**CENTRAL ELECTRICITY REGULATORY COMMISSION**
**NEW DELHI**

**Petition No. 37/TT/2014**

**Coram:**

**Shri Gireesh B. Pradhan, Chairperson**
**Shri A.K. Singhal, Member**
**Shri A.S Bakshi, Member**

**Date of Hearing : 17.03.2015**
**Date of Order : 22.01.2016**

**In the matter of:**

Approval of transmission tariff for Asset-1: Kurnool-Raichur 2$^{nd}$ 765 kV S/C line and extension of Kurnool 765/400 kV and Raichur 765/400 kV Sub-stations; Asset-2: 1500 MVA, 765/400 kV ICT #2 and 240 MVAR reactor alongwith the associated bays at 765/400 kV Nellore PS and Asset-3: 1500 MVA, 765/400 kV ICT #3 and 240 MVAR bus reactor alongwith the associated bays at 765/400 kV Nellore PS under Common System associated with ISGS projects in Krishnapatnam area of Andhra Pradesh in Southern Region for tariff block 2009-14 under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

**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 Bhavan,
Bangalore-560 009

2. Transmission Corporation of Andhra Pradesh Limited,
(APTRANSCO), Vidyut Soudha,
Hyderabad-500 082

3. Kerala State Electricity Board (KSEB),
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram-695 004

4. Tamil Nadu Electricity Board-TNEB)
   NPKRR Maaligai, 800, Anna Salai,
   Chennai-600 002

5. Electricity Department,
   Government of Pondicherry,
   Pondicherry-605 001

6. Eastern Power Distribution Company of Andhra Pradesh Limited,
   (APEPDCL)
   APEPDCL, P&T Colony, Seethmmadhara, Vishakhapatam,
   Andhra Pradesh

7. Southern Power Distribution Company of Andhra Pradesh Limited,
   (APSPDCL)
   Srinivasasa Kalyana Mandapam Backside,
   Tiruchanoor Road, Kesavayana Gunta,
   Tirupati-517 501
   Chittoor District, Andhra Pradesh

8. Central Power Distribution Company of Andhra Pradesh Limited,
   (APCPDCL), Corporate Office, Mint Compound,
   Hyderabad-500 063, Andhra Pradesh

9. Northern Power Distribution Company of Andhra Pradesh Limited,
   (APNPDCL), Opposite NIT Petrol Pump,
   Chaitanyapuri, Kazipet,
   Warangal-506 004, Andhra Pradesh

10. Bangalore Electricity Supply Company Limited (BESCOM),
    Corporate Office, K.R.Circle,
    Bangalore-506 001, Andhra Pradesh

11. Gulbarga Electricity Supply Company Limited (GESCOM),
    Station Main Road,
    Gulbarga, Karnataka

12. Hubli Electricity Supply Company Limited (HESCOM),
    Navanagar, PB Road,
    Hubli, Karnataka

13. Mescom Corporate Office,
    Paradigm Plaza, AB Shetty Circle,
    Mangalore-575 001, Karnataka

14. Chamundeswari Electricity Supply Corporation Limited (CESC),
    # 927, L J Avenue, Ground Floor,
    New Kantharaj Urs Road,
    Saraswatipuram, Mysore-570 009 Karnataka **…… Respondents**

**For petitioner** : Shri S. S. Raju, PGCIL
Shri S. K. Venkatesan, PGCIL
Shri Jasbir Singh, PGCIL
Shri M. M. Mondal, PGCIL

**For respondents** : None

**ORDER**

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval for determination of transmission tariff for Kurnool-Raichur 2nd 765 kV S/C line and extension of Kurnool 765/400 kV and Raichur 765/400 kV Sub-stations; 1500 MVA, 765/400 kV ICT #2 and 240 MVAR reactor alongwith the associated bays at 765/400 kV Nellore PS and 1500 MVA, 765/400 kV ICT #3 and 240 MVAR bus reactor alongwith the associated bays at 765/400 kV Nellore PS (hereinafter referred to as “transmission assets”) under Common System associated with ISGS projects in Krishnapatnam area of Andhra Pradesh in Southern Region for the period from the date of commercial operation to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as “the 2009 Tariff Regulations”).

2. Investment approval (IA) of the project was accorded by Board of Directors of the petitioner vide Memorandum No. C/CP/ISGS Krishnapatnam dated 4.8.2011 at an estimated cost of ₹163734 lakh including IDC of ₹10228 lakh (based on 1st Quarter, 2011 price level) and at revised estimated cost of ₹185939 lakh including IDC of ₹15736 lakh (based on October, 2014 price level), as per revised cost estimate (RCE) approved by Board of Directors of the petitioner vide Memorandum No. C/CP/RCE-ISGS Projects in Krishnapatnam dated 20.4.2015,

submitted by the petitioner vide affidavit dated 19.8.2015. The project was scheduled to be commissioned within 36 months from the date of investment approval i.e. by 3.8.2014 say 1.9.2014.

3. The scope of work covered under the project is as follows:-

**Transmission Lines:**

i) LILO of both circuits of SEPL/MEPL-Nellore 400 kV D/C Quad line at Nellore Pooling Station;
ii) Nellore Pooling Station-Kurnool 765 kV D/C line;
iii) Kurnool-Raichur 2nd 765 kV S/C line (first line covered under Krishnapatnam UMPP);

**Sub-stations:**

i) Establishment of new 2x1500 MVA, 765/400 kV Sub-station at Nellore;
ii) Extension of Kurnool 765/400 kV Sub-station;
iii) Extension of Raichur 765/400 kV Sub-station;

**Reactive Compensation:**

i) 1x240 MVAR, 765 kV bus reactor at new 765/400 kV Nellore Sub-station;
ii) 240 MVAR, 765 KV line reactor at each end of both circuits of Nellore-Kurnool 765 kV line.

4. The petitioner initially claimed transmission tariff for the assets from the anticipated date of commercial operation. Subsequently, the petitioner vide affidavit dated 7.3.2014 has submitted the actual date of commercial operation of Asset-1: 1500 MVA, 765/400 kV ICT #2 and 240 MVAR reactor alongwith the associated bays at 765/400 kV Nellore PS and Asset-2: 1500 MVA, 765/400 kV ICT #3 and 240 MVAR bus reactor alongwith the associated bays at 765/400 kV Nellore PS as 1.2.2014 and 1.3.2014 respectively. Further, the petitioner, vide affidavit dated 28.5.2014, submitted the revised anticipated date of commercial

operation of Kurnool-Raichur 2nd 765 kV S/C line and extension of Kurnool 765/400 kV and Raichur 765/400 kV Sub-stations as 1.6.2014. Accordingly, tariff of Assets-1 and 2, commissioned during 2009-14 are allowed in the instant petition. The petitioner was directed to file a fresh petition under the 2014 Tariff Regulations in case of Kurnool-Raichur 2nd 765 kV S/C line and extension of Kurnool 765/400 kV and Raichur 765/400 kV Sub-stations commissioned during 2014-19 tariff period. Accordingly, the petitioner filed Petition No. 161/TT/2015 for Asset-1 under tariff period 2014-19. The details of the assets considered in the instant order are as follows:-

<table>
<tr><th>Srl. No.</th><th>Particulars</th><th>Scheduled COD</th><th>Actual/ anticipated COD</th><th>Time over-run</th></tr>
<tr><td>1</td><td>Asset-1: 1500 MVA, 765/400 kV ICT #2 and 240 MVAR reactor alongwith the associated bays at 765/400 kV Nellore PS</td><td rowspan="2">1.9.2014</td><td>1.2.2014 (actual)</td><td rowspan="2">none</td></tr>
<tr><td>2</td><td>Asset-2: 1500 MVA, 765/400 kV ICT #3 and 240 MVAR bus reactor alongwith the associated bays at 765/400 kV Nellore PS</td><td>1.3.2014 (actual)</td></tr>
</table>

5. This order has been issued after considering PGCIL affidavits dated 7.3.2014, 28.5.2014, 30.6.2014 24.7.2015 and 19.8.2015.

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

**(₹ in lakh)**

| **Particulars** | **Asset-1** | **Asset-2** |
|---|---|---|
| | **2013-14 (pro-rata)** | **2013-14 (pro-rata)** |
| Depreciation | 71.62 | 28.41 |
| Interest on Loan | 74.71 | 29.29 |
| Return on equity | 84.71 | 34.00 |
| Interest on Working Capital | 7.44 | 3.18 |
| O & M Expenses | 41.46 | 20.73 |
| **Total** | **279.94** | **115.61** |

7. The details submitted by the petitioner in support of its claim for Interest on Working Capital are as below:-

(₹ in lakh)

| Particulars | Asset-1 | Asset-2 |
|---|---|---|
| | **2013-14 (pro-rata)** | **2013-14 (pro-rata)** |
| Maintenance Spares | 37.31 | 37.31 |
| O & M expenses | 20.73 | 20.73 |
| Receivables | 279.94 | 231.22 |
| **Total** | **337.98** | **289.26** |
| Rate of Interest | 13.20% | 13.20% |
| Interest | **7.44** | **3.18** |

8. No comments have been received from the general public in response to the notices published in news papers by the petitioner under Section 64 of the Electricity Act, 2003. Tamil Nadu Generation and Distribution Corporation Limited, (TANGEDCO), a subsidiary of TNEB Limited and one of the successor entities to the erstwhile Tamil Nadu Electricity Board (TNEB), Respondent No. 4 has filed reply dated 13.1.2015. TANGEDCO has raised issues like de-linking of various elements of the project from commissioning of Krishnapatnam UMPP due to uncertainty, prudence check of the cost claimed, transmission charges to be borne by the Krishnapatnam UMPP beneficiaries, and other issues like additional return on equity, floating rate of interest on loan, O&M Expenses, short fall or refund of excess annual fixed charges on account of RoE and claim for service tax and licence fee etc. The petitioner has filed rejoinder dated 31.3.2014 to the reply of TANGEDCO. The objections raised by the respondent and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

9. Having heard the petitioner and perused the material on record, we proceed to dispose of the petition.

## Capital Cost

10. As regards the capital cost, Regulation 7(1) of the 2009 Tariff Regulations provides as follows:-

> **"(1) Capital cost for a project shall include:-**
>
> (a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (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 fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.
>
> (b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and
>
> (c) additional capital expenditure determined under regulation 9:
>
> Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.
>
> (2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:
>
> Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:
>
> Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff."

11. TANGEDCO has submitted that the capital cost is higher when compared to the original apportioned approved cost and a prudence check be done by the Commission. The petitioner has submitted the revised cost estimate (RCE) vide affidavit dated 19.8.2015 and the total estimated completion cost is within the revised apportioned approved cost. The petitioner initially in the petition submitted the capital expenditure as on the anticipated date of commercial operation and

estimated additional capital expenditure of the instant assets. The petitioner was directed to submit certain information as per true-up provisions of the 2009 Tariff Regulations. The petitioner vide additional affidavit dated 24.7.2015 has submitted the Auditors Certificate dated 1.5.2015 alongwith revised tariff forms based on actual COD of the instant assets. However, the information submitted is insufficient for determination of true-up tariff. Accordingly, instead of truing-up, final tariff is being determined in the instant petition and the petitioner is once again directed to submit the required information along with the true-up petition.

12. Further, the Auditor's Certificate dated 1.5.2015 submitted by the petitioner in support of the capital expenditure incurred, states "This is to certify that the above summary has been prepared on the basis of the information drawn from the Audited Statement of Accounts of Power Grid Corporation of India Ltd, SRTS-I, Secunderabad for the period ended 31.3.2015." Thus, it is not clear from the Auditors Certificate whether the capital expenditure has been indicated on cash basis or accrual basis. In addition, the petitioner has submitted Form-9A, but there is no indication of any liability as on COD and thereafter, whereas as per Form-9 for "Statement of Additional Capitalisation after COD", the petitioner has submitted the justification that the additional capital expenditure is in the nature of balance and retention payments. In addition, as per the statement of Discharge of IDC submitted by the petitioner, it is noted that the total amount of IDC claimed has not been discharged as on COD and some amount has been discharged during 2013-14 and 2014-15. Thus, there is a mismatch between Form-9A, Form-9 and the statement of Discharge of IDC. As such, as per the information submitted by the petitioner, it is not possible to determine the capital cost as on COD on cash basis and the nature of additional capital expenditure, so as to consider the same to be just discharge of

liability or as an addition to the Gross Block. Similarly, in the case of claim for initial spares, the petitioner had initially claimed initial spares for the instant assets vide affidavit and Auditors Certificate, both dated 15.2.2014, but subsequently, the petitioner vide affidavit dated 24.7.2015 has submitted that the entire liability against the initial spares has been discharged before 31.3.2014 and as per the latest Auditors' Certificate dated 1.5.2015, no claim for initial spares has been made. Therefore, due to mismatch in liability, non-availability of capital cost on cash basis and mismatch in the claim for initial spares, we have no option but to proceed with the determination of the final tariff in the instant petition. The petitioner is directed to submit the capital cost statement on cash basis indicating element wise (i.e. Land, building and civil work, TL and sub-station etc.) and year wise actual expenditure incurred up to 31.3.2014 along with element wise details of undischarged liability as on COD and at the end of the financial year duly certified by the Auditors along with the true-up petition.

13. The details of revised apportioned approved cost, actual expenditure incurred as on the date of commercial operation and details of additional capital expenditure (hereinafter "add cap") incurred/projected to be incurred for the instant assets as claimed vide affidavit dated 24.7.2015 are summarized below:-

**(₹ in lakh)**

| **Particulars** | **Revised apportioned approved cost** | **Claimed** | | | | **Add-cap** | | | **Estimated completion cost** |
|---|---|---|---|---|---|---|---|---|---|
| | | **Hard cost as on COD** | **IDC** | **IEDC** | **Cost upto actual COD** | **2013-14** | **2014-15** | **2015-16** | |
| Asset-1 | 11420.00 | 7909.04 | 318.91 | 39.34 | 8267.29 | 204.23 | 938.90 | 254.86 | 9665.28 |
| Asset-2 | 9687.00. | 6275.87 | 317.81 | 39.41 | 6633.09 | 169.77 | 2624.57 | - | 9427.43 |

14. As per the Auditors Certificate submitted by the petitioner, expenditure has been verified from the "Book of Accounts" of the project and the

estimated/projected expenditure is on the basis of details furnished by the Management.

**Date of Commercial Operation**

15. The COD of Nellore-Kurnool transmission line has been declared as 1.11.2014 whereas COD of the associated line reactor has been declared on 1.2.2014. The Commission during hearing held on 17.3.2015 directed the petitioner to submit whether Asset-2 is a line reactor or Bus Reactor. The Commission also directed that if it is a line reactor being charged as Bus Reactor, necessary approval in this regard to be submitted by the petitioner. The petitioner vide affidavit dated 24.7.2015 has submitted that Asset-2 is a line reactor which is being charged as Bus Reactor and the same was discussed and agreed in 23$^{rd}$ and 24$^{th}$ SRPC meeting and 91$^{st}$, 92$^{nd}$ and 93$^{rd}$ OCC meetings of SRPC.

16. The petitioner has charged 765 kV line Reactor (Asset-2) as Bus Reactor. Although 765 kV bus at Nellore is not connected with any transmission line as on the date of COD of 765/400 kV ICT, the petitioner has charged 765 kV Bus with ICT and a 765 kV line reactor charged as Bus Reactor. The petitioner has submitted minutes of meeting for 91$^{st}$ OCC meeting held on 21.1.2014 wherein the following was recorded:-

> "6.11.2.........In the 22$^{nd}$ TCC Meeting held on 25$^{th}$ October, 2013, PGCIL had informed that the matter regarding using 765 kV Line Reactor at Nellore PS was being studied and they would come up with a proposal in this regard........"
> "6.11.3.......AGM, SRTS-I, PGCIL informed that 3x80 MVAR reactor and 3x500 MVA ICTs were ready for commissioning by month end and could be utilised for voltage regulation as discussed and noted in the 22$^{nd}$ TCC/23$^{rd}$ SRPC Meetings. He added that 3x80 MVAR Line Reactor would also be commissioned shortly...."
> "6.11.4......OCC concurred that the bus reactors would be beneficial for voltage regulation at Nellore PS....."

17. We have considered the submissions of the petitioner. It is observed that it has been agreed in the OCC meeting that the line reactor charged at 765 kV as Bus Reactor will be beneficial for voltage regulation. Further, we have also perused CEA certificate under Regulation 43 of CEA (Measures of Safety of Electric Supply) Regulations submitted by the petitioner. In view of the decision at OCC meeting and CEA certificate and as the use of line reactor as Bus Reactor would help in voltage regulation, date of commercial operation of Asset-1 and Asset-2, as claimed by the petitioner, is approved. However, it is observed that the petitioner has not disclosed in the petition that the line reactor is charged as a bus reactor. We are of the view that the petitioner should faithfully and diligently place on record all basic facts about the transmission assets in order to assist the Commission to take informed decision on issues related to the tariff of the transmission assets under consideration. The petitioner is directed to inform the Commission whenever any asset has been commissioned differently than planned.

**Time over-run**

18. The project was scheduled to be commissioned within 36 months from the date of IA i.e. 4.8.2011. Accordingly, the scheduled commissioning works out to 3.8.2014 i.e. 1.9.2014. The instant assets were commissioned within the specified timeline on 1.2.2014 and 1.3.2014. Thus, there is no time over-run in the case of instant assets.

**Cost over-run**

19. The total cost as on 31.3.2014 as well as the total estimated completion cost is within the revised apportioned approved cost. Thus, there is no cost over-

run in case of instant assets. However, the Commission observed that there is cost variation in various elements as per details as under:-

**<u>Asset-1</u>:**

a) 110.77% in Total civil works
b) 11.05% in Switchgear circuit breaker, CT, PT, Isolator etc
c) 39.14% in Transformer
d) 84.48% in Auxiliaries (Fire fighting, lighting system & power & control cables)
e) 118.51% in Structure for Switchyard

**<u>Asset-2</u>:**

a) 103.99% in Total civil works
b) 10.95% in Switchgear Circuit Breaker, CT, PT, Isolator etc
c) 28.1% in Transformer
d) 11.87% in Bus-bars/Conductor/Insulators (Erection Hardware)
e) 79.07% in Auxiliaries (Fire fighting, lighting system & power & control cables)
f) 110.77% in Structure for Switchyard

20. Though, there is no cost over-run as compared to the revised apportioned approved cost, there is cost over-run in the total completion cost as compared to original apportioned approved cost. The petitioner has submitted that the cost over-run is mainly due to higher award cost received in competitive bidding compared to initial estimates. For procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions.

21. However, the Commission directed the petitioner to submit the reasons for cost variations. The petitioner, vide affidavit dated 30.6.2014, has submitted that

the Original estimates have been prepared based on the 4th Quarter, 2010 price levels and the LOA was awarded on 20.10.2011. Cost of the items like switch gears, transformers, bus bars/ conductor/insulators, grounding, erection are based on the contract awarded through competitive bidding process and anticipated price variation as per the provisions of contract. Cost provided in the petition is inclusive of taxes, whereas original estimates are exclusive of taxes and taxes are shown separately. Projected completion cost as per the Auditors' Certificate dated 15.2.2014 is ₹11022 lakh as against FR cost of ₹9009 lakh for Asset-1 and ₹9167 lakh as against FR cost of ₹7678 lakh for Asset-2 which is 22.34 % & 19.39 % respectively higher than FR Cost. The increase in cost is due to combined effect of following reasons:-

(i) With regard to escalation in civil works and structures for switchyard, increase in cost is on account of variation in actual site conditions for execution of civil works which is difficult to ascertain at the time of preparation of cost estimate;

(ii) Cost variation in CT, PT, Isolators, Switchgears, Transformer and reactors is mainly on account of actual price received through competitive bidding process and exchange rate variation of Euro. Further, applicable escalation factor to be derived from PV formula as per the contract is based on the applicable indices. As the values of applicable indices depend on market; it is not possible to predict exact escalation factor and its impact;

(iii) The cost variation in auxiliaries (Fire Fighting, Lighting system & power& control cables) is on account of the best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions.

22. The justification submitted by the petitioner for cost variation in some of the elements appears to be in order and therefore, we are inclined to accept it. However, as observed earlier, the cost estimates of the petitioner are not realistic not only in this petitions but also in many similar other petitions. The petitioner is directed to adopt a prudent procedure to make cost estimates of different transmission projects more realistic.

**Treatment of IDC and IEDC**

23. The petitioner has claimed Interest During Construction (IDC) of ₹318.91 lakh and ₹317.81 lakh for Asset-1 and Asset-2 respectively. The petitioner vide affidavit dated 24.7.2015 has submitted that IDC on cash basis works out to ₹67.07 lakh and ₹48.55 lakh for Asset-1 and Asset-2 respectively. Further, the petitioner has also submitted that IDC discharged up to COD is ₹66.80 lakh and ₹48.29 lakh respectively for both the assets. Thus, IDC of ₹66.80 lakh and ₹48.29 lakh has been allowed for Asset-1 and Asset-2 respectively. However, the petitioner has further stated that balance amount of accrued IDC for both the assets were discharged during 2013-14 and 2014-15, though, the balance amount of accrued IDC should have been discharged as add cap for next financial years. In addition, additional capital expenditure (ACE) claimed in Form-9 (i.e. Statement of additional capital expenditure) is ₹204.23 lakh and ₹169.77 lakh respectively towards balance/retention payments, which has been assumed to be that the ACE claims are towards the un-discharged liability. As such, due to the mismatch in the information submitted by the petitioner, it is not possible to identify the discharge

and un-discharged liabilities as on COD and after COD. Therefore, the petitioner is directed to submit Auditor certified details of capital cost on cash basis as on COD along with liability flow statement duly reconciled with the capital cost as per books of account, at the time of truing-up.

24. The petitioner has also claimed Incidental Expenditure During Construction (IEDC) of ₹39.34 lakh and ₹39.41 lakh for Asset-1 and Asset-2 respectively. Further, the petitioner vide affidavit dated 24.7.2015 has submitted that IEDC discharged up to CDO is ₹39.34 lakh and ₹39.41 lakh in the case of Asset-1 and Asset-2 respectively. Thus, IEDC discharged upto COD has been considered for computing tariff in this order.

**Initial Spares**

25. Regulation 8 of 2009 Tariff Regulations provides that initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:-

| | |
|---|---|
| Transmission line | 0.75% |
| Transmission Sub-station | 2.5% |

26. The petitioner has claimed initial spares in the original petition for the instant assets. Subsequently, the petitioner vide affidavit dated 24.7.2015 submitted that the entire liability against the procurement of the initial spares has been discharged prior to 31.3.2014. However, as per CA certificate dated 1.5.2015 submitted vide affidavit dated 24.7.2015, the petitioner has not claimed any amount against initial spares. Thus, no initial spares have been considered for the instant assets. Therefore, the petitioner is directed to submit the amount of initial

spares actually discharged on COD and balance amount discharged during next financial years as additional capital expenditure (if any), at the time of truing-up.

**Capital cost allowed as on COD**

27. The details of the capital cost considered as on the date of commercial operation after allowing capitalization of IDC, IEDC (as claimed) for the purpose of the determination of transmission tariff are as follows:-

**(₹ in lakh)**

| Particulars | Capital cost claimed as on COD | IDC disallowed | Capital cost allowed as on COD |
|---|---|---|---|
| Asset-1 | 8267.29 | 252.11 | 8015.18 |
| Asset-2 | 6633.09 | 269.52 | 6363.57 |

**Additional Capital Expenditure**

28. As regards additional capital expenditure clause 9(1) of the 2009 Tariff Regulations provides as under:-

> "Additional Capitalisation: (1) The capital expenditure 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;
> (ii) Works deferred for execution;
> (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
> (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
> (v) Change in Law:"

29. Further, the 2009 Tariff Regulations defines cut-off date as follows:-

> "cut-off date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and incase of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation".

30. Therefore, the cut-off date for the instant assets is 31.3.2017.

31. It is noted that the additional capital expenditure claimed by the petitioner falls within the cut-off date and is mainly on account of balance and retention payments. Additional capital expenditure for financial year 2014-15 and 2015-16 claimed by the petitioner falls beyond the tariff period i.e. 2009-14 and is not being allowed for calculation of tariff for the period up to 31.3.2014. Thus, additional capital expenditure claimed from the date of commercial operation to 31.3.2014 has been allowed for tariff computation and the details of capital cost as on 31.3.2014 are as under:-

**(₹ in lakh)**

| **Particulars** | **Capital cost allowed as on COD** | **Add-cap for 2013-14 allowed** | **Estimated capital cost allowed as on 31.3.2014** |
|---|---|---|---|
| Asset-1 | 8015.18 | 204.23 | 8219.41 |
| Asset-2 | 6363.57 | 169.77 | 6533.34 |

## Debt- Equity Ratio

32. Regulation 12 of the 2009 Tariff Regulations provides as under:--

> "12. **Debt-Equity Ratio**. (1) For a project declared under commercial operation on or after 1.4.2009, 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 where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:
>
> Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.
>
> **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, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.
>
> (2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 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."

33. The petitioner has claimed debt: equity ratio of 70:30 as on the date of commercial operation of the instant assets. The details of debt: equity in respect of the assets covered in this petition as on date of commercial operation and as on 31.3.2014 respectively are as under:-

**(₹ in lakh)**

| **Particulars** | **Asset-1** | | | |
|---|---|---|---|---|
| | **Cost as on COD** | | **Cost as on 31.3.2014** | |
| | **Amount** | **%** | **Amount** | **%** |
| Debt | 5610.63 | 70.00 | 5753.59 | 70.00 |
| Equity | 2404.55 | 30.00 | 2465.82 | 30.00 |
| **Total** | **8015.18** | **100.00** | **8219.41** | **100.00** |
| **Particulars** | **Asset-2** | | | |
| | **Cost as on COD** | | **Cost as on 31.3.2014** | |
| | **Amount** | **%** | **Amount** | **%** |
| Debt | 4454.50 | 70.00 | 4573.34 | 70.00 |
| Equity | 1909.07 | 30.00 | 1960.00 | 30.00 |
| **Total** | **6363.57** | **100.00** | **6533.34** | **100.00** |

34. The above stated debt-equity ratio has been applied for the purpose of tariff calculation in this order.

**<u>Return on Equity (RoE)</u>**

35. The petitioner has submitted that it may be allowed to recover the shortfall or refund the excess AFC, on account of return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission. TANGEDCO has submitted that the request of the petitioner to recover the tax rates after truing up be negated as the petitioner is aware of its tax structure and rates applicable at the time of filing the petition itself.

The return on equity has been computed @ 19.610% p.a on average equity as per Regulation 15(3) of the 2009 Tariff Regulations. As regards recovery of shortfall on account of change in tax rate, Clause (5) of Regulation permits the petitioner to recover same directly from the beneficiaries which shall be trued up at the end of the truing up.

36. The petitioner has also submitted that the instant assets have been completed within the timeline specified in the 2009 Tariff Regulations and has claimed additional return on equity @ 0.50 %. It is noted that as per investment approval for implementation of "Common System Associated with ISGS projects in Krishnapatnam area of Andhra Pradesh" the project was to be commissioned within 36 months from the date of investment approval and the scheduled COD of the project works out 4.8.2014 i.e. 1.9.2014. TANGEDCO has submitted that Regulation 15(2) of the Tariff Regulations provides additional RoE only if the entire project has been commissioned within the time line specified and not individual elements of the project.

37. As regards additional return on equity, Regulation 15 of the 2009 Tariff Regulations and Regulation 24 of the 2014 Tariff Regulations provides as under:-

> "15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.
>
> (2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:
>
> Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be:

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

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

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed charge on account of Return on Equity due to change in applicable Minimum Alternate/ Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission;

Provided further that Annual Fixed charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations".

**Regulation 24(2) of the 2014 Tariff Regulations**

"(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 50 kilometers."

38. We have considered the submissions of the petitioner. The assets covered under the Common System associated with ISGS projects in Krishnapatnam area of AP were commissioned at different points of time. The assets covered in the instant petition are covered in four petitions. The details of these petitions are given below:-

| Petition No. | Asset | Date of commissioning | Actual time taken | Timeline specified in Regulations |
|---|---|---|---|---|
| 224/TT/2013 | LILO of both circuits of SEPL/MEPL-Nellore 400 kV D/C (quad) line alongwith the associated bays at Nellore Pooling Station | 1.4.2013 | 19 months | 400 kV D/C Quad Trans-mission line – 32 months* |
| 37/TT/2014 | 1500 MVA, 765/400 kV ICT #2 and 240 MVAR reactor alongwith the associated bays at 765/400 kV Nellore PS | 1.2.2014 | 29 months | New 765 kV AC Sub-station – 30 months* |
| | 1500 MVA, 765/400 kV ICT #3 and 240 MVAR bus reactor alongwith the associated bays at 765/400 kV Nellore PS | 1.3.2014 | 30 months | New 765 kV AC Sub-station – 30 months* |
| 245/TT/2014 | (A) Nellore Pooling Station-Kurnool 765 kV D/C line along with | 1.11.2014 | 38 months | 765 kV DC Transmission Line – 40 |

| | | | | |
|---|---|---|---|---|
| | the associated bays at 765 kV Nellore Pooling Station and Kurnool Sub-station and (B) 240 MVAR, 765 kV line reactor at Nellore end of one circuit and at Kurnool end of both circuits of Nellore-Kurnool 765 kV line. | | | months+<br><br>New 765 kV AC Sub-station – 36 months+ |
| 161/TT/2015 | Asset-1: Kurnool-Raichur 2nd 765 kV S/C line and extension of Kurnool 765/400 kV and Raichur 765/400 kV Sub-stations | 21.6.2014 | 34 months 17 days | 400 kV D/C Quad Trans-mission line – 38 months+<br><br>New 765 kV AC Sub-station – 36 months+ |

* As per 2009 Tariff Regulations   + As per 2014 Tariff Regulations

39. In the instant case, some of the assets covered in the project were commissioned during 2009-14 tariff period and some of the assets were commissioned during 2014-19 tariff period. As per the 2009-14 Tariff Regulations, additional return on equity is to be allowed only if all the elements of the project are commissioned within the timeline specified and as per the 2014-19 Tariff Regulations it could be allowed if any element of the transmission project is completed within the timeline specified and it is certified by the RPC/NRPC that commissioning of a particular element is beneficial for the system operation. It is observed from the above table that the assets covered in Petition No. 245/TT/2014 have been commissioned on 1.11.2014 i.e. after the specified timeline in the 2014 Tariff Regulations. The assets commissioned during the 2009-14 tariff period were commissioned within the timeline specified in the said regulations. However, the asset covered in Petition No. 245/TT/2014 has not been commissioned within the timeline specified in the 2014 Tariff regulations. Since all the elements of the scheme have not been commissioned within the timeline specified in the

applicable Tariff Regulations, the scheme do not qualify for grant of additional RoE. Accordingly, we hold that no additional RoE shall be allowed in case of any of the assets covered under the scheme.

40. The details of return on equity calculated are as given under:-

**(₹ in lakh)**

| Particulars | Asset-1 | Asset-2 |
|---|---|---|
| | **2013-14 (pro-rata)** | **2013-14 (pro-rata)** |
| Opening Equity | 2404.55 | 1909.07 |
| Addition due to Additional Capitalisation | 61.27 | 50.93 |
| Closing Equity | 2465.82 | 1960.00 |
| Average Equity | 2435.19 | 1934.54 |
| Return on Equity (Base Rate ) | **15.50%** | **15.50%** |
| Tax rate for the year 2013-14 (MAT) | 20.961% | 20.961% |
| Rate of Return on Equity (Pre Tax ) | 19.610% | 19.610% |
| **Return on Equity (Pre Tax)** | **79.59** | **31.61** |

## Interest on Loan

41. Regulation 16 of the 2009 Tariff Regulations provides that:-

"16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

(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 annual depreciation allowed,.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

42. In these calculations, interest on loan has been worked out as hereinafter:-

(a) Gross amount of loan, repayment of instalments & rate of interest have been considered as per Form-13 submitted vide affidavit dated 24.7.2015;

(b) The normative repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period;

(c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the normative average loan during the year to arrive at the interest on loan.

43. The petitioner has submitted that the interest on loan has been considered on the basis of rate prevailing as on respective CODs and the change in interest

due to floating rate of interest applicable, if any, for the project needs to be claimed/ adjusted over the tariff block 2009-14. TANGEDCO has submitted that the 2009 Tariff Regulation does not have any specific provision in this regard. We would like to clarify that the interest on loan has been calculated on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing up.

44. Detailed calculations of the weighted average rate of interest have been given at Annexure-1 to 2 to this order.

45. Details of Interest on Loan calculated are as under:-

**(₹ in lakh)**

| **Particulars** | **Asset-1** | **Asset-2** |
|---|---|---|
| | **2013-14 (pro-rata)** | **2013-14 (pro-rata)** |
| Gross Normative Loan | 5610.63 | 4454.50 |
| Cumulative Repayment upto Previous Year | - | - |
| Net Loan-Opening | 5610.63 | 4454.50 |
| Addition due to Additional Capitalisation | 142.96 | 118.84 |
| Repayment during the year | 69.46 | 27.27 |
| Net Loan-Closing | 5684.12 | 4546.07 |
| Average Loan | 5647.37 | 4500.28 |
| Weighted Average Rate of Interest on Loan | 7.6987% | 7.4964% |
| **Interest** | **72.46** | **28.11** |

## Depreciation

46. Regulation 17 of the 2009 Tariff Regulations provides for computation of depreciation in the following manner, namely:-

> "17. **Depreciation** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.
>
> (2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.
>
> Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

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

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

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III 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 date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) 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."

47. The date of commercial operation of assets covered in the petition fall in the year 2013-14. Accordingly, the assets will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of the 2009 Tariff Regulations.

48. The details of the depreciation allowed are as under:-

**(₹ in lakh)**

| **Particulars** | **Asset-1** | **Asset-2** |
|---|---|---|
| | **2013-14 (pro-rata)** | **2013-14 (pro-rata)** |
| Opening Gross Block | 8015.18 | 6363.57 |
| Additional Capital expenditure | 204.23 | 169.77 |
| Closing Gross Block | 8219.41 | 6533.34 |
| Average Gross Block | 8117.30 | 6448.46 |
| Rate of Depreciation | 5.1344% | 5.0748% |
| Depreciable Value | 7305.57 | 5803.61 |
| Remaining Depreciable Value | 7305.57 | 5803.61 |
| **Depreciation** | **69.46** | **27.27** |

**Operation & Maintenance Expenses (O&M Expenses)**

49. Clause (g) of regulation 19 of the 2009 Tariff Regulations specifies the norms for O & M expenses based on the type of sub-station and line. Norms specified in respect of the elements covered in the instant petition are as under:-

| Elements | 2011-12 | 2012-13 | 2013-14 |
|---|---|---|---|
| 400 kV bays (₹ lakh per bay) | 58.57 | 61.92 | 65.46 |
| 765 kV bays (₹ lakh per bay) | 81.99 | 86.68 | 91.64 |

50. Accordingly, O&M Expenses allowed in respect of the Asset-1 and Asset-2 are as under:-

**(₹ in lakh)**

| Element | 2013-14 (pro-rata) |
|---|---|
| **Asset-1-COD: 1.2.2014** | |
| 2 Nos. 765 kV bays | 30.55 |
| 1 No. 400 kV bay | 10.91 |
| **Asset-1-Total** | **41.46** |
| **Asset-2-COD: 1.3.2014** | |
| 2 Nos. 765 kV bays | 15.27 |
| 1 No. 400 kV bay | 5.46 |
| **Asset-2-Total** | **20.73** |

51. The petitioner has submitted that O & M Expenses for the period 2009-14 were arrived at on the basis of normalized actual O & M Expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O & M Expenses for the tariff period 2009-14. The petitioner has further submitted that it would approach the Commission for additional manpower cost on account of wage revision (if any) during the tariff block 2009-14 for claiming in the tariff.

52. TANGEDCO has submitted that the petitioner has reserved his rights for revision of the O&M expenses and the tariff regulations do not provide for any revision of normative O&M expenses based on actuals. The petitioner has also submitted that the claim for transmission tariff is exclusive of any statutory taxes, levies, duties, cess or any other kind of impositions etc. Such kinds of payments are generally included in the O & M Expenses. While specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have allowed O&M Expenses as per the existing norms.

**Interest on Working Capital**

53. As per the 2009 Tariff Regulations the components of the working capital and the interest thereon are discussed under:-

**(i) Receivables**

As per Regulation 18(1) (c) (i) of the 2009 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 18(1)(c)(ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M Expenses from 1.4.2009. The value of maintenance spares has accordingly been worked out.

**(iii) O & M Expenses**

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for O&M Expenses 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**

As provided under 18(3) of the 2009 Tariff Regulations, SBI Base rate of 9.70% as on 1.4.2013 plus 350 BPS i.e. 13.20% has been considered for the purpose of working out the interest on working capital.

54. Necessary computations in support of interest on working capital are as follows:-

**(₹ in lakh)**

| **Particulars** | **Asset-1** | **Asset-2** |
|---|---|---|
| | **2013-14 (pro-rata)** | **2013-14 (pro-rata)** |
| Maintenance Spares | 37.31 | 37.31 |
| O & M expenses | 20.73 | 20.73 |
| Receivables | 270.20 | 221.61 |
| **Total** | **328.24** | **279.65** |
| **Interest** | **7.22** | **3.08** |

## Transmission Charges

55. The transmission charges being allowed for the transmission assets are as under:-

(₹ in lakh)

| Particulars | Asset-1 | Asset-2 |
|---|---|---|
| | **2013-14 (pro-rata)** | **2013-14 (pro-rata)** |
| Depreciation | 69.46 | 27.27 |
| Interest on Loan | 72.46 | 28.11 |
| Return on equity | 79.59 | 31.61 |
| Interest on Working Capital | 7.22 | 3.08 |
| O & M Expenses | 41.46 | 20.73 |
| **Total** | **270.20** | **110.80** |

**Filing Fee and the Publication Expenses**

56. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. 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 Regulation 42 of the 2009 Tariff Regulations.

**Licence Fee**

57. The petitioner has submitted that in O&M norms for tariff block 2009-14 the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents. TANGEDCO has submitted that it has countered in its reply in various petitions to not allow the claim for recovery of licence fee. We wish to clarify that the petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations

**Service Tax**

58. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The petitioner submitted that service tax on

transmission has been put on negative list w.e.f. 1.4.2012 and therefore the transmission charges, is exclusive of service tax and shall be born and additionally paid by the respondents. TANGEDCO has submitted that the claim for service tax be negated. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

**Sharing of Transmission Charges**

59. TANGEDCO has submitted that the instant assets were originally proposed for ATS of Krishnapatnam UMPP (KUMPP) project and transmission charges have to be borne by the KUMPP beneficiaries. As the KUMPP assets are not commissioned, the transmission charges will be borne by the Southern Region constituents alone. TANGEDCO has further submitted that once KUMPP is commissioned, the transmission charges and cost implications due to any modification in the transmission system be transferred to the original scheme of ATS of KUMPP project and borne by the actual beneficiaries.

60. 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.

61. This order disposes of Petition No. 37/TT/2014.

| sd/- | sd/- | sd/- |
|---|---|---|
| **(A.S. Bakshi)**<br>**Member** | **(A.K. Singhal)**<br>**Member** | **(Gireesh B. Pradhan)**<br>**Chairperson** |

**Annexure-1**

(₹ in lakh)

| CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN- Asset-1 | | |
|---|---|---|
| | **Details of Loan** | **2013-2014** |
| **1** | **Bond XL** | |
| | Gross loan opening | **100.00** |
| | Cumulative Repayment upto DOCO/previous year | **0.00** |
| | Net Loan-Opening | 100.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 100.00 |
| | Average Loan | 100.00 |
| | Rate of Interest | 9.30% |
| | Interest | 9.30 |
| | Rep Schedule | 12 annual instalments from 28.06.2016 |
| **2** | **Bond XLI** | |
| | Gross loan opening | **100.00** |
| | Cumulative Repayment upto DOCO/previous year | **0.00** |
| | Net Loan-Opening | 100.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 100.00 |
| | Average Loan | 100.00 |
| | Rate of Interest | 8.85% |
| | Interest | 8.85 |
| | Rep Schedule | 12 annual instalments from 19.10.2016 |
| **3** | **Bond XLII** | |
| | Gross loan opening | **1500.00** |
| | Cumulative Repayment upto DOCO/previous year | **0.00** |
| | Net Loan-Opening | 1500.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 1500.00 |
| | Average Loan | 1500.00 |
| | Rate of Interest | 8.80% |
| | Interest | 132.00 |
| | Rep Schedule | Final payment on 13.03.2023 |
| **4** | **FC Bond** | |
| | Gross loan opening | **1262.40** |
| | Cumulative Repayment upto DOCO/previous year | **0.00** |
| | Net Loan-Opening | 1262.40 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 1262.40 |
| | Average Loan | 1262.40 |
| | Rate of Interest | 3.88% |
| | Interest | 48.92 |
| | Rep Schedule | Final payment on |

| | | |
|---|---|---|
| | | 17.03.2023 |
| **5** | **Bond XLIV** | |
| | Gross loan opening | **2824.70** |
| | Cumulative Repayment upto DOCO/previous year | **0.00** |
| | Net Loan-Opening | 2824.70 |
| | Additions during the year | 142.96 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 2967.66 |
| | Average Loan | 2896.18 |
| | Rate of Interest | 8.70% |
| | Interest | 251.97 |
| | Rep Schedule | 3 equal instalments on 15.07.2018, 15.07.2023 and 15.07.2028 |
| | | |
| | **Total Loan** | |
| | Gross loan opening | **5787.10** |
| | Cumulative Repayment upto DOCO/previous year | 0.00 |
| | Net Loan-Opening | 5787.10 |
| | Additions during the year | 142.96 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 5930.06 |
| | Average Loan | 5858.58 |
| | Rate of Interest | **7.6987%** |
| | **Interest** | **451.04** |

<u>**Annexure-2**</u>

**(₹ in lakh)**

| | | |
|---|---|---|
| **CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN-Asset-2** | | |
| | **Details of Loan** | **2013-2014** |
| **1** | **Bond XLV** | |
| | Gross loan opening | **0.00** |
| | Cumulative Repayment upto DOCO/previous year | **0.00** |
| | Net Loan-Opening | 0.00 |
| | Additions during the year | 118.84 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 118.84 |
| | Average Loan | 59.42 |
| | Rate of Interest | 9.65% |
| | Interest | 5.73 |
| | Rep Schedule | 12 annual instalments from 28.02.2018 |
| **2** | **Bond XLII** | |
| | Gross loan opening | **3293.57** |
| | Cumulative Repayment upto DOCO/previous year | **0.00** |
| | Net Loan-Opening | 3293.57 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 3293.57 |
| | Average Loan | 3293.57 |
| | Rate of Interest | 8.80% |
| | Interest | 289.83 |
| | Rep Schedule | Final payment on 13.03.2023 |
| **3** | **FC Bond** | |
| | Gross loan opening | **1253.00** |
| | Cumulative Repayment upto DOCO/previous year | **0.00** |
| | Net Loan-Opening | 1253.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 1253.00 |
| | Average Loan | 1253.00 |
| | Rate of Interest | 3.88% |
| | Interest | 48.55 |
| | Rep Schedule | Final payment on 17.03.2023 |
| **4** | **Bond XLIV** | |
| | Gross loan opening | **96.59** |
| | Cumulative Repayment upto DOCO/previous year | **0.00** |
| | Net Loan-Opening | 96.59 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 96.59 |
| | Average Loan | 96.59 |
| | Rate of Interest | 8.70% |
| | Interest | 8.40 |

| | | |
|---|---|---|
| | Rep Schedule | 3 equal instalments on 15.07.2018, 15.07.2023 and 15.07.2028 |
| | | |
| | **Total Loan** | |
| | Gross loan opening | **4643.16** |
| | Cumulative Repayment upto DOCO/previous year | 0.00 |
| | Net Loan-Opening | 4643.16 |
| | Additions during the year | 118.84 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 4762.00 |
| | Average Loan | 4702.58 |
| | Rate of Interest | **7.4964%** |
| | **Interest** | **352.53** |