

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 291/TT/2013**

**Coram:**

**Shri A.K.Singhal, Member  
Shri A.S. Bakshi, Member**

**Date of Hearing : 03.03.2015  
Date of Order : 24.11.2015**

**In the matter of:**

Approval 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 of Transmission Tariff for Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line under Transmission System associated with Synchronous Inter-connection between SR and WR in SR & WR.

**And in the matter of:**

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

**.....Petitioner**

Vs

1. Karnataka Power Transmission Corporation Ltd  
Kaveri Bhawan,  
Bangalore-560 009
2. Transmission Corporation of Andhra Pradesh Ltd  
Vidyut Soudha,  
Hyderabad-500 082
3. Kerala State Electricity Board (KSEB),  
Vaidyuthi Bhavanam,  
Pattom, Thiruvananthapuram-695 004
4. Tamil Nadu Generation and Distribution Corporation Ltd  
NPKRR Maaligai, 800, Anna Salai,  
Chennai-600 002.
5. Electricity Department  
Government of Goa, Vidyuti Bhawan,  
Panaji, Goa-403001
6. Electricity Department,  
Government of Pondicherry,  
Pondicherry-605 001
7. Eastern Power Distribution Company of Andhra Pradesh Ltd  
APEPDCL, P&T Colony, Seethmmadhara,  
Vishakhapatnam, Andhra Pradesh.
8. Southern Power Distribution Company of Andhra Pradesh Ltd  
Srinivasasa Kalyana Mandapam Backside,  
Tiruchanoor Road, Kesavayana Gunta, Tirupati-517 501



9. Central Power Distribution Company of Andhra Pradesh Ltd  
Corporate Office, Mint Compound,  
Hyderabad-500 063
10. Northern Power Distribution Company of Andhra Pradesh Ltd  
Opp. NIT Petrol Pump, Chaitanyapuri,  
Kazipet, Warangal-506 004
11. Bangalore Electricity Supply Company Ltd  
Corporate Office, K. R. Circle,  
Bangalore-560 001
12. Gulbarga Electricity Supply Company Ltd  
Station Main Road,  
Gulbarga. Karnataka
13. Hubli Electricity Supply Company Ltd.  
Navanagar, PB Road,  
Hubli, Karnataka
14. MESCOM Corporate Office  
Paradigm Plaza, AB Shetty Circle,  
Mangalore-575 001
15. Chamundeswari Electricity Supply Corporation Ltd  
No. 927, L J Avenue, Ground Floor,  
New Kantharaj Urs Road, Saraswatipuram,  
Mysore-570 009
16. Madhya Pradesh Power Management Company Ltd  
Shakti Bhawan, Rampur  
Jabalpur-482 008
17. Maharashtra State Electricity Distribution Company Limited  
Prakashgad, 4th floor Andheri (East),  
Mumbai-400 052
18. Gujarat Urja Vikas Nigam Ltd  
Sardar Patel Vidyut Bhawan  
Race Course Road, Vadodra-390007
19. Electricity Department,  
Administration of Daman & Diu,  
Daman-396210
20. Electricity Department.  
Administration of Dadra & Nagar Haveli,  
UT, Silvassa-396230,
21. Chhattisgarh State Electricity Board  
P.O Sunder Nagar, Dangnia,  
Raipur, Chhattisgarh-492013
22. Madhya Pradesh Audyogik Kendra Vikas Nigam( Indore) Ltd.,  
3/54, Press Complex, Agra-Bombay Road  
Indore-452008

...Respondents



**Parties present:**

Shri S.S Raju, PGCIL  
Shri Jasbir Singh, PGCIL  
Shri Prashant Sharma, PGCIL  
Shri Vivek Kumar Singh, PGCIL  
Shri Anshul Garg, PGCIL  
Shri M.M. Mondal, PGCIL  
Shri S.K.Venkatesan, PGCIL

**ORDER**

The petitioner, Power Grid Corporation of India Limited (PGCIL) has sought approval for transmission tariff for Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line under Transmission System associated with Synchronous Inter-connection between Southern Region and Western Region in Southern Region and Western Regions, under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "2009 Tariff Regulations").

2. The petitioner has been entrusted with the implementation of "Line bays and Reactors at POWER GRID S/S for Raichur-Solapur Transmission line for Synchronous Inter connection between SR and WR". The scope of work covered under Synchronous Inter connection between SR and WR is as under:

**Substations**

i) Extension of 765/400 kV S/S at Raichur to accommodate following:

- 765 kV Line Bays : 1
- 240 MVar 765 kV Switchable Line Reactor : 1

ii) Extension of 765/400 kV S/S at Solapur to accommodate following:

- 765 kV Line Bays : 1
- 240 MVar 765 kV Switchable Line Reactor : 1

3. The scope of works for inter-state transmission system was firmed up in the Standing Committee meeting on Power System Planning for Southern Region on 17.7.2007 and discussed and agreed in the 24<sup>th</sup> Standing Committee meeting of Southern Region on 18.6.2007 and in 27<sup>th</sup> meeting of Standing Committee on Power System Planning in Western Region held on 30.7.2007 at Indore. The investment approval of the project was accorded by the Board of Directors of the



Petitioner Company vide Memorandum dated 4.6.2012 at an estimated cost of ₹75.74 crore including IDC of ₹3.16 crore based on the 4<sup>th</sup> quarter, 2011-12 price level.

4. The matter was heard on 3.12.2013 and the Commission by order dated 16.12.2013 had granted provisional tariff as under, subject to adjustment as per Regulation 5(4) of the 2009 Tariff Regulations.

Particulars	Anticipated DOCO	Annual transmission charges claimed for the year 2013-14	(Rs in lakh)
			Annual transmission charges allowed for the year 2013-14
765 kV Bay Extension at Sholapur and Raichur S/S along with switchable Line Reactor for 765 kV S/C Raichur-Sholapur T/L	1.2.2014	236.86	201.33

5. The Commission in the said order dated 16.12.2013 also observed as under:

*"7. We have considered the submissions made by the petitioner and the respondent. After carrying out a preliminary prudence check of the Annual Fixed Charges claimed and taking into consideration the cost over-run, which shall be looked into at the time of determination of final tariff, the Commission has decided to grant provisional tariff as given below. The petitioner's prayer for additional Return on Equity shall also be considered at the time of determination of final tariff"*

6. The petitioner vide affidavit dated 29.10.2014 has submitted that the combined assets have been put under Commercial Operation (DOCO) in two parts viz.,

- (a) **Asset-I** : 765 kV 240 MVAR Switchable Line Reactor for 765 kV S/C Raichur-Solapur line – II (Pvt line) at Solapur S/S on 1.1.2014
- (b) **Asset-II** : 765 kV 240 MVAR Switchable Line Reactor at Raichur S/S along with associated Bay and Equipment on 1.2.2014

7. The petitioner has not submitted single line diagram for the assets mentioned in the petition but has only submitted the map of the transmission system associated with Krishnapatnam UMPP-Part-B. The petitioner has under Regulation 43 of CEA (measures related to Safety & Electricity Supply) Regulations, 2010 submitted the CEA certificate for the assets covered in the petition.

8. The petitioner vide affidavit dated 21.4.2015 has submitted the Memorandum dated 11.9.2014 wherein the Revised Cost Estimate (RCE) of Line bays and reactor at Power Grid S/S for Raichur-Sholapur transmission line for Synchronous interconnection between SR and WR had



been approved by the Board of Directors of the Petitioner Company on 4.8.2014 for ₹93.23 crore based on December, 2013 Price Level including IDC of ₹1.10 crore.

9. The details of the transmission charges claimed by the petitioner for the said assets as above in the affidavit dated 29.10.2014 are as under:

**Asset-I**

(₹ in lakh)	
Particulars	2013-14
Depreciation	19.12
Interest on Loan	25.44
Return on equity	19.88
Interest on Working Capital	3.92
O & M Expenses	45.82
<b>Total</b>	<b>114.18</b>

**Asset-II**

(₹ in lakh)	
Particulars	2013-14
Depreciation	20.76
Interest on Loan	27.90
Return on equity	21.76
Interest on Working Capital	3.23
O & M Expenses	30.55
<b>Total</b>	<b>104.20</b>

10. The details submitted by the petitioner in support of its claim for interest on working capital are as below:

**Asset-I**

(₹ in lakh)	
Particulars	2013-14
Maintenance Spares	27.49
O & M expenses	15.27
Receivables	76.12
<b>Total</b>	<b>118.88</b>
Rate of Interest	13.20%
<b>Interest</b>	<b>3.92</b>

**Asset-II**

(₹ in lakh)	
Particulars	2013-14
Maintenance Spares	27.50
O & M expenses	15.28
Receivables	104.20
<b>Total</b>	<b>146.98</b>
Rate of Interest	13.20%
<b>Interest</b>	<b>3.23</b>



11. 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 (the Act). Reply has been filed by the respondents. The respondents, MPPMCL, MSEDCL and KSEB have filed replies to the petition and the petitioner has filed its rejoinder to the same.

12. The matter was heard on 3.3.2015 and the Commission after directing the petitioner to submit additional information, reserved its order in the petition. In compliance with the directions of the Commission, the petitioner has also filed additional information vide affidavits dated 9.6.2015, 26.6.2015, 24.9.2015 and 15.10.2015. Based on the submissions of the parties and the documents available on record, we proceed to dispose of the petition as stated in the subsequent paragraphs.

### **Capital Cost**

13. Regulation 7 of the 2009 Tariff Regulations provides as under:

*“(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.”*



14. The petitioner vide affidavit dated 24.9.2015 has submitted the capital cost incurred upto COD and for the year 2013-14 as per actual COD for the assets, vide Auditor's certificate dated 6.5.2015 for Asset-I and Auditor's certificate dated 27.5.2015 for Asset-II. The petitioner has also submitted that the expenditure shown in the auditor's certificate is on cash basis, except IDC. Accordingly, the capital cost claimed as on COD(s) of the transmission assets and additional capital expenditure incurred /to be incurred is as under:

(₹ in lakh)

	Apportioned approved cost (FR)	Expenditure to be incurred upto COD	Projected Additional Capital Expenditure for 2013-14	Total Estimated Cost up to 31.3.2014	Projected Additional Capital Expenditure		Total Estimated completion Cost
					2014-15	2015-16	
<b>Asset-I</b>	<b>3824.60</b>	1671.35	1132.50	<b>2803.85</b>	1460.67	197.07	<b>4461.59</b>
<b>Asset-II</b>	<b>3749.03</b>	1157.98	622.64	<b>1780.62</b>	1497.55	181.98	<b>3460.15</b>

#### Time Overrun

15. As per investment Approval, the assets covered in the instant petition were scheduled to be commissioned within 21 months from the date of investment approval which is 4<sup>th</sup> June, 2012. Accordingly, the scheduled COD works out to be 4.3.2014 and the DOCO as 1.4.2014. The petitioner vide its affidavit dated 25.2.2015 has submitted that the completion schedule of the subject assets viz., 02 nos 765 kV line bays along with 2 nos 240 MVAR 765 kV switchable line reactors at 765 kV Raichur s/s and 765 kV Sholapur s/s under transmission system associated with synchronous interconnection between SR and WR in SR & WR as per Investment approval is 1.4.2014. It has also submitted that the 765 kV Raichur-Sholapur transmission line was scheduled to be commissioned during January, 2014. It has further submitted that on commissioning of 765 kV Raichur-Sholapur S/C transmission line, the subject assets along with the 765 kV Raichur-Sholapur S/C transmission line were put into regular service on 4.7.2014. Referring to Regulation 12 of the 2009 Tariff Regulations, the petitioner has submitted that the subject assets of the petitioner were ready for regular service after successfully charging and commissioning from 1.1.2014/1.2.2014, but were prevented from providing regular service due to the delay in commissioning of the 765 kV Raichur-Sholapur S/C transmission line which was not attributable to and beyond the control of the petitioner. Accordingly, the petitioner has submitted that the



Commission may consider the approval of the date of commercial operation prior to the element coming into regular service.

16. The Commission vide Record of the proceedings held on 3.3.2015 directed the petitioner to furnish additional information as under:

*“(f) Since the petitioner has approved the date of commercial operation under Regulation 3(12)(c) of the 2009 Tariff Regulations, the details of the correspondence carried with the transmission licensee pertaining to coordination regarding commissioning of the assets and the date on which the transmission line was commissioned”*

17. In response, the petitioner vide affidavit dated 12.6.2015 has furnished the status of commissioning of assets covered in the petition as under:

<b>Assets</b>	<b>Scheduled COD</b>	<b>Actual COD</b>	<b>Delay</b>
<b>Asset-I</b> 765 kV Bay Extension at Solapur Sub-Station along with Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line	1.4.2014	1.1.2014	No delay
<b>Asset-II</b> 765 kV Bay Extension at Raichur Sub-Station along with Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line		1.2.2014	No delay

18. The petitioner in the said affidavit has also submitted the following:

*(i) The issue regarding commissioning of the line was discussed in 23<sup>rd</sup> SRPC meeting dated 26.10.2013 and SRPC had requested MoP, GOI for expediting the commissioning of line. The line was commissioned on 1.7.2014.*

*(ii) During the 23<sup>rd</sup> meeting of SRPC held on 26.10.2013, POWERGRID had informed that Raichur-Sholapur circuit under TBCB route could be slightly delayed. The issue regarding tying up of the SR grid with NEW grid with single 765 kV line was being studied. SRLDC had opined that it may not be desirable to synchronize SR with the NEW grid with a single 765 kV line.*

19. We have examined the matter. The second proviso to Regulation 3(12)(c) of the 2009 Tariff Regulations provides as under:-

*“3. (12) Date of commercial operation“ or COD“ means (c) in relation to the transmission system, the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful charging and trial operation: Provided that the date shall be the first day of a calendar month and transmission charge for the element shall be payable and its availability shall be accounted for, from that date: Provided further that in case an element of the transmission system is ready for regular service but is prevented from providing such service for reasons not attributable to the transmission licensee, its suppliers or contractors, the Commission may approve the date of commercial operation prior to the element coming into regular service.”*





20. As per Regulation 3(12)(c), a transmission element is in regular service only after successful charging and trial operation . A perusal of second proviso reveals that this proviso can be invoked only when a transmission element is in regular service, but is prevented for providing such service for the reasons not attributable to the transmission licensee.

21. The Tribunal in its judgement dated 2.7.2012 in Appeal No. 123 of 2011 had examined the provisions of Regulation 3(12)(c) and has come to the conclusion that three conditions are required to be met for declaration of COD under the said regulation. Relevant paragraph of the judgement is extracted as under:-

*"10. A transmission system may comprise of one or more transmission lines and sub-station, inter-connecting transformer, etc. According to above definition an element of the transmission system which includes a transmission line, could be declared as attained COD if the following conditions are met:*

- (i) It has been charged successfully,*
- (ii) its trial operation has been successfully carried out, and*
- (iii) it is in regular service."*

22. As per the judgment of the Tribunal, an element of transmission system can be declared as having attained commercial operation only if it has been charged successfully after successful trial operation and is in regular service. Though the petitioner has submitted that the asset was ready for regular service but was prevented from providing regular service, it has not furnished any documentary evidence to justify that it was regularly coordinating with the transmission licensee for commissioning of the assets. Though the bays and reactors covered in this petition was ready, the successful trial operation and charging could not be carried out without the 765 kV S/C Raichur – Solapur Transmission line II getting commissioned. As per the information submitted, Raichur – Solapur Transmission line II was commissioned only on 1.7.2014. As the Bays and Line Reactors could not have been charged for trial operation without the availability of this transmission line, the case is not covered under the second proviso of Regulation 3(12)(c) of the 2009 Tariff Regulations. Accordingly, the date of commercial operation of Asset-I and Asset-II cannot be approved as 1.1.2014 and 1.2.2014 respectively as claimed by the petitioner.

23. The petitioner has claimed tariff for the transmission assets as per the 2009 Tariff Regulations. We are of the view that the instant transmission assets could be charged and trial



operation could be successfully carried out only on commissioning of the Raichur-Solapur Transmission line II, which is stated to have been commissioned on 1.7.2014. Accordingly, the date of commercial operation of the transmission assets could be only during the 2014-19 tariff period and will be governed by the provisions of the 2014 Tariff Regulations. As such, the petitioner is directed to file a fresh petition claiming tariff for the transmission assets as per the 2014 Tariff Regulations within 30 days of issue of this order.

24. This order disposes of Petition No. 291/TT/2013.

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

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

