>5.33</b>	<b>489.21</b>



(₹ in lakh)

Particulars	ASSET-3			
	2014-19			
	Interest Rate (%)	Loan deployed as on 1.3.2015	Additions during the tariff period	Total
Bond XXXVIII - doco	9.25	85.49	0.00	85.49
Bond XLIII - doco	7.93	540.00	0.00	540.00
		<b>625.49</b>	<b>0.00</b>	<b>625.49</b>

**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN  
FOR TARIFF PERIOD 2014-19**

(₹ in lakh)

Particulars	ASSET-1				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	12171.92	14670.26	14670.26	14670.26	14670.26
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	9.33	263.84
Net Loans Opening	12171.92	14670.26	14670.26	14660.93	14406.42
Add: Drawl(s) during the year	2498.34	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	0.00	0.00	9.33	254.51	323.63
Net Closing Loan	14670.26	14670.26	14660.93	14406.42	14082.79
Average Net Loan	13421.09	14670.26	14665.60	14533.68	14244.61
Interest on Loan	293.58	351.52	351.08	347.47	338.86
Rate of Interest on Loan (%)	2.1875	2.3961	2.3939	2.3908	2.3789

(₹ in lakh)

Particulars	ASSET-2				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	483.88	489.21	489.21	489.21	489.21
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	4.83
Net Loans Opening	483.88	489.21	489.21	489.21	484.38
Add: Drawl(s) during the year	5.33	0.00	0.00	0.00	0.00





Particulars	ASSET-2				
	2014-15	2015-16	2016-17	2017-18	2018-19
Less: Repayment(s) of Loan during the year	0.00	0.00	0.00	4.83	32.63
Net Closing Loan	489.21	489.21	489.21	484.38	451.75
Average Net Loan	486.55	489.21	489.21	486.80	468.07
Interest on Loan	43.18	43.42	43.42	43.23	41.60
Rate of Interest on Loan (%)	8.8750	8.8753	8.8753	8.8800	8.8883

(₹ in lakh)

Particulars	ASSET-3				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	625.49	625.49	625.49	625.49	625.49
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	45.00
Net Loans Opening	625.49	625.49	625.49	625.49	580.49
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	0.00	0.00	0.00	45.00	45.00
Net Closing Loan	625.49	625.49	625.49	580.49	535.49
Average Net Loan	625.49	625.49	625.49	602.99	557.99
Interest on Loan	50.73	50.73	50.73	48.95	45.38
Rate of Interest on Loan (%)	8.1104	8.1104	8.1104	8.1171	8.1322

