

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION FOR

Approval under regulation-86 for determination of transmission tariff for
combined elements

- a) 400 KV Ramagundam-Hyderabad D/C line (DOCO 01.11.2004),
- b) 400 kV S/C Hyderabad - Kurnool - Gooty Transmission Line (DOCO 01.03.2005),
- c) 400 kV S/C Khammam-Nagarjunasagar line (DOCO 01.03.2004) and
- d) 400 KV S/C Gooty-Neelmangla line (DOCO 1.5.2005) along with associated bays and equipment under **Ramagundam Stage – III** Transmission System in Southern Region

for the period from

1.4.2009 to 31.3.2014

PETITION NO. :

TARIFF BLOCK : 2009 - 2014

POWER GRID CORPORATION OF INDIA LTD.

REGISTERED OFFICE

**B-9, QUTAB INSTITUTIONAL AREA, KATWARIA SARAI,
NEW DELHI – 110 016**

CORPORATE CENTRE

**“SAUDAMINI”, PLOT NO-2, SECTOR-29,
GURGAON-122 001 (HARYANA)
EPABX : 0124-2571 700 TO 719, FAX :0124-2571989**



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**BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.:

IN THE MATTER OF: Approval under regulation-86 for determination of transmission tariff for combined elements a) 400 KV Ramagundam-Hyderabad D/C line (DOCO 01.11.2004), b) 400 kV S/C Hyderabad - Kurnool - Gooty Transmission Line (DOCO 01.03.2005), c) 400 kV S/C Khammam-Nagarjunasagar line (DOCO 01.03.2004) and d) 400 KV S/C Gooty-Neelmangla line (DOCO 1.5.2005) along with associated bays and equipment under Ramagundam Stage – III Transmission System for the period from 1.4.2009 to 31.3.2014

Power Grid Corporation of India Ltd.

--- PETITIONER

Registered office: B-9, Qutab Institutional Area,
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Corporate Centre : 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

Tamilnadu Electricity Board (TNEB)
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
Represented by its Chairman
And Others

----- RESPONDENTS

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**FILED BY
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY**

S S RAJU
S S RAJU

Dy. GENERAL MANAGER (COMMERCIAL)

**GURGAON
DATED: 05.07.2010**



**BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

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NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
Represented by its Chairman
And Others

----- RESPONDENTS

To
The Secretary
Central Electricity Regulatory Commission
New Delhi

Sir,
The application filed under Regulation 86 of CERC (Conduct of Business) Regulation, 1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission tariff for combined elements of Ramagundam –III Transmission System in Southern Region for the period from 1.4.2009 to 31.3.2014 may please be registered.

**FILED BY
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY**

एस. एस. राजु

**S S RAJU
Dy. GENERAL MANAGER (COMMERCIAL)**

**GURGAON
DATED: 05.07.2010**



**BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.:

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Power Grid Corporation of India Ltd.

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Tamilnadu Electricity Board (TNEB)
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
Represented by its Chairman
And Others

----- RESPONDENTS

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

--- PETITIONER

VERSUS

- 1 Kerala State Electricity Board (KSEB)
Vaidyuthi Bhavanam
Pattom, Thiruvananthapuram – 695 004
Represented by its Chairman)
- 2 Tamilnadu Electricity Board (TNEB)
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
Represented by its Chairman
- 3 Electricity Department
Govt of Pondicherry,
Pondicherry - 605001
Represented by its Chief Secretary

----- RESPONDENTS



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- 4 Electricity Department
Government of Goa
Vidyuti Bhawan, Panaji
Goa 403001
Represented by Chief Engineer (Electrical)
- 5 Transmission Corporation of Andhra Pradesh Ltd.,
(APTRANSCO)
Vidyut Soudha, Hyderabad – 500 082
Represented by its Chairman
- 6 Northern Power Distribution Company of Andhra
Pradesh Limited (APNPDCL)
Opp. NIT Petrol Pump
Chaitanyapuri, Kazipet,
WARANGAL – 506 004
Andhra Pradesh
Represented by Its Managing Director
- 7 Eastern Power Distribution Company of Andhra Pradesh
Limited (APEPDCL)
APEPDCL, P&T Colony,
Seethmmadhara, VISHAKHAPATNAM
Andhra Pradesh,
Represented by its Managing Director
- 8 Southern Power Distribution Company of Andhra
Pradesh Limited (APSPDCL)
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
TIRUPATI-517 501,
Chittoor District, Andhra Pradesh
Represented by Its Managing Director
- 9 Central Power Distribution Company of Andhra Pradesh
limited (APCPDCL)
Corporate Office, Mint Compound,
HYDERABAD – 500 063
Andhra Pradesh
Represented by Its Managing Director
- 10 Karnataka Power Transmission Corporation Ltd.,
(KPTCL)
Kaveri Bhavan, Bangalore – 560 009
Represented by its Chairman
- 11 Bangalore Electricity Supply Company Ltd.,
(BESCOM), Corporate Office, K.R.Circle
BANGALORE – 560 001
Karanataka
Represented by Its Managing Director

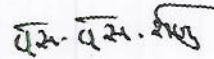


पुस्तक, मुद्रांक

- 12 Gulbarga Electricity Supply Company Ltd., (GESCOM)
Station Main Road, GULBURGA
Karnataka
Represented by Its Managing Director
- 13 Hubli Electricity Supply Company Ltd., (HESCOM)
Navanagar, PB Road
HUBLI, Karnataka
Represented by Its Managing Director
- 14 MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle
MANGALORE – 575 001
Karnataka
Represented by Its Managing Director
- 15 Chamundeswari Electricity Supply Corporation Ltd.,
(CESC)
927, L J Avenue
Ground Floor, New Kantharaj Urs Road
Saraswatipuram, MYSORE – 570 009
KARNATAKA
Represented by Its Managing Director

---RESPONDENTS

FILED BY
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY



S S RAJU
Dy. GENERAL MANAGER (COMMERCIAL)

GURGAON
DATED: 05.07.2010





हरियाणा HARYANA

17AA 320440

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION NO.:

IN THE MATTER OF: Approval under regulation-86 for determination of transmission tariff for combined elements a) 400 KV Ramagundam-Hyderabad D/C line (DOCO 01.1.2004), b) 400 kV S/C Hyderabad - Kurnool - Gooty Transmission Line (DOCO 01.03.2005), c) 400 kV S/C Khammam-Nagarjunasagar line (DOCO 01.03.2004) and d) 400 KV S/C Gooty-Neelmangla line (DOCO 1.5.2005) along with associated bays and equipment under Ramagundam Stage - III Transmission System for the period from 1.4.2009 to 31.3.2014

Power Grid Corporation of India Ltd.

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Corporate Centre: 'SAUDAMINI', Plot No-2,
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Tamilnadu Electricity Board (TNEB)

NPKRR Maaligai, 800, Anna Salai
Chennai - 600 002

Represented by its Chairman
And Others

--- PETITIONER

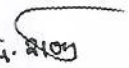
---- RESPONDENTS



Affidavit verifying the Petition

I, S S Raju, S/O Sh S B Raju, working as Deputy General Manager (Commercial) in the Powergrid Corporation of India Ltd., having its registered Office at B-9, Institutional Area, Katwaria Sarai, New Delhi-110 016, do hereby solemnly affirm and state as under :-

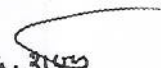
1. That I am the Dy. General Manager (Commercial) of Power Grid Corporation of India Ltd., the representative of the Petitioner in the above matter, and am duly authorised to make this affidavit.
2. That the enclosed petition is being filed for determination of tariff for combined elements a) 400 KV Ramagundam-Hyderabad D/C line (DOCO 01.11.2004), b) 400 kV S/C Hyderabad - Kurnool - Gooty Transmission Line (DOCO 01.03.2005), c) 400 kV S/C Khammam-Nagarjunasagar line (DOCO 01.03.2004) and d) 400 KV S/C Gooty-Neelmangla line (DOCO 1.5.2005) along with associated bays and equipment under Ramagundam Stage – III in SR for the period from 1.4.2009 to 31.3.2014
3. That no other petition except this petition has been filed directly or indirectly for combined elements of combined elements a) 400 KV Ramagundam-Hyderabad D/C line (DOCO 01.11.2004), b) 400 kV S/C Hyderabad - Kurnool - Gooty Transmission Line (DOCO 01.03.2005), c) 400 kV S/C Khammam-Nagarjunasagar line (DOCO 01.03.2004) and d) 400 KV S/C Gooty-Neelmangla line (DOCO 1.5.2005) along with associated bays and equipment under Ramagundam Stage – III in Southern Region for the period from 1.4.2009 to 31.3.2014
4. The documents attached with the petition are legible copies and duly attested by me
5. The statements made in the petition herein are based on petitioner company's official records maintained in the ordinary course of business and I believe them to be true and correct.



 (DEPONENT)

VERIFICATION

Solemnly affirmed at Gurgaon on this 5th day of July'2010 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.




 (DEPONENT)

ATTESTED

 (SAJJAN SINGH)
 ADVOCATE & NOTARY
 GURGAON (HARYANA)



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Power Grid Corporation of India Ltd.
Registered office: B-9, Qutab Institutional Area,
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Tamilnadu Electricity Board (TNEB)
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
Represented by its Chairman
And Others

---- RESPONDENTS

To
The Hon'ble Chairman and
his Companion Members of The Hon'ble CERC
The Humble application filed by the Petitioner

MOST RESPECTFULLY SHOWETH

- 1.0 That, Hon'ble Commission have made CERC (Terms and Conditions of Tariff) Regulations, 2009 and issued vide notification dated 19.01.2009 . These regulations shall remain in force for a period of 5 years w.e.f. 01.04.2009, unless reviewed earlier or extended by the Hon'ble Commission.
- 2.0 The Petitioner herein, Power Grid Corporation of India Ltd. is a Government Company within the meaning of Companies Act, 1956. In exercise of powers under sub-section (1) of section 38(1) the Electricity Act 2003, the Government of India has declared the Petitioner herein as the Central Transmission Utility (CTU). The petitioner being CTU is deemed to be a transmission licensee under section 14 of the Electricity Act' 2003.
- 3.0 The petitioner being CTU and transmission licensee is required to inter-alia build, maintain and operate an efficient, co-ordinated and economical inter state transmission system (ISTS). The tariff for the said transmission systems shall be determined by the Hon'ble Commission in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2009.



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- 4.0 That the petitioner has constructed a) 400 KV Ramagundam-Hyderabad D/C line (DOCO 01.11.2004), b) 400 kV S/C Hyderabad - Kurnool - Gooty Transmission Line (DOCO 01.03.2005), c) 400 kV S/C Khammam-Nagarjunasagar line (DOCO 01.03.2004) and d) 400 KV S/C Gooty-Neelmangla line (DOCO 1.5.2005) along with associated bays and equipment under Ramagundam Stage – III in Southern Region as per the DOCO indicated against each element. Schematic diagram of transmission system is enclosed as Encl.-1, page ..19
- 5.0 That the revised Transmission Tariff based on admitted capital cost of Rs 29838.35 lakhs for a) 400 KV Ramagundam-Hyderabad D/C line (DOCO 01.11.2004), b) 400 kV S/C Hyderabad - Kurnool - Gooty Transmission Line (DOCO 01.03.2005), c) 400 kV S/C Khammam-Nagarjunasagar line (DOCO 01.03.2004) and d) 400 KV S/C Gooty-Neelmangla line (DOCO 1.5.2005) along with associated bays and equipment under Ramagundam Stage – III in Southern Region including Additional Capitalisation for all the assets of the said transmission system covered under this petition for the tariff period 2004 – 2009 up to 31.03.2009 has been approved by the Hon'ble Commission vide its order dated 03.02.2009 in petition No.: 113/2008, copy whereof are attached hereto as Encl.-2, page 29 to 50 .
- 6.0 As per the Provisions of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009, Regulation 5 (2) states that in case of existing project, the application shall be based on admitted Capital Cost including any Additional capitalization already admitted up to 31.03.2009 and estimated additional capital expenditure for the respective years of the tariff period 2009-14.
- 7.0 That the enclosed application is being filed under Regulation 86 of CERC (Conduct of Business) Regulation, 1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission tariff from 01.04.2009 to 31.03.2014 based on the capital cost as admitted by Hon'ble Commission as on 31.03.2009 and proposed additional capitalization during 2009-14 for the assets covered under the current petition. The break up of cost including proposed projected additional capital expenditure during 2009-14 is detailed below:

Rupees in lakhs

Name of the asset	Admitted capital cost as on 31.03.09	Add. cap. proposed during 2009-14 period					Total Projected exp.	Total estimated capital cost as on 31.03.2014
		2009-10	2010-11	2011-12	2012-13	2013-14		
400 KV Ramagundam-Hyderabad D/C T/L (DOCO 01.11.2004)	9310.17	0	0	0	372.60		372.60	9682.77
400 kV S/C Hyderabad - Kurnool - Gooty T/L (DOCO 01.03.2005)	8690.34	0	0	0	0	0	0	8690.34
400 kV S/C Khammam-Nagarjunasagar T/L (DOCO 01.03.2004)	4658.82	0	0	0	0	0	0	4658.82
400 KV S/C Gooty-Neelmangla T/L (DOCO 1.5.2005)	7179.02	0	0	0	309.00	0	309.00	7488.02
Total	29838.35	0	0	0	681.60	0	681.60	30519.95



- 8.0 That the admissibility of additional capital expenditure (Add.-cap.) proposed during 2009-14 is to be dealt in accordance with the provisions of regulation 9(2)(v), the extract of clause 9(2)(v) of regulation 2009 is reproduced as under:

“Additional Capitalization”

(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

- (i)
(ii)
(iii)
(iv)

(v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system.

- 9.0 The category wise break up of additional capital expenditure during 2009-14 period is detailed below:

Name of Asset	Year	Nature	Amount	Details of Expenditure
400 KV Ramagundam- Hyderabad D/C T/L (DOCO 01.11.2004)	2012-13	Transmission Line	372.60*	For tower strengthening which has become necessary due to below mentioned reasons
400 KV S/C Gooty- Neelmangla T/L (DOCO 1.5.2005)	2012-13	Transmission Line	309.00*	

*total 681.60 MT @ Rs 1.00 lakh/MT of galvanized tower parts shall be used

- 10.0 That the tower strengthening work has become necessary for Grid stability due to following:

10.1 During the month of May and June' 2009, there had been 10 incidents of tower collapses on various transmission lines of the Petitioner company. These failures were investigated by the committee comprising experts from CEA and POWERGRID. While reviewing these tower failures, it was observed that the failures were occurred/triggered due to failure of suspension towers only.

10.2 It is worthwhile to mention that earlier towers were designed on the basis of provisions of IS:802-1977 which was based on the deterministic approach i.e., factor of safety was being applied on working loads. However, in line with international practice and as per provisions of IEC: 826-1991, major changes were incorporated in the revised IS:802-1995 which is now based on the probabilistic approach with different reliability levels.

10.3 Further, wind patterns in the country have changed over the years and earlier concept of 3 wind zones (light, medium & heavy) have been changed to 6 wind zones with



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enhanced wind pressures as per revised IS:875-1987. For an example, the towers of the 400 kV Dadri- Ballabhgarh and Dadri-Mandola were designed for medium wind zone as per earlier IS whereas the line is presently falling under wind zone-4 (47m/sec) as per revised IS. With the revised wind zone/ IS, wind pressure on conductor has increased to 161kg/m² from 90kg/m² (earlier standard).

10.4 While going through the Design of Suspension Tower of various lines, it is observed that Suspension Towers of these 10 lines are designed and constructed with following practice:

- A) As per IS: 802 – 1977- Old Code (100% wind in Broken Wire Condition)
- B) As per IS:802 Draft Code (100% wind in Broken Wire Condition)
- C) As per IS; 802 – 1995 New Code (0% wind in Broken Wire Condition – Contractor’s Design)
- D) As per IS: 802 – 1995 New Code (0% wind in Broken Wire Condition with Narrow Front Wind – In house Design)
- E) As per IS; 802 – 1995- (Under revision) - New Code (75% wind in Broken Wire Condition with Narrow Front Wind – In house Design)

It is further revealed that failed Suspension Towers in 2009 belongs to following types of Design categories:

Sl. No.	Category of Design	Name of line
1	TYPE-A	400 kV Dadri-Ballabhgarh D/C line 400 kV Dadri-Mandola D/C line 400 kV Farakka-Sagardighi S/C line 400 kV Kanpur-Ballabhgarh S/C line 400 kV Korba-Bhilai Ckt-I S/C line
2	TYPE-B	None
3	TYPE-C	400 kV Jabalpur-Itarsi Ckt-III & IV D/C line 400 kV Khandwa-Dhule D/C line
4	TYPE-D	400 kV Allahabad-Mainpuri D/C line 400 kV Meerut-Muzaffarnagar S/C line
5	TYPE-E	None

10.5 From the para above, it is observed that that there had been no failure for Type B and Type E design whereas failures were observed for Type-A, Type C and Type D designs. Basic reason for these failures may be summarized as under:

- i) Wind pattern in the country has changed causing higher wind loads on conductor and towers than it was designed for. The same is also reflected by a review article on “Basic wind speed map of India with long term hourly wind data” published by experts from SERC, Chennai (Annexure – I)
- ii) The change in basic concept of IS for transmission line design including loading in broken wire condition.



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- 10.6 It is further to mention that these failures were also discussed in the standing committee of experts constituted vide Office Memorandum No. 5-41\ Secy\ CEA\ 2001\ 2070 dtd. 05.09.2002 to investigate the tower failures. The meeting was chaired by Chief Engineer, CEA on 29/05/09. The committee acknowledged the fact that these towers were designed as per earlier IS: 802-1977 prevalent at that time and wind patterns in the country have also changed subsequently. The committee observed that tower failures occurred because of high velocity wind acting on the towers. It was opined that a narrow front storm hit the towers & the intensity/ speed of wind exceeded the limit for which the tower were designed. Committee further advised to provide hip bracing upto bottom cross arm in order to increase the strength of suspension towers. Chief Engineer (SETD), CEA and Chairman, Expert Committee opined that the expenditure incurred for such augmentation of towers can be capitalized. Copy of the minutes of the meeting is enclosed at Annexure-II.
- 10.7 Suitability of failed suspension tower w.r.t. revised IS code were rechecked w.r.t. corresponding wind zone. It was observed that the towers failed to sustain higher loads as per revised wind zone/ pressure.
- 10.8 As mentioned above in para 10.4, after review of design of failed towers, it is evident that Suspension towers of lines affected during May/ June' 2009, were not able to sustain loads as per revised IS:802-1995. It is therefore prudent that the stability of transmission lines may be improved by strengthening of suspension towers.
- 10.9 In view of the above, following action plan to avoid failures in lines was decided:
- i) to take up strengthening of suspension towers for all the lines having suspension towers of design category Type A and Type C on basis of importance/ priority of the line.
 - ii) For strengthening of suspension towers of category Type D where oblique view/ hip bracings in towers already exists, matter may be referred to M/s Structural Engineering Research Centre (SERC), Chennai for reviewing the design and suggesting a methodology to strengthen suspension towers under charged condition.
- 10.10 A meeting of tower design experts from SERC- Chennai, CPRI- Bangalore, CEA and tower manufacturers was also held to decide further course of action. These experts were of the opinion that strengthening of suspension towers up to bottom cross arm level may be taken up in phased manner after reviewing the design of towers falling under category Type-A, C & D.
- 10.11 Copy of the review article on Basic Wind speed map of India with Long term hourly wind data and Report of Standing Committee of experts to investigate failure of Towers of POWERGRID during the period January 2009 to June 2009 is enclosed as Encl.-3, page 51..to.77
- 11.0 **TRANSMISSION TARIFF**
- 11.1 That as per regulation 13 (3) and regulation 14 of the CERC (Terms and Conditions of Tariff) Regulations, 2009, the tariff for transmission of electricity on ISTS shall comprise transmission charge for recovery of annual fixed cost consisting of (a)



Return on Equity, (b) Interest on Loan, (c) Depreciation, (d) Interest on Working Capital and (e) Operation and maintenance expenses.

- 11.2 Hon'ble Commission vide para (a) and (b) (i), (ii) and (iii) of letter Ref. No. C-7/189(204)/2009-CERC dated 23.10.2009 (Copy is attached hereto as Encl.-4, page 78 to 79) decided the procedure for combining of assets for the purpose of Tariff determination for 2009-14 period, follows:

Quote:

"(a) Assets forming part of a transmission scheme/project would be clubbed for the purpose of tariff determination for tariff block 2009-14. Assets from two different projects would not be clubbed for the purpose of tariff determination.

(b) For the transmission scheme/projects completed fully and under commercial operation up to 31.03.2009:

- (i) Elements of a transmission project commissioned within 2 years from the actual DOCO of first element will be combined and treated as stage I of that project. If any element of that project is commissioned after two years the same would be considered as a part of next stage of that transmission project. Thus the total transmission project commissioning will be divided in stages based on the date of commissioning of the individual assets. Maximum period of each stage will be two years.
- (ii) The actual DOCO of last element of a stage of transmission scheme /project would be treated as the notional DOCO of combined assets of a particular stage of transmission scheme/project.
- (iii) Cut off date in such cases will be reckoned from the notional DOCO of combined assets (stage wise)"

Un Quote:

In line with above procedure all the four elements namely a) 400 KV Ramagundam-Hyderabad D/C line (DOCO 01.11.2004), b) 400 kV S/C Hyderabad - Kurnool - Gooty Transmission Line (DOCO 01.03.2005), c) 400 kV S/C Khammam-Nagarjunasagar line (DOCO 01.03.2004) and d) 400 KV S/C Gooty-Neelmangla line (DOCO 1.5.2005) along with associated bays and equipment under Ramagundam Stage - III in Southern Region have been clubbed for the purpose of determination of transmission charges and accordingly **notional DOCO** shall be considered as 01.05.2005. However for all other technical purposes actual DOCO of individual elements shall be considered.

Accordingly, the combined capital cost of all the four assets under Ramagundam Stage - III in Southern Region admitted by CERC as on 31.03.2009 is Rs 29838.35 lakhs and same has been considered for computation of tariff for 2009-14 period.

That as per the regulation, the useful life of the assets (25 years for S/S and 35 years for Transmission Lines) is governed by the respective actual DOCOs of the assets being combined to calculate the transmission charges. After completing the useful life by the respective assets (to be reckoned from the actual DOCO), full recovery of depreciation (90% of the Gross Block) of the asset would be deemed to have been achieved. The add cap in the said asset, if any, thereafter shall be dealt accordingly. Any recovery of depreciation for the combined asset would be considered as recovery of depreciation for the remaining assets, excluding the asset which has achieved the useful life.

That the notional DOCO for the assets covered in the petition has been considered as 01.05.2005 and accordingly completes 12 Yrs on 01.05.2017, thus the depreciation during 2009-14 has been calculated as per straight line method and rates as specified in appendix-III of the Regulations'2009. These details are provided in Form- 11.

The tariff for block 2009-2014 has been worked out as per Appendix-I of the tariff regulations for period 2009-14 and the Tariff Filing Formats along with the other relevant information and supporting documentation (if any) are attached hereto as Encl.- 5, page 80 to 130



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The Transmission Tariff from 01.04.2009 to 31.03.2014 calculated based on admitted cost of Rs 29838.35 lakhs as on 31.03.2009 is summarized below :

Stream-I		Rs. In Lakhs
Period	Annual Transmission Charges	
2009 - 2010	4,479.95	
2010 - 2011	4,465.66	
2011 - 2012	4,455.62	
2012 - 2013	4,449.17	
2013 - 2014	4,446.42	

The Transmission Tariff from 01.04.2009 to 31.03.2014 calculated based on projected expenditure during 2012-13 of Rs 681.60 lakhs considering the Proposed domestic loan (with interest rate @ 8.84 % of latest drawn domestic loan i.e. Bond XXXII) is summarized below :

Stream-II		Rs. In Lakhs
Period	Annual Transmission Charges	
2009 - 2010	0.00	
2010 - 2011	0.00	
2011 - 2012	0.00	
2012 - 2013	57.32	
2013 - 2014	113.05	

Total Transmission Tariff from 01.04.2009 to 31.03.2014 is summarized below :

STREAM I (+) STREAM II		Rs. In Lakhs
Period	Annual Transmission Charges	
2009 - 2010	4,479.95	
2010 - 2011	4,465.66	
2011 - 2012	4,455.62	
2012 - 2013	4,506.49	
2013 - 2014	4,559.47	

- 11.3 That, it is submitted in the Tariff indicated at 11.2 above, the ROE has been calculated @ 17.481 % based on the rate notified by the Hon'ble Commission as per illustration under regulation 15 (4) (i) of the CERC (Terms and Conditions of Tariff) Regulations, 2009. It is further submitted that the above rate of 17.481 % is based on the MAT rate of 11.33 % being applicable for the year 2008-09.

That, as per the Finance Act, 2009, the applicable MAT rate was revised from 10% to 15%. That as per Budget 2010-11, MAT is further revised to 18% and surcharge is revised to 7.5% from 10%.

It is therefore submitted that Tariff as indicated at 11.2 above be approved by the Hon'ble Commission. However, keeping in view the trend of revisions in tax rates as is being witnessed in the two years of the five year tariff block and to avoid accumulation of huge arrears and interest thereupon, it is proposed to invoke the provision of Regulations 44 (Power to Relax) of CERC (Terms and Conditions of Tariff) Regulations, 2009, for relaxation of Regulation 15(3) , CERC (Terms and



24.04.2014

Conditions of Tariff) Regulations, 2009 so that grossing up the base rate ROE may be allowed considering the tax rates viz., MAT, surcharge, any other cess, charges, levies etc, as per the relevant Finance Act and accordingly consequential impact of tariff on account of truing up may be allowed to be billed and settled directly with the beneficiaries every year in the tariff block.

11.4 Service Tax:

That the CESTAT in the case of M.P.Power Transmission Co. Ltd. V.CCE(2008-TIOL-940-CESTAT-DEL) gave a prima facie finding while passing an order in a stay application, that the charges recovered for transmission of electricity by the transmission company would be liable to service tax under the category of 'Support services of business or commerce' ('BSS'). The Tribunal found that the services provided by the activities of a power transmission company have a very close nexus with the activities of power generating and distribution companies and that the business of generation and sale of electricity cannot be completed without the support of the transmission company. While passing the order, the Tribunal relied on two expressions viz (a) services provided in relation to business or commerce and (b) managing distribution and logistics used in the definition of Business Support Service to demand service tax.

On the basis of the above order, the Departmental officers all over India are compelling transmission companies to pay service tax on the transmission charges received from generating or distribution companies. The petitioner, Power Grid Corporation of India Ltd., is a government enterprise, which transmits power through its transmission system from Generating Plant to distribution centers/ bulk consumers, shall also be liable to pay service tax in view of above order.

That order of Commissioner, Central Excise Shillong regarding non registration and non payment of Service Tax on Transmission charges and demand for payment of Service Tax on Transmission charges has been received on 23.11.2009. That it implies service tax is to be paid by the petitioner company.

The Transmission Charges and other related charges indicated at para 11.2 above, is exclusive of Service Tax and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner. Therefore the Service Tax may be allowed to be billed to the beneficiaries.

- 11.5 That Interest on Loan has been calculated on the basis of rate prevailing as on 01.04.2009. The change in Interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from / with the beneficiaries as was being followed during the tariff block 2004-09.
- 11.6 The transmission charges at para-11.2 above is inclusive of O&M expenses for the project derived based on the norms for O&M expenditure as specified under regulation 19(g) of the tariff regulations for block 2009-14. It is the understanding of the petitioner that these norms for O&M expenditure been arrived by the Hon'ble Commission after considering (i) normalized actual O&M expenses of the petitioner on its various projects in various regions during the year 2003-04, 2004-05, 2005-06, 2006-07, 2007-08, (ii) the base norms so arrived is escalated at 5.72% per annum to arrive at norms for years of tariff period 2009-14, (iii) and also wage hike of 50% on account of pay revision of the employees of Public Sector Undertakings. It is submitted that the wage revision of the employees of the petitioner company is due



w.e.f. 1.1.2007 and actual impact of wage hike is still not known. The petitioner reserves the right to approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure in case the impact of wage hike is more than 50%.

Petitioner submits that the License fee has been a new component of cost to the Transmission license under O&M stage of the project and has become incidental to the petitioner / CTU only from 2008-09. No such cost component was incidental during the remaining years of the block (i.e. 2004-08). Normative O&M rates arrived for 2009-14 in the CERC (Terms and Conditions of Tariff) Regulations, 2009 as such did not capture the costs associated with the License fees.

It is therefore submitted that License fee may be allowed to be recovered separately from the respondents.

- 11.7 The Transmission Charges and other related Charges indicated at para 11.2 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee or any other kind of imposition (s) and/ or other surcharges etc. whatsoever imposed / charged by any Government (Central/State) and / or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environmental protection, and/or in respect of any of its installation associated with the Transmission System and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner on the respondents.

12.0 Sharing of Transmission Charges

- 12.1 Tariff for Transmission of Electricity (Annual Fixed Cost) as per para 11.1 to 11.7 above shall be recovered on monthly basis in accordance with Regulation 23 and shall be borne by the respondents in accordance with regulation 33 of CERC (Terms and Conditions of Tariff) Regulations, 2009.

- 13.2 That in the CERC order dated 03.02.2009 in petition No.: 113/2008, Transmission Tariff for the subject assets is to be borne by 5 no. respondents(s) to the Petitioner. Now, after reforms in power sector, no. of respondents in the states of Andhra Pradesh and Karnataka has increased with introduction of DISCOMS. The total list of respondents is enclosed as a part of this petition as Memo of Parties.

- 14.0 In the circumstances mentioned above it will be just and proper that the transmission tariff for the assets covered under this petition be allowed to be charged from the Respondents on the basis set out in para-6 above. **The Petitioner submits that the Encl.-1 to Encl.- 5 may please be treated as integral part of this petition.**

PRAYER

It is respectfully prayed that the Hon'ble Commission may be pleased to

- 1) Approve proposed the additional capitalization of Rs 681.60 lakhs during FY 2012-13, for 400 kV Ramagundam-Hyderabad D/C T/L and 400 kV Gooty-Neelmangla S/C T/L.
- 2) Approve the Transmission Tariff for the assets covered under this petition, as per para - 11 above.

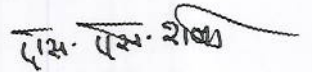


11.4.21

- 3) In addition, invoke the provision of Regulations 44 (Power to Relax) of CERC (Terms and Conditions of Tariff) Regulations,2009, for relaxation of Regulation 15(3), CERC (Terms and Conditions of Tariff) Regulations,2009 so that grossing up the base rate of ROE may be allowed considering the tax rates viz., MAT, surcharge, any other cess, charges, levies etc, as per the relevant Finance Act and accordingly consequential impact of tariff on account of truing up may be allowed to be billed and settled directly with the beneficiaries every year in the tariff block.
- 4) In case of the assets being combined to calculate the transmission charges, allow the petitioner to recover full depreciation (90% of the Gross Block) of the assets during its useful life (25 years for S/S and 35 years for Transmission Lines) reckoning from its actual DOCO. Hon'ble Commission may also be pleased to permit the petitioner to treat the recovery of depreciation after achieving the useful life by an asset (to be reckoned from the actual DOCO) in accordance with para 11.2
- 5) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2009-14 period, if any, from the respondents.
- 6) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and publishing of notices in newspapers in terms of Regulation 42 CERC (Terms and Conditions of Tariff) Regulations,2009, and other expenditure (if any) in relation to the filing of petition.
- 7) Allow the petitioner to bill and recover Service Tax on Transmission charges separately from the respondents, if petitioner is subjected to such service tax.
- 8) Allow the petitioner to bill and recover Licensee fee separately from the respondents.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice

FILED BY
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY



S S Raju

Dy. GENERAL MANAGER (COMMERCIAL)

GURGAON
DATED: 05.07.2010

