

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

IN THE MATTER OF: Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Elements under Transmission System associated with Krishnapatnam UMPP-Part-B in Southern and Western Region.

PETITIONER

Power Grid Corporation of India Ltd.

(Govt. of India undertaking)

Registered office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi 110 016

Corporate office: "Saudamini", Plot no.2, Sector-29, Gurgaon -122 001. (Haryana)

Power Grid Corporation of India Ltd., the petitioner in the matter, is filing an application under regulation-86, for approval of Transmission Tariff for the period 2009-14 above mentioned transmission system in Southern and Western Region.

In terms of Regulation 3(2) of the Central Electricity Regulatory Commission (Procedure for making of application for determination of tariff, publication of the application and other related matters) Regulations, 2004, copy of complete tariff application is hereby served to the respondent (beneficiaries of Southern and Western Region), for information and necessary action in the matter.

The tariff application is hereby served through the nodal officers of the respondents for CERC matters, on the addresses as mentioned below:

ADDRESSES OF NODAL OFFICERS

1 Karnataka Power Transmission Corporation Ltd.,
(KPTCL), Kaveri Bhavan, Bangalore – 560 009
Represented by its Chairman

BY SPEED POST

2 Transmission Corporation of Andhra Pradesh Ltd.,
(APTRANSCO), Vidyut Soudha, Hyderabad – 500
082
Represented by its Chairman

3 Kerala State Electricity Board (KSEB)
Vaidyuthi Bhavanam
Pattom, Thiruvananthapuram – 695 004
Represented by its Chairman

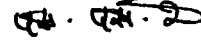
- 4 Tamil Nadu Generation and Distribution Corporation Ltd (Formerly Tamilnadu Electricity Board -TNEB)
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
Represented by its Chairman
- 5 Electricity Department
Govt of Pondicherry,
Pondicherry - 605001
Represented by its Chief Secretary
- 6 Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL)
APEPDCL, P&T Colony,
Seethmmadhara, VISHAKHAPATNAM
Andhra Pradesh,
Represented by its Managing Director
- 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
Represented by Its Managing Director
- 8 Central Power Distribution Company of Andhra Pradesh limited (APCPDCL)
Corporate Office, Mint Compound,
HYDERABAD – 500 063
Andhra Pradesh
Represented by Its Managing Director
- 9 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
- 10 Bangalore Electricity Supply Company Ltd.,
(BESCOM), Corporate Office, K.R.Circle
BANGALORE – 560 001
Karnataka
Represented by Its Managing Director

- 11 Gulbarga Electricity Supply Company Ltd.,
(GESCOM)
Station Main Road, GULBURGA
Karnataka
Represented by Its Managing Director
- 12 Hubli Electricity Supply Company Ltd., (HESCOM)
Navanagar, PB Road
HUBLI, Karnataka
Represented by Its Managing Director
- 13 MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle
MANGALORE – 575 001
Karnataka
Represented by Its Managing Director
- 14 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
15. MADHYA PRADESH POWER MANAGEMENT CO. LTD.
SHAKTI BHAWAN, RAMPUR
JABALPUR - 482 008
REPRESENTED BY ITS MD
16. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.
PRAKASHGAD, 4TH FLOOR
ANDHERI (EAST), MUMBAI - 400 052
REPRESENTED BY ITS MD
17. GUJARAT URJA VIKAS NIGAM LTD.
SARDAR PATEL VIDYUT BHAWAN,
RACE COURSE ROAD
VADODARA - 390 007
REPRESENTED BY ITS CHAIRMAN
18. ELECTRICITY DEPARTMENT
GOVT. OF GOA
VIDYUT BHAWAN, PANAJI,
NER MANDVI HOTEL, GOA - 403 001
REPRESENTED BY ITS CHIEF ENGINEER (ELECTRICAL)

19. ELECTRICITY DEPARTMENT
ADMINISTRATION OF DAMAN & DIU
DAMAN - 396 210
REPRESENTED BY ITS SECRETARY (FIN.)
20. ELECTRICITY DEPARTMENT
ADMINISTRATION OF DADRA NAGAR HAVELI
U.T., SILVASSA - 396 230
REPRESENTED BY ITS SECRETARY (FIN.)
- 21 CHHATTISGARH STATE ELECTRICITY BOARD
P.O.SUNDER NAGAR, DANGANIA, RAIPUR
CHHATISGAARH-492013
REPRESENTED BY ITS CHAIRMAN
- 22 MADHYAPRADESH AUDYOGIK KENDRA
VIKAS NIGAM (INDORE) LTD.
3/54, PRESS COMPLEX, AGRA-BOMBAY ROAD,
INDORE-452 008

Kindly acknowledge the receipt.

Filed by
Power Grid Corporation of India Ltd.



Represented by S. S. Raju
Dy. General Manager (Commercial)

Gurgaon

Dated: 30th Oct. '2013

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION FOR

APPROVAL OF TRANSMISSION TARIFF
for

“Elements under Transmission System associated with Krishnapatnam UMPP-Part-B”
in
Southern and Western Region.

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**



A. A. D.

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

PETITION NO.:

IN THE MATTER OF: Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations '2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Elements under Transmission System associated with Krishnapatnam UMPP-Part-B in Southern and Western Region.

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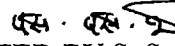
Registered office: B-9, Qutab Institutional Area,
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Corporate Centre : 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

Tamil Nadu Generation and Distribution Corporation
Ltd (Formerly Tamilnadu Electricity Board -TNEB)
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
Represented by its Chairman
And Others

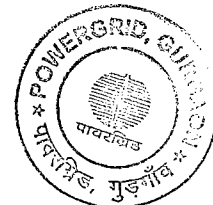
----- RESPONDENTS

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


**REPRESENTED BY S. S. RAJU
Dy. General Manager (Commercial)**

**GURGAON
DATED: 29.10.2013**



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

PETITION NO.:

IN THE MATTER OF: Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Elements under Transmission System associated with Krishnapatnam UMPP-Part-B in Southern and Western Region.

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

----- RESPONDENTS

To

The Secretary
Central Electricity Regulatory Commission
New Delhi 110001

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 from DOCO to 31.03.2014 may please be registered.

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


**REPRESENTED BY S. S. RAJU
Dy. General Manager (Commercial)**

**GURGAON
DATED: 29.10.2013**



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Represented by its Chairman
And Others

---- RESPONDENTS

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

--- PETITIONER

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Represented by its Chairman

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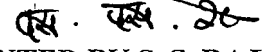
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3/54, PRESS COMPLEX, AGRA-BOMBAY ROAD,
INDORE-452 008

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.



REPRESENTED BY S. S. RAJU
Dy. General Manager (Commercial)

GURGAON
DATED: 29.10.2013





हरियाणा

HARYANA

BEFORE

30AA 425208

THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

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Tamil Nadu Generation and Distribution Corporation
Ltd (Formerly Tamilnadu Electricity Board -TNEB)

--- RESPONDENT

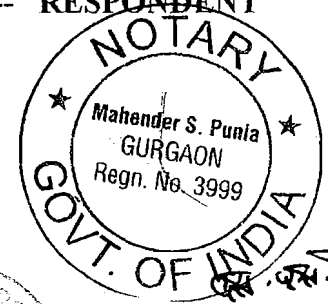
NPKRR Maaligai, 800, Anna Salai

Chennai - 600 002

Represented by its Chairman


And Others

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:-

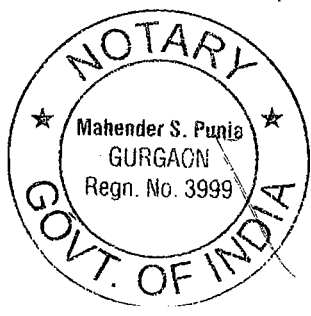
1. I am the Dy. General Manager of Power Grid Corporation of India Ltd., the representative of the Petitioner in the above matter, and am duly authorised to make this affidavit.
2. I submit that the enclosed tariff Petition is being filed for determination of Transmission Tariff for 2009-14 Block for Elements under Transmission System associated with Krishnapatnam UMPP-Part-B (Ant. DOCO 01.02.2014) in Southern and Western Region.
3. I submit that no other tariff Petition except this Petition has been filed directly or indirectly for approval of Transmission Tariff for 2009-14 Block for Elements under Transmission System associated with Krishnapatnam UMPP-Part-B (Ant. DOCO 01.02.2014) in Southern and Western Region.
4. The statements made in the tariff 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.
5. The documents attached with the petition are legible copies and duly attested by me


 (DEPONENT)

VERIFICATION

Solemnly affirmed at Gurgaon on this ^{29th}.....day of Oct, 2013 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

MAHENDER S. PUNIA
 ADVOCATE & NOTARY
 H-111 GURGAON (Haryana) India



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

PETITION NO.:

IN THE MATTER OF: Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Elements under Transmission System associated with Krishnapatnam UMPP-Part-B in Southern and Western Region.

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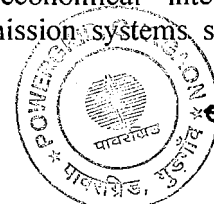
Tamil Nadu Generation and Distribution Corporation
Ltd (Formerly Tamilnadu Electricity Board -TNEB)
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
Represented by its Chairman
And Others

---- RESPONDENT

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.

4.0 That the instant petition covers approval of transmission tariff for Elements under Transmission System associated with Krishnapatnam UMPP-Part-B in Southern and Western Region, which is anticipated to be put under commercial operation w.e.f. 01.02.2014.

5.0 Approval of the Scheme

5.1 That the petitioner has been entrusted with the implementation of "Transmission System associated with Krishnapatnam UMPP-Part-B". The investment approval of the project was accorded by Board of Directors of POWERGRID vide the Memorandum Ref.: C/CP/KUMPP-B dated 09.02.2012, at an estimated cost of Rs. 1927.16 Crores including IDC of Rs 88.13 Crores, price level -4th Qtr, 2011, a copy whereof is attached hereto as **Encl-1, pages 2.1 to 2.2**. that the scope of the scheme was discussed and agreed in the 24th and 33rd SCM of Southern Region Constituents. Extract of the MOM is Enclosed herewith as **Encl-2 page 3.1 to 3.1...**

5.2 The scope of work covered under "Transmission System associated with Krishnapatnam UMPP-Part-B" in Southern Region and Western Region is as follows:

Transmission Line

- (i) Raichur-Sholapur 765 kV S/C line.
- (ii) Sholapur-Pune 765 kV S/C line
- (iii) LILO of Parli-Pune 400 kV D/C and Pune-Aurangabad 400 kV D/C line at Pune (GIS) S/S (including M/C)
- (iv) LILO of existing Raichur-Gooty 400 kV Quad D/C line at Raichur (New) S/S.

Sub Station

- (i) Establishment of new 765/400 kV S/S at Raichur with 2x1500 MVA ICTs.
- (ii) Establishment of new 765/400 kV S/S at Sholapur with 2x1500 MVA ICTs.
- (iii) Establishment of new 765/400 kV substation at Pune (GIS) with 2x1500 MVA ICTs.

Line Reactors

- (i) 1x240 MVAR switchable line reactors at each end of Raichur -Sholapur 765 kV S/C and Sholapur-Pune 765 kV S/C lines.
- (ii) 4x50 MVAR line reactors at Pune(GIS) substation for LILO of Parli-Pune and Pune Aurangabad 400 kV D/C line at Pune (GIS) substation.

Bus Reactor

- (i) 1x240 MVAR bus reactor each at Raichur-Sholapur & Pune substations.

The Schematic diagram of the scheme is attached hereto as **Encl. - 3, (page 2.2..)**.

6.0 Implementation Schedule

As per the approval, the transmission scheme was scheduled to be commissioned in 32 months from the date of investment approval. The date of Investment Approval is 09.02.2012. Hence the commissioning schedule comes to 09.10.2014 and DOCO as 01.11.2014 against which the subject asset is anticipated to be commissioned and put



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under commercial operation w.e.f. 01.02.2014. Hence there is no time overrun in commissioning of the subject assets.

That the subject assets is anticipated to be commissioned and put under commercial operation in 32 months from the date of investment approval. In this context, following provisions of CERC (Terms and Conditions of Tariff) Regulations, 2009 may please be invoked.

Regulation 15 and Amendment of Regulation 15 of the Principal Regulations vide notification No. L-7/145(160)/2008- CERC dated 21.06.2011 : Return on equity

(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% to 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 time line specified in Appendix-II.

“(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 year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

Appendix-II

Time line for completion of projects :

1. The completion time schedule shall be reckoned from the date of investment approval by the Board (of the generating company or the transmission licensee),



Handwritten signature and initials.

or the CCEA clearance as the case may be, up to the date of commercial operation of the units or block or element of the transmission project as applicable.

2. The time schedule has been indicated in months in the following tables:

Asset	Actual/ant. Comp. (date / Months)	CERC Time line (months)	Qualifying -Time line for addl. ROE (months)	Scheduled completion (Months)	Additional ROE Claimed
Asset-1	01.02.2014	30	32	23	YES
Asset-2	01.02.2014	32	32	23	YES
Asset-3	01.02.2014	30	32	23	YES
Asset-4	01.02.2014	30	32	23	YES
Asset-5	01.02.2014	30	32	23	YES

The project i.e. (plain terrain), Raichur-Solapur line and other four assets (Ant. DOCO : 1.02.2014) under Transmission system associated with Krishnapatnam UMPP Part-B in Western And Southern Regional Grid; for which the qualified time schedule has been stipulated as 32 months in the Appendix-II to the Regulations. The project is anticipated to be complete within 23 months from the date of investment approval and therefore, qualifies for additional ROE of 0.5% under Regulation 15(2) of CERC (Terms and conditions of Tariff) Regulations, 2009. Accordingly, the tariff under this petition is based on pre-tax ROE of 18.044% inclusive of MAT @ 11.33% (Base rate-10%, surcharge- 10%, cess-3%) being applicable for the year 2008-09. The grossed up pre-tax rate of ROE of 16 % (15.5+0.5) works out to 18.044 % (grossed up at 11.33% of MAT Rate)

7.0 Completion Cost

7.1 That the application for determination of tariff is filed in line with provision 5 (1) & (2) of tariff Regulation 2009 applicable for 2009-14 period. Further, that the present petition covers approval of tariff based on actual/estimated expenditure incurred up to DOCO and additional capitalization projected to be incurred from DOCO to 31.03.2015 in respect of the subject asset as per detail given below. That the capital cost incurred upto DOCO and projected to be incurred during 2013-14, 2014-15 & 2015-16 is duly certified by auditors in auditor certificate; copy whereof in respect of the assets covered in this petition is enclosed herewith as Encl-4 (page 29.. to 36.).

(Rs in Lakhs)

Name of the element	Approved Cost	Exp. Up to DOCO (1.2.14)	Proj exp. from DOCO to 31.03.14	Proj exp. from 1.1.14 to 31.03.15	Estimated completion Cost
765 kV Raichur-Sholapur line alongwith bay extensions at Raichur S/S with ICTs & Reactors and Bays for Raichur Sholapur 765 kV S/S TL at 765/400 kV Sholapur S/S alongwith 240 MVAR Switchable Line Reactor - Asset I	56556	51138.73	6111.60	3135.20	60385.53
LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/s - Asset II	3468	2541.36	138.19	141.3	2820.85



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240 MVAR Bus Reactor and associated bays at Solapur S/S – Asset III	4084.45	4191.55	195.82	1001.78	5389.15
1x1500 MVA ICT-1 and its associated bays at Solapur S/S– Asset IV	5968.46	5136.38	520.01	742.57	6398.96
1x1500 MVA ICT-2 and its associated bays at Solapur S/S– Asset V	6091.06	4939.86	524.13	995.76	6459.75
Total	76168	67947.88	7489.75	6016.61	81454.24

Against the total apportioned approved cost of Rs 761.68 crores, the anticipated completed cost is Rs 814.54 crores of these five assets, so, there is marginal cost overrun in comparison to FR cost . The reasons for item wise cost variation between approved cost (FR) and actual cost as on DOCO are explained in detail in Form-5B.

Further, it is humbly prayed that tariff may be allowed on the estimated completion cost, since few elements of the project are yet to be completed. The completion cost for Elements under Transmission System associated with Krishnapatnam UMPP-Part-B in Southern and Western Region works out to Rs 814.54 cr which is with in the overall project cost of Rs 1927.16 Cr. Thus, it is humbly prayed that Tariff may be allowed as claimed in the petition.

Initial spares: Total Initial spares for the Transmission lines is 0.63% (approximately) and sub-stations is 2.17 % (approximately) which is with in specified limit under provision 8 of the CERC Regulations 2009.

7.2 The details of underlying assumptions for additional capitalization for this asset is summarized below:

The admissibility of additional capital expenditure (Add. Cap.) incurred after DOCO is to be dealt in accordance with the provisions of Regulation 9 (1), the extract of clause 9 of the regulations, 2009 is reproduced as under:

“Additional Capitalization”

(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 upto 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: Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.



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7.3 The additional Capitalisation incurred/projected to be incurred in the contextual asset is mainly on account of Balance/Retention Payments and hence the same may be allowed by Hon'ble Commission. The details of underlying reasons for additional capitalization for Elements under Transmission System associated with Krishnapatnam UMPP-Part-B in Southern and Western Region are:

Asset I

Rs in lakhs

Year	Work/Equipment proposed to be added after COD up to cut off date	Amount capitalised and proposed to be capitalised	Justification as per purpose
DOCO to 31.03.2014	Land	-	Balance & retention payment
	Building & other civil works	127.16	
	Sub station	2539.85	
	Transmission Line	3432.41	
	PLCC	12.17	
	Subtotal	6111.60	
01.04.2014 to 31.03.2015	Land	570.40	Balance & retention payment
	Building & other civil works	-	
	Sub station	1093.73	
	Transmission Line	1471.03	
	PLCC	-	
	Subtotal	3135.20	

Asset – II

Rs. In Lakhs

Year	Work/Equipment proposed to be added after COD up to cut off date	Amount capitalised and proposed to be capitalised	Justification as per purpose
DOCO to 31.03.2014	Sub station	34.69	Balance & retention payment
	Transmission Line	95.10	
	PLCC	8.40	
	Subtotal	138.19	
01.04.2014 to 31.03.2015	Sub station	100.54	Balance & retention payment
	Transmission Line	40.76	
	PLCC	-	
	Subtotal	141.30	

Asset III

Rs. In Lakhs

Year	Work/Equipment proposed to be added after COD up to cut off date	Amount capitalised and proposed to be capitalised	Justification as per purpose
DOCO to 31.03.2014	Building & other civil works	40.55	Balance & retention payment
	Sub station	155.27	
	Subtotal	195.82	
01.04.2014 to 31.03.2015	Building & other civil works	106.95	Balance & retention payment
	Sub station	894.83	
	Subtotal	1001.78	



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Asset IV

Rs in Lakh

Year	Work/Equipment proposed to be added after COD up to cut off date	Amount capitalised and proposed to be capitalised	Justification as per purpose
DOCO to 31.03.2014	Building & other civil works	207.83	Balance & retention payment
	Sub station	312.18	
	Subtotal	520.01	
01.04.2014 to 31.03.2015	Building & other civil works	268.04	Balance & retention payment
	Sub station	474.53	
	Subtotal	742.57	

Asset V

Rs. In Lakhs

Year	Work/Equipment proposed to be added after COD up to cut off date	Amount capitalised and proposed to be capitalised	Justification as per purpose
DOCO to 31.03.2014	Building & other civil works	136.80	Balance & retention payment
	Sub station	387.33	
	Subtotal	524.13	
01.04.2014 to 31.03.2015	Building & other civil works	385.77	Balance & retention payment
	Sub station	609.99	
	Subtotal	995.76	

That the petition for determination of tariff is being filed in line with provision 5 (2) of tariff Regulation 2009 applicable for 2009-14 period.

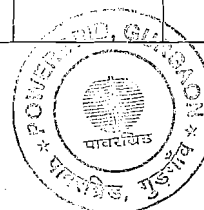
8.0 TRANSMISSION TARIFF

8.1 The tariff for block 2009-2014 has been worked out as per CERC (Terms and Conditions of Tariff) Regulations, 2009, issued vide notification dated. 19.01.2009. In the present petition the transmission tariff has been calculated taking actual / estimated expenditure upto DOCO and estimated additional capitalization from DOCO to 31.03.2014. Calculations for working out the tariff along with supporting documentation are attached hereto as Encl.- 5, pg³¹ to 1.32.

8.2 The annual transmission tariff for the tariff period 2009-14 is summarized as below:

(Rs in Lacs)

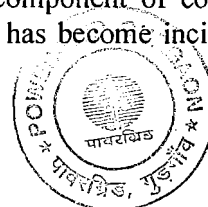
Name of the asset	2009-10	2010-11	2011-12	2012-13	2013-14
765 kV Raichur-Sholapur line alongwith bay extensions at Raichur S/S with ICTs & Reactors and Bays for Raichur Sholapur 765 kV S/S TL at 765/400 kV Sholapur S/S alongwith 240 MVAR Switchable Line Reactor – Asset I					1244.70



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LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/s – Asset II					100.23
240 MVAR Bus Reactor and associated bays at Solapur S/S – Asset III					100.42
1x1500 MVA ICT-1 and its associated bays at Solapur S/S– Asset IV					132.61
1x1500 MVA ICT-2 and its associated bays at Solapur S/S– Asset V					132.15
Total					1710.11

- 8.3 That in line with the amendment dated 21.06.2011 to Regulation 15 of the Principal Tariff Regulation dated 19.01.2009, the petitioner shall be allowed to recover the shortfall or refund the excess Annual Fixed Charges, 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. Further, Annual Fixed charges with respect to Tax rates applicable shall be trued up in accordance with Regulation 6 of the Principal Regulations.
- 8.4 Service tax on transmission has been put in the negative list w.e.f. 01.04.2012 and accordingly the Transmission Charges indicated at para 8.2 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 if at any time the transmission charges is withdrawn from the negative list.
- 8.5 That Interest on Loan has been calculated on the basis of rate prevailing as on DOCO / 01.02.2014. 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.
- 8.6 The transmission charges at para-8.2 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 employees has been implemented. The petitioner reserves the right to approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure due to impact of wage revision.
- 8.7 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



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the petitioner / CTU only from 2008-09. It is therefore submitted that License fee shall be recovered separately from the respondents as per CERC (Terms and Conditions on Tariff) (Third Amendment), Regulations, 2012 issued vide date 31.12.2012, para 13 "Addition of New Regulation to the Principal Regulations 42A. (1) (b)."

- 8.8 The Transmission Charges and other related Charges indicated at para 8.2 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.

9.0 Sharing of Transmission Charges

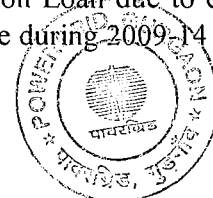
Tariff for Transmission of Electricity (Annual Fixed Cost) as per para 8.0 of petition shall be recovered on monthly basis and the billing collection and disbursement of Transmission Charges shall be governed by provision of CERC (sharing of interstate Transmission Charges and Losses) Regulations, 2010.

The Petitioner submits that the Encl.-1 to Encl.-5 may please be treated as integral part of this petition.

PRAYER

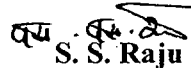
It is respectfully prayed that the Hon'ble Commission may be pleased to

- 1) Approve the Transmission Tariff for the assets covered under this petition, as per para -8.0 above. The billing shall be done from the actual date of commercial operation.
- 2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
- 3) Approve the Additional ROE as claimed in the Petition.
- 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, 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.
- 5) 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.
- 6) 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 respondent.

- 7) Allow the Petitioner to bill and recover Service tax on Transmission Charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list at any time in future.
- 8) Allow the petitioner to bill and recover Licensee fee separately from the respondents as per CERC (Terms and Conditions on Tariff) (Third Amendment), Regulations, 2012 issued vide date 31.12.2012, para 13 "Addition of New Regulation to the Principal Regulations 42A. (1) (b)."
- 9) Allow provisional tariff in accordance with clause (3) of Regulation 5 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (First and Second Amendment).
- 10) Allow the petitioner to bill Tariff from actual DOCO.
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: 29.10.2013



Encl-1

2012



भारत पावर ग्रिड कॉर्पोरेशन लिमिटेड

(भारत सरकार का उद्योग)

POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

पता: नेशनल इन्फ्रास्ट्रक्चर डेवेलपमेंट अथॉरिटी, 2 फ्लोर-29, गुडगाँव-122001, हरियाणा
TELEPHONE: 0124-2571700-719, फॉक्स: 0124-2571760, 0124-2571761 गैर-आवृत्ति
Corporate Office: 'Saudamini' Plot No. 2, Sector-29, Gurgaon-122001, Haryana
TELEPHONE: 0124-2571700-719, फॉक्स: 0124-2571760, 0124-2571761 ग्राम: NATION GRID

CGPKRUMPP-B

February 9, 2012

MEMORANDUM

SUB: INVESTMENT APPROVAL FOR "TRANSMISSION SYSTEM ASSOCIATED WITH KRISHNAPATNAM UMP - PART-B"

The Board of Directors of POWERGRID, in exercise of powers delegated to it by the Department of Public Enterprises (DPE), Ministry of Heavy Industries and Public Enterprises, Government of India through its Office Memorandum No. 26(3)/2005-GM-GL-92 dated 1st May, 2008 and Office Memorandum No. DPE/11(2)/97-Fin, dated 22nd July, 1997 (modified subsequently through Office Memorandum No. 18(24)/2003-GM-GL-94 dated 5th August, 2006) have accorded investment approval for "Transmission System associated with Krishnapatnam UMP - Part-B" in its 267th meeting held on February 6, 2012 as per the details given below:

1 Broad Scope of the Project

Transmission lines

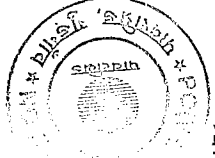
- i) Raichur - Sholapur 765 KV S/C line;
- ii) Sholapur - Pune 765 KV S/C line;
- iii) LLO of Part - Pune 400 KV D/C and Pune-Aurangabad 400 KV D/C line at Pune (GIS) substation (including multi circuit);
- iv) LLO of existing Raichur - Gooty 400 KV Quad D/c line at Raichur (New) substation.

Substations

- a) Establishment of new 765/400 KV substation at Raichur with 2x1500 MVA ICTS.
- b) Establishment of new 765/400 KV substation at Sholapur with 2x1500 MVA ICTS.
- ii) Establishment of new 765/400 KV substation at Pune (GIS) with 2x1500 MVA ICTS.

पुनः शोलापुर 765 KV S/C लाइन का निर्माण करने के लिए निम्नलिखित स्थानों पर 765/400 KV के नए सबस्टेशन स्थापित करने के लिए निम्नलिखित निवेश मंजूरी दी गई है।

प्रिय महोदय,



2012



(Seema Gupta)
General Manager (CP)

2/9/12

श्री. ए. ए. शर्मा

February 8, 2012.

This is issued in pursuance of 207th meeting of Board of Directors held on

investment approval.

The project is scheduled to be commissioned within 32 months from the date of

3. Commissioning Schedule

ratio of 70:30

Project is proposed to be implemented through loan from The World Bank/ domestic borrowings and POWERGRID's internal resources with a debt equity

is attached as Annexure-I.

The estimated cost of the project based on 4th Quarter, 2011 price level is Rs. 1927.16 Crore including IDC of Rs. 88.13 Crore. The abstract cost estimate

2. Project Cost & Funding

1X 240 MVAR busreactor each at Raichur, Sholapur & Pune substations

Bus Reactors

(ii) 4X50 MVAR line reactors at Pune (GIS) substation for LLO of Parl - Pune and Pune-Aurangabad - 400 KV D/C line at Pune (GIS) substation.

765 KV S/C and Sholapur - Pune 765 KV S/c lines.

(iii) 1X240 MVAR switchable line reactors at each end of Raichur - Sholapur

Line Reactors

Reactive Compensation



श्री. ए. ए. शर्मा

General Manager (CP)
(Seema Gupta)

9/2/12
[Signature]

Director (Personnel) / Director (Projects) / Director (Finance)

For kind information of:

Company Secretary

DY. CVO

GM: Cost Engg / ESMD

ED: Engg-SFF, IT, ERP & CE / Commercial / Finance / CS & MM / HR / Engg-HVDC & O&I / CMG / OS / Engg-TL & SS / SR-II / SR-I / SR-III / SR-IV / SR-V

CEO, POSOCO

Distribution:



23

16. 17. 18

Sl. No.	DESCRIPTION	AMOUNT in Crores
(Cost updated to 4TH QUARTER 2011 price level)		
TRANSMISSION SYSTEM ASSOCIATED WITH KRISHNAPATNAM UMPP - PART B		
(BASE COST)		
ABSTRACT COST ESTIMATE		
ANNEXURE -		
A	Prognostic Survey & Soil Investigation	2.08
B	Land acquisition for S/Strin and R/Rt Compensation	22.66
C	Cost of compensation for Trans. Lines	10.15
	a) Compensation towards Crop & RTTC	15.88
	b) Compensation towards forest	30.80
D	Civil Works	8.50
	a) Infrastructure for substations	14.02
	b) Entry for Trans. Lines and S/Strin	142.50
E	Equipment (Supply & Erection) Cost	193.05
	a) Trans Lines	
	b) Tap-Station	
F	Sub Total A to E	1639.60
G	Special Tools & Plants	16.80
H	Incidental expenditure during construction (i.e. DC) @ 5% of (F - C(ii))	81.19
I	Contingencies @ 3% of (F - C(ii))	48.71
J	Contingencies & Contingencies @ 8% on Contingency Allowance (considering 25,000 per Ha for 131 Ha)	0.047
K	Customs duty @ 20.941% plus @ 2% handling charges	52.69
L	Sub Total (A to K)	1839.03
	Interest During Construction (IDC)	88.13
GRAND TOTAL		1927.16
1. Debt component is envisaged to be covered under Domestic sources/VR Loan. Equity component is through IR		
2. Interest rate has been considered @ 10.5% for Domestic loan & @ 7% for THE WORLD BANK Loan		
3. Debt:equity ratio has been considered as 70:30		

End. 2

For v/a pl. 3/8
ED (2007) 10
ASSTD

Central Electricity Authority
System Planning & Project Appraisal Division
Sewa Bhawan, R.K. Puram, New Delhi - 110066.

No. 51/4/SP&PA-2007/ 625-635

Date: July 17, 2007

To

- 1. The Member Secretary,
Southern Regional Power Committee,
29, Race Course Cross Road,
Bangalore 560 009.
FAX : 080-22259343
- 2. The Director (Projects),
Power Grid Corp. of India Ltd.
"Saudamini", Plot No.2, Sector-29,
Gurgaon 122 001, Haryana.
FAX : 95124-2571932
- 3. The Director (Transmission),
Transmission Corp. of Andhra Pradesh Ltd.,
Vidyut Soudha, Hyderabad - 500 082.
FAX : 040-66665137
- 4. The Director (Transmission),
Karnataka State Power Transmission Corp.Ltd.,
Cauvery Bhawan, Bangalore 560 009.
FAX : 080 -2228367
- 5. The Member (Transmission),
Kerala State Electricity Board,
Vidyuthi Bhawanam, Pattom, P.B. No. 1028,
Thiruvananthapuram - 695 004.
FAX : 0471-2444738
- 6. Member (Distribution),
Tamil Nadu electricity Board (TNEB),
6th Floor, Eastern Wing, 800 Anna Salai,
Chennai - 600002.
FAX : 044-28516362
- 7. The Director (Power),
Corporate Office, Block - I,
Neyveli Lignite Corp. Ltd.,
Neyveli, Tamil Nadu - 607 801.
FAX : 04142-252650
- 8. The Superintending Engineer -I,
First Floor, Electricity Department,
Gingy Salai,
Puducherry - 605 001.
FAX : 0413-2334277/2331556
- 9. Director (Projects),
National Thermal Power Corp. Ltd. (NTPC),
NTPC Bhawan, Core-7, Scope Complex,
Lodhi Road,
New Delhi-110003.
FAX-011-24360912
- 10. Shri N. S. M. Rao
General Manager (Transmission),
NPCIL, 12th Floor, Vikram Sarabhai Bhawan,
Anushakti Nagar,
Mumbai - 400 094.
FAX : 022- 25993570/25991258
- 11. The Director (Operation),
Power Trading Corpn. of India Limited,
2nd Floor, NBCC Tower,
15 Bhikaji Cama Place,
New Delhi 110066. FAX-011-41659504

Handwritten notes:
D. K. Jindal
ASSTD (SP&PA)
17/7/2007
J. J. Jindal

Sub: 24th meeting of the Standing Committee on Power System Planning of Southern Region
- Minutes of the meeting

Sir,

24th meeting of the Standing Committee on Power System Planning of Southern Region was held on June 18, 2007 at Bangalore. Minutes of the meeting are enclosed.

Your comments and observations, if any, may be sent to us at the earliest.

Encl: Minutes

Handwritten initials: J. J. Jindal

Yours faithfully,

Signature: Pardeep Jindal
17/07/2007

Director (I/C) (SP&PA-III)
(Telephone No. 011 26732325)



Scheme - B : Synchronous Inter-connection of SR and WR

Transmission System:

1) Raichur - Sholapur 765kV S/C line-1

Transmission Charges:

Transmission charges for this scheme would be shared by SR and WR constituents on 50:50 basis. Transmission scheme would be regional pool scheme of SR and WR

Target Date:

Target would be to match with the Krishnapatnam UMPP generation project.

Scheme - C : Evacuation System for Krishnapatnam UMPP

Transmission System:

1) Krishnapatnam UMPP - Nellore 400 kV, Quad D/C line

2) Krishnapatnam UMPP - Kurnool 400kV, Quad D/C line

3) Krishnapatnam UMPP - Gooty, 400 kV, Quad D/C line

4) Raichur - Sholapur 765kV S/C line-2

5) Sholapur - Pune 765kV S/C line

6) Kurnool - Raichur 765kV S/C line

7) 765kV substations at Kurnool, Raichur, Sholapur and Pune, with 765/400kV 3000 MVA transformers at each of the substations.

8) Inter-linking of Raichur and Kurnool 765kV/400kV (PGCIL) S/S with Southern Region grid through suitable inter-connection.

Transmission Charges:

Transmission charges for this scheme would be shared by all the beneficiaries of Krishnapatnam UMPP in ratio of their shares in Krishnapatnam UMPP.

Target Date:

Target would be to match with the Krishnapatnam UMPP generation project.

Scheme - D : System strengthening in Western Region corresponding to power from Krishnapatnam UMPP

Transmission System:

1) Pune (WR) - Navi Mumbai (WR) 400kV D/C line

Transmission Charges:

Transmission charges for this scheme would be shared by WR.

Target Date:

Target would be to match with the Krishnapatnam UMPP generation project.

10.5 POWERGRID representative informed that for synchronous inter-connection of SR with WR through Raichur-Sholapur 765kV lines, it was desirable that the Raichur - Sholapur 765kV S/C line-1 under Scheme-B and Raichur-Sholapur 765kV S/C line-2 under Scheme-C should be commissioned simultaneously. For this, the Raichur-Sholapur 765kV S/C line-2, which was proposed as part of Krishnapatnam transmission system should also be implemented matching with the line-1. In the event there was

25. 25.25



Central Electricity Authority
System Planning & Project Appraisal Division
Sewa Bhawan, R.K. Puram, New Delhi – 110066

No. 51/4/SP&PA-2011/ 1647-58

Date: 15 November 2011

To

1. The Member Secretary, Southern Regional Power Committee, 29, Race Course Cross Road, Bangalore 560 009. FAX : 080-22259343	2. The Director (Projects), Power Grid Corp. of India Ltd. "Saudamini", Plot No.2, Sector-29, Gurgaon 122 001, Haryana. FAX : 95124-2571932
3. The Director (Grid Operation), Transmission Corp. of Andhra Pradesh Ltd., Vidyut Soudha, Hyderabad – 500 082. FAX : 040-66665137	4. The Director (Transmission), Karnataka State Power Transmission Corp.Ltd., Cauvery Bhawan, Bangalore 560 009. FAX : 080 -22228367
5. The Member (Transmission), Kerala State Electricity Board, Vidyuthi Bhawanam, Pattom, P.B. No. 1028, Thiruvananthapuram - 695 004. FAX : 0471-2444738	6. Member (Distribution), Tamil Nadu electricity Board (TNEB), 6 th Floor, Eastern Wing, 800 Anna Salai, Chennai - 600002. FAX : 044-28516362
7. The Director (Power), Corporate Office, Block – I, Neyveli Lignite Corp. Ltd., Neyveli, Tamil Nadu – 607 801. FAX : 04142-252650	8. The Superintending Engineer –I, First Floor, Electricity Department, Gingy Salai, Puducherry – 605 001. FAX : 0413-2334277/2331556
9. Director (Projects), National Thermal Power Corp. Ltd. (NTPC), NTPC Bhawan, Core-7, Scope Complex, Lodhi Road, New Delhi-110003. FAX-011-24360912	10. Director (Operations), NPCIL, 12 th Floor, Vikram Sarabhai Bhawan, Anushakti Nagar, Mumbai – 400 094. FAX : 022- 25991258

Sub: 33rd meeting of the Standing Committee on Power System Planning of Southern Region
- Minutes of the meeting.

Sir,

The 33rd meeting of the Standing Committee on Power System Planning of Southern Region was held on 20th October, 2011 (Thursday) at Conference Hall of Northern Region Power Committee, Katwaria Sarai, New Delhi.

Minutes of the meeting is enclosed. It is also available at CEA's website (www.cea.nic.in).

Yours faithfully,

(Pardeep Jindal)

Director (SP&PA)

(Telephone: 011 26198092, Fax No. 011 26102045)

Copy to:

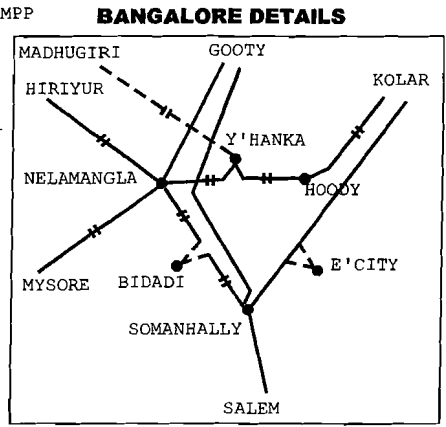
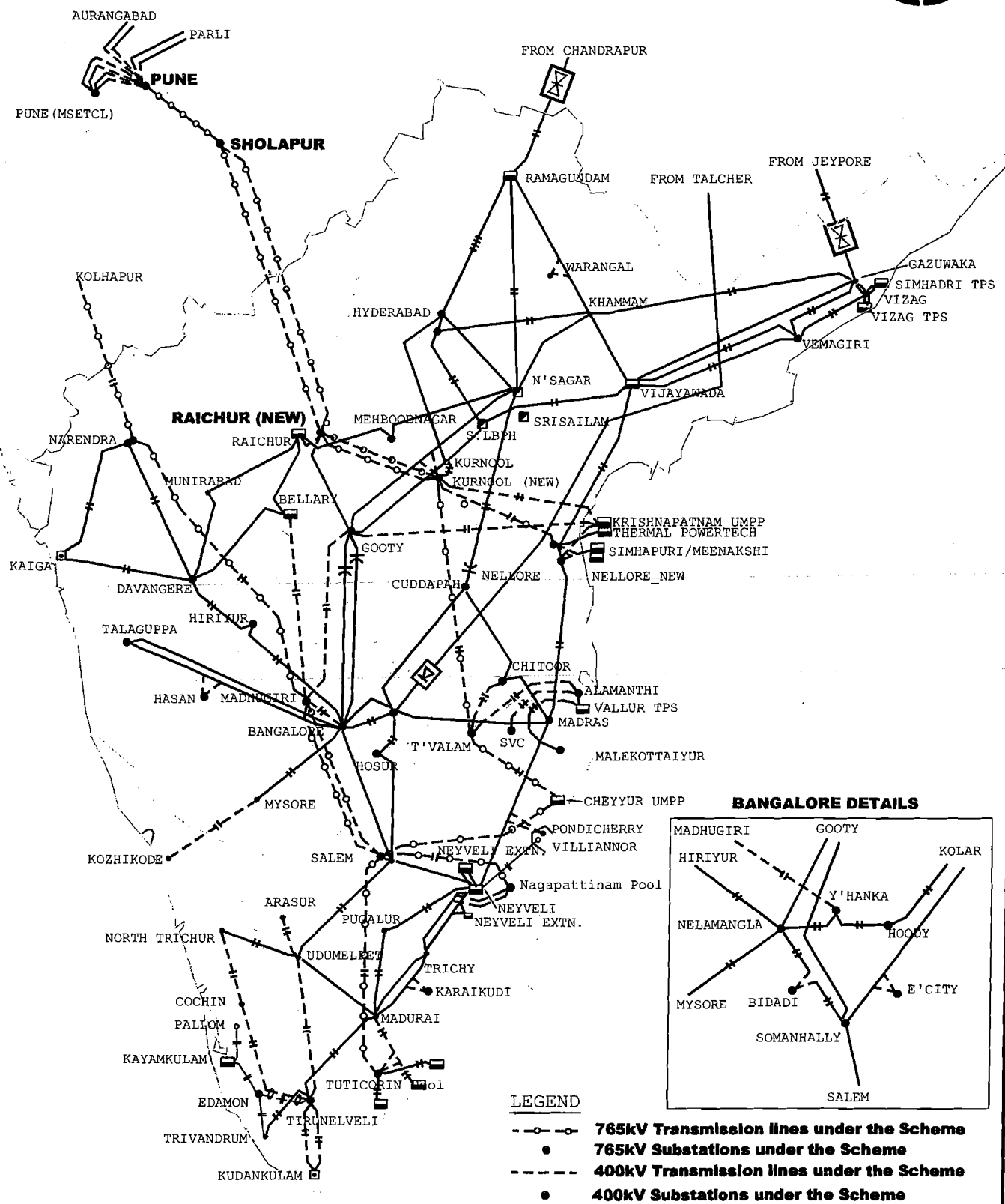
(1) Sh. SK Soonee, CEO, POSOCO,
B-9, Qutub Institutional Area, -
Katwaria Sarai,
New Delhi-110016

(2) Sh. Shashi Shekhar, Joint Secretary,
Min. of New & Renewable Energy,
CGO Complex,
New Delhi -110003





TRANSMISSION SYSTEM ASSOCIATED WITH KRISHNAPATNAM UMP - PART-B





Certificate

Certificate of Capital Cost for 765 kV S/C Raichur-Sholapur line alongwith bay extensions at Raichur Substation with ICTs and reactors and Bays for Raichur - Solapur 765 Kv SC TL at 765 / 400kV Solapur SS alongwith 240 MVAR switchable Line Reactor associated with Transmission System for Krishnapatnam UMPP Part-B Project

This is to certify that the Capital cost of the above mentioned project which is anticipated to be under commercial operation from 01-02-2014 is as below.


RS. IN LACS

SL. NO.	PARTICULARS	EXPENDITURE UPTO 31-03-2013	ESTIMATED EXPENDITURE FROM 01-04-2013 UPTO DOCO i.e., 01-02-2014	ESTIMATED EXPENDITURE FROM DOCO to 31-03-2014.	BALANCE ESTIMATED EXPENDITURE IN 2014-15	TOTAL
1	LAND	881.00	180.00	-	570.44	1,631.44
2	BUILDING & CIVIL WORKS	1,838.16	159.32	127.16	-	2,124.64
3	SUBSTATION	5,328.45	21,220.39	2,539.85	1,093.73	30,182.42
4	TRANSMISSION LINE	9,670.59	11,742.52	3,432.41	1,471.03	26,316.56
5	PLCC	4.12	114.17	12.17	-	130.47
	TOTAL	17,722.32	33,416.41	6,111.60	3,135.20	60,385.53

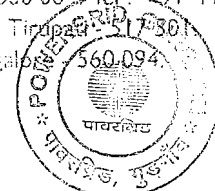
This is to further certify that the above summary has been prepared on the basis of the information drawn from the audited statements of accounts of Powergrid Corporation of India Limited, SRTS-I, Secunderabad for the period ended 31-03-2013. The estimated expenditure is on the basis of details furnished by management.

HYDERABAD
DATE : 30 September 2013

For Sagar & Associates
Chartered Accountants
Firm Reg No: 003510S


(B. Srinivasa Rao)
(PARTNER)

Member Ship No: 202352





CERTIFICATE

Certificate of Capital Cost for 765 kV S/C Raichur-Sholapur line alongwith bay extensions at Raichur Substation with ICTs and reactors and Bays for Raichur - Solapur 765 Kv SC TL at 765 / 400kV Solapur SS alongwith 240 MVAR switchable Line Reactor associated with Transmission System for Krishnapatnam UMPP Part-B Project

This is to certify that the Capital cost of the above-mentioned project which is anticipated to be under commercial operation from 01-02-2014 is as below.

RS. IN LACS

SL. NO.	PARTICULARS	CAPITAL COST	IDC	IEDC	TOTAL
1	EXPENDITURE UPTO 31-03-2013	15,622.78	857.06	1,242.48	17,722.32
2	ESTIMATED EXPENDITURE FROM 01-04-2013 UPTO DOCO i.e. , 01-02-2014	31,021.23	544.84	1,850.34	33,416.41
3	ESTIMATED EXPENDITURE FROM DOCO to 31-03-2014.	6,111.60	-	-	6,111.60
4	BALANCE ESTIMATED EXPENDITURE IN 2014-15	3,135.20	-	-	3,135.20
	TOTAL	55,890.81	1,401.90	3,092.82	60,385.53
	VALUE OF INITIAL SPARES INCLUDED IN THE ABOVE CAPITAL COST FOR TL				174.60
	VALUE OF INITIAL SPARES INCLUDED IN THE ABOVE CAPITAL COST FOR SS				745.39

This is to further certify that the above summary has been prepared on the basis of the information drawn from the audited statements of accounts of Powergrid Corporation of India Limited, SRTS-I, Secunderabad for the period ended 31-03-2013. The estimated expenditure is on the basis of details furnished by management.

Place:HYDERABAD
Date:30-10-2013

Handwritten signature and initials
29-A

For Sagar & Associates
Chartered Accountants
Firm Reg. No:0035105
HYDERABAD
Name: Aruna
Membership No:218454



Certificate

Certificate of Capital Cost for LILO of 400 kV D/C Quad Raichur-Gooty TL along with the associated bay equipments at

765/400 kV Raichur Substation associated with Transmission System for Krishnapatnam UMPP Part-B Project

This is to certify that the Capital cost of the above mentioned project which is anticipated to be under commercial operation from 01-02-2014 is as below.

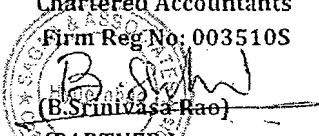
RS. IN LACS

SL. NO.	PARTICULARS	EXPENDITURE UPTO 31-03-2013	ESTIMATED EXPENDITURE FROM 01-04-2013 UPTO DOCO i.e., 01-02-2014	ESTIMATED EXPENDITURE FROM DOCO to 31-03-2014.	BALANCE ESTIMATED EXPENDITURE IN 2014-15	TOTAL
1	LAND	-	-	-	-	-
2	BUILDING & CIVIL WORKS	-	-	-	-	-
3	SUBSTATION	8.22	1,220.73	34.69	100.54	1,364.18
4	TRANSMISSION LINE	18.78	1,217.38	95.10	40.76	1,372.03
5	PLCC	-	76.24	8.40	-	84.64
	TOTAL	27.00	2,514.36	138.19	141.30	2,820.85

This is to further certify that the above summary has been prepared on the basis of the information drawn from the audited statements of accounts of Powergrid Corporation of India Limited, SRTS-I, Secunderabad for the period ended 31-03-2013. The estimated expenditure is on the basis of details furnished by management.

HYDERABAD
DATE : 30 September 2013

For Sagar & Associates
Chartered Accountants
Firm Reg No: 003510S


(B. Srinivasa Rao)
(PARTNER)
Member Ship No: 202352



CERTIFICATE

Certificate of Capital Cost for LILO of 400 kV D/C Quad Raichur-Gooty TL along with the associated bay equipments at 765/400 kV Raichur Substation associated with Transmission System for Krishnapatnam UMPP Part-B Project

This is to certify that the Capital cost of the above mentioned project which is anticipated to be under commercial operation from 01-02-2014 is as below.

RS. IN LACS

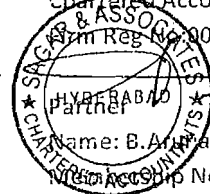
SL. NO.	PARTICULARS	CAPITAL COST	IDC	IEDC	TOTAL
1	EXPENDITURE UPTO 31-03-2013	23.00	2.00	2.00	27.00
2	ESTIMATED EXPENDITURE FROM 01-04-2013 UPTO DOCO i.e., 01-02-2014	2,492.37	19.99	2.00	2,514.36
3	ESTIMATED EXPENDITURE FROM DOCO to 31-03-2014.	138.19	-	-	138.19
4	BALANCE ESTIMATED EXPENDITURE IN 2014-15	141.30	-	-	141.30
	TOTAL	2,794.85	21.99	4.00	2,820.85
	VALUE OF INITIAL SPARES INCLUDED IN THE ABOVE CAPITAL COST FOR TL				0.00
	VALUE OF INITIAL SPARES INCLUDED IN THE ABOVE CAPITAL COST FOR SS				0.00

This is to further certify that the above summary has been prepared on the basis of the information drawn from the audited statements of accounts of Powergrid Corporation of India Limited, SRTS-i, Secunderabad for the period ended 31-03-2013. The estimated expenditure is on the basis of details furnished by management.

Place:HYDERABAD

Date:30-10-2013

For Sagar & Associates
Chartered Accountants
Firm Reg No:0035105



30-A

K. G. Goyal & Associates

COST ACCOUNTANTS

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goyaldelhi@yahoo.co.in

Jaipur Office :
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Maharani Farms
Durgapura
JAIPUR - 302018
Mobile : 9829373503
rajeshgoyaljaipur@yahoo.co.in

CERTIFICATE OF CAPITAL COST

Project Name: Transmission System associated with Krishnapatnam UMPP - PART B

Name of Element: 765 / 400kV Solapur SS alongwith 240 MAVR Bus Reactor and associated bays under Transmission System associated with Krishnapatnam UMPP - PART B

Anticipated DOCO 01-02-2014

(RS./ LAKHS)

PARTICULARS	CAPITAL COST	IDC	IEDC	TOTAL
Expenditure Upto 31.03.2013	600.66	1.41	29.98	632.05
Expenditure from 01.04.2013 to 30.06.2013	346.13	2.69	10.50	359.32
Estimated Expenditure from 01.07.2013 to 31.01.2014	3,157.82	6.81	35.55	3,200.18
Estimated Expenditure from 01.02.2014 to 31.03.2014	195.82	-	-	195.82
Estimated Expenditure from 01.04.2014 to 31.03.2015	1,001.78	-	-	1,001.78
Total	5,302.21	10.91	76.03	5,389.15

Initial Spares Included in Above - Transmission Line
- Sub-Station

218.54

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., Western Region-1, Nagpur up to 31.03.2013. The expenditure for the period from 01.04.2013 to 30.06.2013 has been verified from the books of the project and the the estimated expenditure is based on the details furnished by the management.

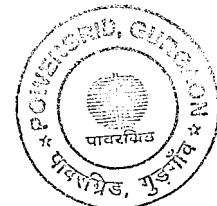
Place : Nagpur
Date : 19-09-2013



For K.G. Goyal & Associates
Cost Accountants

Rajesh Goyal
Rajesh Goyal
(Partner)
M-10884

Handwritten signature and initials



K. G. Goyal & Associates

COST ACCOUNTANTS

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 Maharani Farms
 Durgapura
 JAIPUR - 302018
 Mobile : 9829373503
rajeshgoyaljaipur@yahoo.co.in

CERTIFICATE OF CAPITAL COST

Project Name: Transmission System associated with Krishnapatnam UMPP - PART B
Name of Element: 765 / 400kV Solapur SS alongwith 240 MAVR Bus Reactor and associated bays under Transmission System associated with Krishnapatnam UMPP - PART B
Anticipated DOCO 01-02-2014

(RS./ LAKHS)

PARTICULARS	Expenditure upto 31.03.2013	Expenditure From 01.04.2013 to 30.06.2013	Estimated Expenditure From 01.07.2013 to 31.01.2014	Estimated Expenditure From 01.02.2014 to 31.03.2014	Estimated Expenditure From 01.04.2014 to 31.03.2015	Total Expenditure
LAND	-	-	-	-	-	-
BUILDING, CIVIL WORKS & COLONY	166.95	78.60	579.53	40.55	106.95	972.58
TRANSMISSION LINE	-	-	-	-	-	-
SUB-STATION	465.10	280.72	2,620.65	155.27	894.83	4,416.57
PLCC	-	-	-	-	-	-
	632.05	359.32	3,200.18	195.82	1,001.78	5,389.15

Initial Spares included in the above :

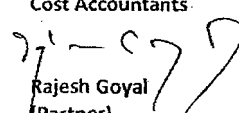
Transmission Line
 Sub Station

218.54

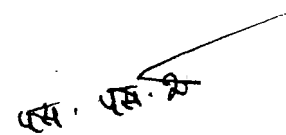
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For K.G. Goyal & Associates
 Cost Accountants




Rajesh Goyal
 (Partner)
 M-10884

Place : Nagpur
 Date : 19-09-2013


 सि. सि. २१



K. G. Goyal & Associates

COST ACCOUNTANTS

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JAIPUR - 302018
Mobile : 9829373503
rajeshgoyaljaipur@yahoo.co.in

CERTIFICATE OF CAPITAL COST

Project Name: Transmission System associated with Krishnapatnam UMPP - PART B

Name of Element: 765 / 400kV Solapur SS alongwith 1 x 1500 MVA ICT-1 and its associated bays under Transmission System associated with Krishnapatnam UMPP - PART B

Anticipated DOCO 01-02-2014

	(RS./ LAKHS)			
PARTICULARS	CAPITAL COST	IDC	IEDC	TOTAL
Expenditure Upto 31.03.2013	1,222.04	2.96	62.96	1,287.96
Expenditure from 01.04.2013 to 30.06.2013	844.25	11.11	43.30	898.66
Estimated Expenditure from 01.07.2013 to 31.01.2014	2,869.84	14.33	65.59	2,949.76
Estimated Expenditure from 01.02.2014 to 31.03.2014	520.01	-	-	520.01
Estimated Expenditure from 01.04.2014 to 31.03.2015	742.57	-	-	742.57
Total	6,198.71	28.40	171.85	6,398.96

Initial Spares Included in Above - Transmission Line
- Sub-Station -

200.15

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., Western Region-1, Nagpur up to 31.03.2013. The expenditure for the period from 01.04.2013 to 30.06.2013 has been verified from the books of the project and the the estimated expenditure is based on the details furnished by the management.

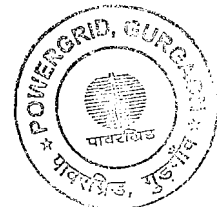
Place : Nagpur
Date : 29-08-2013



For K.G. Goyal & Associates
Cost Accountants

(Signature)
Rajesh Goyal
(Partner)
M-10884

(Signature)



K. G. Goyal & Associates

COST ACCOUNTANTS

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Durgapura
JAIPUR - 302018
Mobile : 9829373503
rajeshgoyaljaipur@yahoo.co.in

CERTIFICATE OF CAPITAL COST

Project Name: Transmission System associated with Krishnapatnam UMPP - PART B
Name of Element: 765 / 400kV Solapur SS alongwith 1 x 1500 MVA ICT-1 and its associated bays under Transmission System associated with Krishnapatnam UMPP - PART B
Anticipated DOCO 01-02-2014

(RS./ LAKHS)

PARTICULARS	Expenditure upto 31.03.2013	Expenditure From 01.04.2013 to 30.06.2013	Estimated Expenditure From 01.07.2013 to 31.01.2014	Estimated Expenditure From 01.02.2014 to 31.03.2014	Estimated Expenditure From 01.04.2014 to 31.03.2015	Total Expenditure
LAND	222.19	-	-	-	-	222.19
BUILDING, CIVIL WORKS & COLONY	250.61	150.59	279.35	207.83	268.04	1,156.42
TRANSMISSION LINE	-	-	-	-	-	-
SUB-STATION	815.16	748.07	2,670.41	312.18	474.53	5,020.35
PLCC	-	-	-	-	-	-
	1,287.96	898.66	2,949.76	520.01	742.57	6,398.96

Initial Spares included in the above :

Transmission Line
Sub Station

200.15

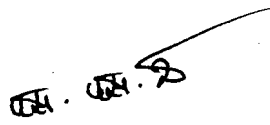
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For K.G. Goyal & Associates
Cost Accountants


Rajesh Goyal
(Partner)
M-10884



Place : Nagpur
Date : 29-08-2013





K. G. Goyal & Associates

COST ACCOUNTANTS

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 Mobile : 9829373503
rajeshgoyaljaipur@yahoo.co.in

CERTIFICATE OF CAPITAL COST

Project Name: Transmission System associated with Krishnapatnam UMPP - PART B

Name of Element: 765 / 400kV Solapur SS alongwith 1 x 1500 MVA ICT-2 and its associated bays under Transmission System associated with Krishnapatnam UMPP - PART B

Anticipated DOCO 01-02-2014

(RS./ LAKHS)

PARTICULARS	CAPITAL COST	IDC	IEDC	TOTAL
Expenditure Upto 31.03.2013	968.24	2.27	48.25	1,018.76
Expenditure from 01.04.2013 to 30.06.2013	925.27	7.14	27.83	960.24
Estimated Expenditure from 01.07.2013 to 31.01.2014	2,865.10	17.30	78.46	2,960.86
Estimated Expenditure from 01.02.2014 to 31.03.2014	524.13	-	-	524.13
Estimated Expenditure from 01.04.2014 to 31.03.2015	995.76	-	-	995.76
Total	6,278.50	26.71	154.54	6,459.75

Initial Spares Included in Above - Transmission Line
 - Sub-Station

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., Western Region-1, Nagpur up to 31.03.2013. The expenditure for the period from 01.04.2013 to 30.06.2013 has been verified from the books of the project and the the estimated expenditure is based on the details furnished by the management.

Place : Nagpur
 Date : 29-08-2013



For K.G. Goyal & Associates
 Cost Accountants

Rajesh Goyal
 Rajesh Goyal
 (Partner)
 M-10884



K. G. Goyal & Associates

COST ACCOUNTANTS

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Durgapura
JAIPUR - 302018
Mobile : 9829373503
rajeshgoyaljaipur@yahoo.co.in

CERTIFICATE OF CAPITAL COST

Project Name: Transmission System associated with Krishnapatnam UMPP - PART B
Name of Element: 765 / 400kV Solapur SS alongwith 1 x 1500 MVA ICT-2 and its associated bays under Transmission System associated with Krishnapatnam UMPP - PART B
Anticipated DOCO: 01-02-2014

(RS./ LAKHS)

PARTICULARS	Expenditure upto 31.03.2013	Expenditure From 01.04.2013 to 30.06.2013	Estimated Expenditure From 01.07.2013 to 31.01.2014	Estimated Expenditure From 01.02.2014 to 31.03.2014	Estimated Expenditure From 01.04.2014 to 31.03.2015	Total Expenditure
LAND	-	-	-	-	-	-
BUILDING, CIVIL WORKS & COLONY	102.66	48.33	109.35	136.80	385.77	782.91
TRANSMISSION LINE	-	-	-	-	-	-
SUB-STATION	916.10	911.91	2,851.51	387.33	609.99	5,676.84
PLCC	-	-	-	-	-	-
	1,018.76	960.24	2,960.86	524.13	995.76	6,459.75

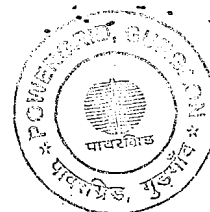
Initial Spares included in the above : Transmission Line
Sub Station

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., Western Region-1, Nagpur up to 31.03.2013. The expenditure for the period from 01.04.2013 to 30.06.2013 has been verified from the books of the project and the the estimated expenditure is based on the details furnished by the management.

Place : Nagpur
Date : 29-08-2013

For K.G. Goyal & Associates
Cost Accountants

Rajesh Goyal
Rajesh Goyal
(Partner)
M-10884



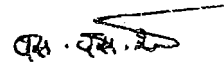
Summary Sheet

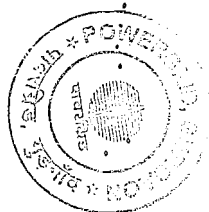
Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: 765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014

(Rs in Laacs)

Sl.No.	Particulars	Form No.	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014(Pro Rata)
1	2	3	4	5	6	7	8	9
1	Depreciation	FORM-12	0.00					461.13
2	Interest on Loan	FORM-13A	0.00					110.60
3	Return on Equity	FORM-01A	0.00					488.94
4	Interest On Working Capital	FORM-13B	0.00					32.06
5	O & M Expenses		0.00					151.97
6	Total		0.00					1,244.70

37


Petitioner



Encl-5

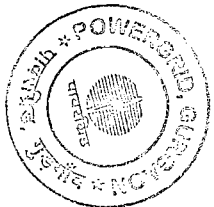
Calculation Of Return On Equity

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Equity as DOCO						15,341.61
Notional Equity for Add Cap						1,833.48
Total Equity						17,175.09
Return on Equity @ 17.481% 18.044%						488.94

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Details of Transmission Lines And Substations

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: 765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014

Transmission Lines											
Sl.No.	Name of Line	Type of Line AC/HVDC	S/C or D/C	No. of Sub- Conductors	Voltage level kV	Line Length (Km.)	Date of Commercial operation	Covered in the present petition			
								Yes/No	If No, petition No.		
1	Raichur-Sholapur	AC	S/C	4	765	207.754	01-FEB-2014	Yes			
Substations											
Sl.No.	Name of Sub-Station	Type of Substation Conventional /GIS/ HVDC Terminal/ HVDC Back to Back	Voltage level kV	No. of Transformers / Reactors/ SVC etc (with Capacity)	No. of Bays				Date of Commercial operation	Covered in the present petition	
					765 KV	400 KV	220 KV	132 KV & below		Yes/No	If No, petition No.
1	Solapur(PG) New	Conventional	765/400	1 X 240 MVAR switchable line reactor							
	Raichur Bay -1		765		1				01-FEB-2014	Yes	
	switchable line Reactor Bay		765		1				01-FEB-2014	Yes	
3	Raichur (New)	Conventional	765/400	2 X 1500 MVA ICTs							
	Solapur Bay - 1		765		1				01-FEB-2014	Yes	
	ICT 1 - 1 bay		765		1				01-FEB-2014	Yes	
	ICT 2 - 1 bay		765		1				01-FEB-2014	Yes	
	ICT 1 - 1 bay		400			1			01-FEB-2014	Yes	
	ICT 2 - 1 bay		400			1			01-FEB-2014	Yes	
	Raichur (New).	Conventional	765	2 X 240 MVAR switchable line Reactors with one 80MVAR spare unit							
	switchable line Reactor Bay -1		765		1				01-FEB-2014	Yes	
	Bus Reactor Bay		765		1				01-FEB-2014	Yes	
Total					7	2					

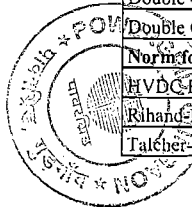
(Petitioner)

Normative Parameters considered For tariff calculations

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014**

Particulars	Unit	Year Ending March					
		Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
Base Rate of Return on Equity	%						17.481
Tax Rate	%						11.33
Target Availability	%						98.00
Normative O&M per Km.	Rs. lacs	Given Below					
Normative O&M per bay	Rs. lacs	Given Below					
Spares for WC as % of O&M	%						15.00
Receivables in Months for WC	months						2.00
Prime lending Rate of SBI as on 01-APR-2009	%						13.20
Norms for O&M expenditure for Transmission System							
		2009-10	2010-11	2011-12	2012-13	2013-14	
Norms for sub-station (Rs Lakh per bay)							
765 KV		73.36	77.56	81.99	86.68	91.64	
400 KV		52.40	55.40	58.57	61.92	65.46	
220 KV		36.68	38.78	41.00	43.34	45.82	
132 KV and below		26.20	27.70	29.28	30.96	32.73	
Norms for AC and HVDC Lines (Rs Lakhs per km)							
Single Circuit (Bundled conductor with four or more sub-conductors)		0.537	0.568	0.600	0.635	0.671	
Single Circuit (Twin & Triple Conductor)		0.358	0.378	0.400	0.423	0.447	
Single Circuit (Single Conductor)		0.179	0.189	0.200	0.212	0.224	
Double Circuit (Bundled conductor with four or more sub-conductors)		0.940	0.994	1.051	1.111	1.174	
Double Circuit (Twin & Triple Conductor)		0.627	0.663	0.701	0.741	0.783	
Double Circuit (Single Conductor)		0.269	0.284	0.301	0.318	0.336	
Norms for HVDC Stations							
HVDC Back-to-back stations (Rs lakh per 500 MW)		443.00	468.00	495.00	523.00	553.00	
Rihand-Dadri HVDC bipole scheme (Rs Lakh)		1450.00	1533.00	1621.00	1713.00	1811.00	
Talcher-Kolar HVDC bipole scheme (Rs Lakh)		1699.00	1796.00	1899.00	2008.00	2122.00	

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PA. 2
(Petitioner)

Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Transmission Licensee : POWERGRID CORPORATION OF INDIA Ltd
Name of the Project : TRANSMISSION SYSTEM ASSOCIATED WITH KUMPP-B
Name of Region: SR-1

Elements:

765 kV S/C Raichur-Sholapur line alongwith bay extensions at Raichur Substation with ICTs and reactors and Bays for Raichur - Solapur 765 Kv SC TL at 765 / 400kV Solapur SS alongwith 240 MVAR switchable Line Reactor

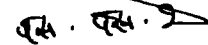
Capital Cost Estimates

Amount in Crores

Board of Director/ Agency approving the Capital cost estimates:	Board of Directors 267th meeting	
Date of approval of the Capital cost estimates:	9th Feb 2012	
	Present Day Cost	Completed Cost
Price level of approved estimates	As of End of 4th Qtr. Of the year 2011	As on Scheduled COD of the System
Foreign Exchange rate considered for the Capital cost estimates		1USD = Rs.58 & EURO = Rs. 76.80
Capital Cost excluding IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Cr.)		
Capital cost excluding IDC & FC (Rs. Cr)	539.69	642.24
IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Cr.)		
Total IDC & FC (Rs.Cr.)	25.86	29.03
Rate of taxes & duties considered		
Capital cost Including IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Cr.)		
Total Capital cost Including IDC & FC (Rs. Cr)	565.56	671.27
Schedule of Commissioning	09.10.2014	01.02.2014 (Anticipated)
(Scheduled DOCO elementwise)		

Note:

1. Copy of approval letter should be enclosed.
2. Details of Capital cost are to be furnished as per FORM-5B or 5C as applicable.
3. Details of IDC & Financing Charges are to be furnished as per FORM-16.



PETITIONER



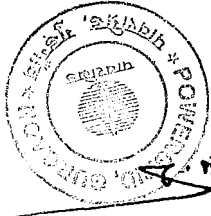
Name of the Transmission Licensee :
POWERGRID CORPORATION OF INDIA LTD
TRANSMISSION SYSTEM ASSOCIATED WITH KUMMP-8

Name of Region:

SR-1

765 KV S/C Raichur-sholapur line along with bay extensions at Raichur Substation with ICTs and reactors and bays for Raichur - Solapur 765 KV SC TL at 765 / 400KV Solapur 55 along with 240 MVAR switchable line Reactor

Sl.No.	Break Down	As per original Estimates	Cost in Rs. Crores			As on COD Provision (Anticipated)	Liabilities / (Balance)	Variation	Reasons for Variation
			3	4	5				
A	TRANSMISSION LINE								
1	Preliminary works								
1.1	Design & Engineering								
1.2	Preliminary Investigation, Right of way, forest clearance, PTCC, general civil works etc.	4.91	3.43	0.38	1.10	Actuals	1.10		
	Total Preliminary works	4.91	3.43	0.38	1.10				
2	Transmission lines material								
2.1	Towers Steel	80.54	52.67	13.17	14.71	Based on awarded rates received against competitive bidding	14.71		
2.2	Conductor	84.11	69.65	17.41	-2.95	variation in conversion rate from Rs. 54 to Rs. 58 per USD.	-2.95		
2.3	Earth Wire	2.19	2.23	0.56	-0.60	Awarded cost	-0.60		
2.4	Insulators	9.61	7.49	1.87	0.24	Awarded cost	0.24		
2.5	Hardware fittings	6.33	7.61	1.90	-3.18	As per the Awarded cost	-3.18		
2.6	Conductor & earthwire accessories	3.45	3.58	0.89	-1.02	As per the Awarded cost	-1.02		
2.7	Erection, stringing & civil works	41.28	22.50	5.62	13.16	Based on awarded rates received against competitive bidding	13.16		
2.8	Spare	2.64	1.40	0.35	0.89		0.89		
2.9	CRS & Corona Camera for TL	14.25	11.40	2.85	0.00		0.00		
	Total Transmission lines material	244.40	178.53	44.63	21.24		21.24		
3.00	Takes and Duties								
3.10	Custom Duty	2.73	-	2.73	0.00		0.00		
3.20	F&I, Other Taxes & Duties	11.31	11.65	1.29	-1.64		-1.64		
	Total Taxes & Duties	14.04	11.65	4.02	-1.64		-1.64		
	Total Transmission lines	263.34	193.61	49.03	20.70		20.70		
B.	SUBSTATIONS								
4.00	Preliminary works & land								
4.10	Design & Engineering (pre survey & soil investigation)	0.20	0.11	0.00	0.09		0.09		
4.20	Land	3.15	8.81	5.50	-11.16	As per actual, due to increase in the cost of land compensation	-11.16		
4.30	Site preparation	-	-	-	-		-		
4.40	R&R compensation	2.00	1.80	0.20	0.00		0.00		
	Total Preliminary works & land	5.35	10.72	5.70	-11.07		-11.07		
5.00	Civil Works				0.00		0.00		
5.10	Control Room, office building, store, FPPH, DG set building etc including HVAC	2.85	5.26	0.58	-2.99	Includes common system e.g. DG set, fire fighting etc of RHQ building, store at Raichur 5/5 etc	-2.99		
5.20	Township and colony	7.01	5.83	0	1.18		1.18		
5.30	Roads and drainage	2.70	0.18	(0.00)	2.52		2.52		
5.40	Foundation for structures								
5.50	Substation infrastructure Misc. civil works (Site awarded packages (levelling, soil investigation, boundary wall, water supply, power supply, porta cabin, etc	9.50	6.19	0.69	2.62		2.62		
	Total Civil Works	22.06	17.46	1.27	3.33		3.33		



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Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD
TRANSMISSION SYSTEM ASSOCIATED WITH KUMPP-8

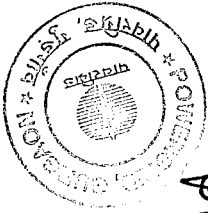
Name of the Project:

765 kV S/C Raichur-Sholapur line alongwith bay extensions at Raichur Substation with ICTs and reactors and Bays for Raichur - Sholapur 765 kV SC TL at 765 / 400kV Solapur SS alongwith 240 MVAR switchable line Reactor

Elements:

Sl.No.	Break Down	Cost in Rs. Crores			
		1	2	3	4
Reasons for Variation	Variation	6-(3-4-5)			
		5	4	3	2
As per original Estimates	As on COD Provision (Anticipated)	Liabilities / (Balance)	8		
			5	4	3
6.00	Substation Equipments				0.00
6.10	Switchgear (C.T., P.T., Circuit Breaker, Isolator, etc.) 765 kV line, tie & ICT bays equipment along with 400 kV ICT bays equipment and 72.5 & 33 kV equipment	3.93	35.55	32.26	-7.02
					1. As per the awarded cost. 2. Variation in conversion rate from Rs. 71 to Rs. 76.8 per EURO 3. Price Variation
6.20	Transformers, 7*500 MVA	9.23	83.11	67.91	-24.44
					As per the awarded cost & variation in conversion rate from Rs. 54 to Rs. 58 per USD, & Price Variation
6.30	Reactor 80 MVAR (Line as well as bus reactor)	4.56	41.04	42.06	-3.54
					Awarded cost + PV
6.40	Control, Relay, Protection Panel and Substation Automation System	0.36	3.26	3.67	0.04
					Awarded cost
6.50	PCCC		1.10	1.24	0.03
					Awarded cost
6.60	HVDC Package				0.00
6.70	Bus Bars/ conductors/insulators (Erection hardware)	0.66	5.91	6.29	-0.28
					Awarded cost + PV
6.80	Auxiliaries	1.04	9.36	13.10	2.69
					Awarded cost
6.90	Emergency D.C. Set	0.06	0.51	0.40	-0.17
					Awarded cost
6.10	Structure for switchyard	3.03	12.10	8.31	-6.82
					Higher rates received against competitive bidding & PV
6.11	Erection & Civil works	9.71	41.38	15.64	-35.45
					Higher rates received against competitive bidding & PV
6.13	Thermovision camera, insulated platform with HMF tools and insulated bucket truck	0.25	2.29	2.55	0.00
	Total Substation Equipments	32.95	235.43	193.41	-74.96
7.00	Mandatory Spares	2.98	4.47	9.22	1.77
8.00	Taxes and Duties				
8.10	Custom Duty				
8.20	FDI, Other Taxes & Duties	0.53	4.75	6.32	1.05
8.30	Total	0.53	4.75	6.32	1.05
	Total (Sub-station)	43.43	272.83	236.37	-79.89
	Construction and pre-commissioning expenses				0.00
9	Construction and pre-commissioning expenses				0.00
9.1	Site supervision & site admn, etc.				
9.1	Tools and Plants				
9.2	Construction Insurance				
	Total Construction and pre commissioning expenses				
10	Overheads				
10.1	Establishment	30.93			
10.2	Audit & Accounts		39.98		
10.3	Contingency				9.05
	Total Overheads	30.93	39.98		9.05
11	Project cost without IDC & FC	497.37	539.69		-50.14
12	IDC & FC	14.02	25.86		11.84
13	Project cost including IDC & FC	511.39	565.56		-38.30

Petitioner



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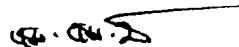
Name of the Transmission Licensee :
Name of the Project :
Name of Region :

Break-up of Project Cost for Transmission System
POWERGRID CORPORATION OF INDIA Ltd
TRANSMISSION SYSTEM ASSOCIATED WITH KUMPP-B
SR-1

Elements:

765 kV S/C Raichur-Sholapur line alongwith bay extensions at Raichur Substation with ICTs and reactors and Bays for Raichur - Solapur 765 Kv SC TL at 765 / 400kV Solapur SS alongwith 240 MVAR switchable Line Reactor

Sl.No.	Break Down	Cost in Rs. Crores			Variation	Reasons for Variation
		As per original Estimates	As on COD 01.02.2014 (Anticiated)	Liabilities / Provision (Balance)		
1	2	3	4	5	6=(3-4-5)	8
6.00	Substation Equipments				0.00	
6.10	Switchgear (CT,PT, Circuit Breaker, Isolator,etc) 765 kV line, tie & ICT bays equipments along with 400 kV ICT bay equipment and 72.5 & 33 kV equipment	32.26	35.35	3.93	-7.02	1. As per the awarded cost. 2. variation in conversion rate from Rs. 71 to Rs. 76.8 per EURO 3. Price Variation
6.20	Transformers, 7*500 MVA	67.91	83.11	9.23	-24.44	As per the awarded cost & variation in conversion rate from Rs. 54 to Rs. 58 per USD, & Price Variation
6.30	Reactor 80 MVAR (line as well as bus reactor)	42.06	41.04	4.56	-3.54	Awarded cost+ PV
6.40	Control,Relay,Protection Panel and Substation Automation system	3.67	3.26	0.36	0.04	Awarded cost
6.50	PLCC	1.24	1.10	0.12	0.03	Awarded cost
6.60	HVDC Package	-	-	-	0.00	
6.70	Bus Bars/ conductors/Insulators (Erection hardware)	6.29	5.91	0.66	-0.28	Awarded cost+ PV
6.80	Auxiliaries	13.10	9.36	1.04	2.69	Awarded cost
6.90	Emergency D.G. Set	0.40	0.51	0.06	-0.17	Awarded cost
6.10	Structure for switchyard	8.31	12.10	3.03	-6.82	Higher rates received against competitive bidding & PV
6.11	Erection & Civil works	15.64	41.38	9.71	-35.45	Higher rates received against competitive bidding & PV
6.13	Thermovision camera, insulated platform with HLM tools and insulated bucket truck	2.55	2.29	0.25	0.00	
	Total Substation Equipments	193.41	235.43	32.95	-74.96	
					0.00	
7.00	Mandatory Spares	9.22	4.47	2.98	1.77	
8.00	Taxes and Duties					
8.10	Custom Duty					
8.20	F&I , Other Taxes & Duties	6.32	4.75	0.53	1.05	
8.30	Total	6.32	4.75	0.53	1.05	
					0.00	
	Total (Sub-station)	236.37	272.83	43.43	-79.89	
					0.00	
9	Construction and pre-commissioning expenses					
9.1	Site supervision & site admn.etc.					
9.2	Tools and Plants					
9.3	construction insurance					
	Total Construction and pre commissioning expenses					
10	Overheads					
10.1	Establishment		30.93			
10.2	Audit & Accounts	39.98			9.05	
10.3	Contingency					
	Total Overheads	39.98	30.93	-	9.05	
11	Project cost without IDC & FC	539.69	497.37	92.47	-50.14	
					0.00	
12	IDC & FC	25.86	14.02	-	11.84	
					0.00	
13	Project cost including IDC & FC	565.56	511.39	92.47	-38.30	


Petitioner



Break-up of Construction/Supply/Service packages

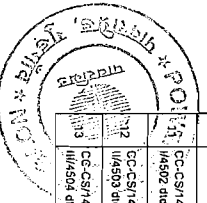
Name of the Transmission Licensee POWERGRID CORPORATION OF INDIA Ltd

Name of the Project : TRANSMISSION SYSTEM ASSOCIATED WITH KUMPP-B

Name of Region: SR-1

Rs. in Crores

S.N o	Name/No. of Construction/Supply/Service Package	Scope of work/ (in line with head of cost break-ups as applicable)	No. of bids received	Date of Award	Date of Start of work	Date of Completion of work	Value of Award ² in			Amendment Value of Award ² in			Firm or Win Escalation In prices	Actual expenditure till the completion or up to COD whichever is earlier	Taxes & duties and IEDC	IDC, FC, FERV & hedging cost	Sub-total	Liabilities
							INR (in Cr)	USD (in Million)	EURO (in Million)	INR (in Cr)	USD (in Million)	EURO (in Million)						
1	CC-CS/147-SR-1/TW-1255/IG/NOA- /IA157 dtd 01.03.2012	765 KV S/C Raichur- Sholapur (Part-1) Transmission Line	13	01.03.2012	01.03.2012	01.02.2014	42.59			40.03			Win Escalation					
2	CC-CS/147-SR-1/TW-1255/IG/NOA- /IA158 dtd 01.03.2012	765 KV S/C Raichur- Sholapur (Part-1) Transmission Line	13	01.03.2012	01.03.2012	01.02.2014	15.93			15.36			Win Escalation					
3	CC-CS/147-SR-2/CD- 1259/IG/NOA/4192 dtd 14.03.2012		5	14.03.2012	14.03.2012	01.02.2014	1.13	7.27		1.08	7.15		Win Escalation					
4	CC-CS/147-SR-1/TW-1256/IG/NOA- /IA159 dtd 01.03.2012	765 KV S/C Raichur- Sholapur (Part-2) Transmission Line	13	01.03.2012	01.03.2012	01.02.2014	42.96			36.64			Win Escalation					
5	CC-CS/147-SR-1/TW-1256/IG/NOA- /IA160 dtd 01.03.2012	765 KV S/C Raichur- Sholapur (Part-2) Transmission Line	13	01.03.2012	01.03.2012	01.02.2014	13.59			12.61			Win Escalation					
6	CC-CS/147-SR1/CD- 1260/IG/NOA/4193		5	14.03.2012	14.03.2012	01.02.2014	1.14	8.14		1.14	8.18		Win Escalation					
7	CC-CS/147-SR1/INS-1264/IG/NOA- /IA333 dtd 21.06.2012	765 KV S/C Raichur- Sholapur Transmission Line	4	21.06.2012	21.06.2012	01.02.2014		1.51			1.82		Win Escalation					
8	CC-CS/147-SR1/INS-1264/IG/NOA- /IA434 dtd 21.06.2013		4	21.06.2012	21.06.2012	01.02.2014	1.96			2.09			Win Escalation					
9	CC-CS/147-SR1/SS-1217/IG/NOA- /IA181 dtd 12.03.2012	765 KV bays along with 400 KV Transformer bay at 765/400 KV Raichur Substation	6	12.03.2012	12.03.2012	01.02.2014	33.88		2.26	34.97		2.26	Win Escalation					
10	CC-CS/147-SR1/SS-1217/IG/NOA- /IA182 dtd 12.03.2013		6	12.03.2012	12.03.2012	01.02.2014	25.93			26.30			Win Escalation					
	CC-CS/147-SR1/TR-1215/IG/NOA- /IA502 dtd 30.11.2012		5	30.11.2012	30.11.2012	01.02.2014		12.82			12.82		Win Escalation					
	CC-CS/147-SR1/TR-1215/IG/NOA- /IA503 dtd 30.11.2012		5	30.11.2012	30.11.2012	01.02.2014	10.45			10.45			Win Escalation					
	CC-CS/147-SR1/TR-1215/IG/NOA- /IA504 dtd 30.11.2012	500 MVA, 1 ph Auto transformer	5	30.11.2012	30.11.2012	01.02.2014	8.18			8.18			Win Escalation	450.04	47.33	14.02	511.39	92.47

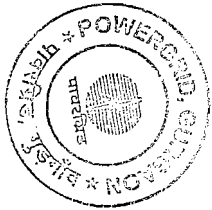


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S.No	Name/No. of Construction/supply/service package	Scope of works ¹ (in line with head of cost break-ups as applicable)	No. of bids received	Date of Award	Date of Start of work	Date of Completion of Work	Value of Award ² in			Amendment Value of Award ³ in			Firm or With Escalation in prices	Actual expenditure till the completion or up to COD whichever is earlier	Taxes & duties and IEDC	IDC, FC, FERV & Hedging cost	Sub-total	Liabilities
							INR (in Cr)	USD (in Million)	EURO (in Million)	INR (in Cr)	USD (in Million)	EURO (in Million)						
14	CC-CS/147-SR2/RT-1216/1/G4/NOA-1/4395 dtd 16.08.2012	80 MVAR, 1 ph Reactor	6	16.08.2012	16.08.2012	01.02.2014	27.66			27.66			With Escalation					
15	CC-CS/147-SR2/RT-1216/1/G4/NOA-1/4396 dtd 16.08.2012		6	16.08.2012	16.08.2012	01.02.2014	6.27			6.27			With Escalation					
16	CC-CS/256-WR1/CB-1507/3/G10/NOA/4331 dtd 19.06.2012	765 kV CB	3	19.06.2012	19.06.2012	01.02.2014	7.72			7.72			With Escalation					
			3	19.06.2012	19.06.2012	01.02.2014	0.17			0.17			With Escalation					
17	Misc. Site awarded works					01.02.2014	8.23			8.23			With Escalation					
Bays for Raichur - Solapur 765 Kv SC TL at 765 / 400kV Solapur SS alongwith 240 MVAR switchable Line Reactor																		
1	CC-CS/147-WR1/SS-1334/1/G5/NOA-1/4316	New 765/400 kV substation at Sholapur (P260 SS02) - Supply	7	30.05.2012	30.05.2012	01.02.2014							With Escalation					
2	CC-CS/147-WR1/SS-1334/1/G5/NOA-1/4317	New 765/400 kV substation at Sholapur (P260 SS02) - Supply	7	30.05.2012	30.05.2012	01.02.2014							With Escalation					
3	CC-CS/147-WR1/SS-1334/1/G5/NOA-1/4318	New 765/400 kV substation at Sholapur (P260 SS02) - Erection	7	30.05.2012	30.05.2012	01.02.2014							With Escalation					
4	CC-CS/256-WR1/CB-1507/3/G10/NOA/4331	Circuit Breaker for Solapur s/s	3	19.06.2012	19.06.2012	01.02.2014							With Escalation					
5	CC-CS/147-WR1/RT-1338/1/G4/NOA-1/4407	7 nos. 765 kV 80 MVAR single phase Shunt reactor at Solapur S/S, 4 nos. single phase Bus reactor at Solapur S/S (P260 RT02) - Erection		05.10.2012	05.10.2012	01.02.2014							With Escalation					
6	CC-CS/147-WR1/RT-1338/1/G4/NOA-1/4468	7 nos. 765 kV 80 MVAR single phase Shunt reactor at Solapur S/S, 4 nos. single phase Bus reactor at Solapur S/S (P260 RT02) - Erection		05.10.2012	05.10.2012	01.02.2014							With Escalation					
TOTAL IN INR (Rs Crore)														450.04	47.33	14.02	511.39	92.47

NOTE:-

i) Conversion rate considered a) USD to INR =58 & b) EURO to INR =76.8



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DETAILS OF ELEMENTWISE COST

Name of the Transmission Licensee :

POWER GRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN

Name of the Project :

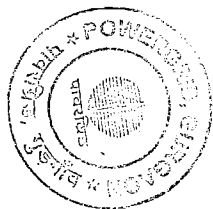
Transmission System associated with Krishnapatnam UMPP - Part B

Transmission lines

S.NO.	Name of line	Apportioned approved Cost (Rs Cr)	Completed Cost (Rs Cr)	Covered in t yes/nc
1	Raichur - Solapur 765 kV S/C Line (Asset-1)	565.56	603.86	yes
2	LILO of existing Raichur - Gooty 400 KV Quad D/C line at Raichur (new) substation(Asset-2)	34.68	28.21	yes
Total (T/L) cost		600.24	632.07	

Substations

S.NO.	Name of Substation	Apportioned approved Cost (Rs Cr)	Completed Cost (Rs Cr)	Covered in t
1	240 Mvar Bus reactor and associated bays at soalpur S/s(Asset-3)	40.84	53.89	yes
2	1x 1500 MVA ICT-1 and its associated bays at solapur S/s(Asset-4)	59.69	63.99	yes
3	1x 1500 MVA ICT-2 and its associated bays at solapur S/s(Asset-5)	60.91	64.59	yes
Total (S/S) Cost		161.44	182.47	
Total cost of these five Assets		761.68	814.54	
Balance System		1165.48	<i>yet to be completed</i>	
Total Project cost		1927.16	814.54	

पक्ष - पक्ष 2
Petitioner

Financial package upto COD

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014**
 Project Cost as on COD/31.03.2009: **51138.72 (Rs. in Lakhs)**
 Date of Commercial Operation of the Transmission element: **01-FEB-2014** (O.A.)

(Rs in Laacs)

Transmission Lines				Financial Package as apporportioned/ Approved		Financial Package as on COD		As Admitted on COD	
	Currency and Amount		Currency and Amount		Currency and Amount		Currency and Amount		
Loans									
Loans - Domestic	INR	39589.20	INR	0.00					
Loans - Foreign			INR	35797.11					
Total Loans		39589.20		35797.11					
Equity									
Foreign									
Domestic	INR	16966.80	INR	15341.61					
Notional				0.00					
Total Equity		16966.80		15341.61					
Debt Equity Ratio		70.00:30.00		70.00:30.00					
Total Cost		56556.00		51138.72					
	Debt	Equity	Total						
Add Cap For 2013-2014			6111.59						
Add Cap For 2013-2014	Actual	Normative							
Debt		4278.11							
Equity		1833.48							
Total		6111.59							
Total Capital Cost with ADDCAP upto 01.04.2014			57250.31						

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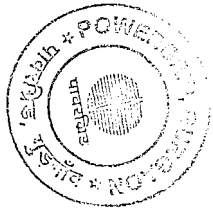
Statement of Additional Capitalisation after COD

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: 765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kV S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOC0 :01-FEB-2014
 COD: 01-FEB-2014

(Rs in Lacs)

Sl.No.	Year	Work/Equipment proposed to be added after COD upto cut off date/ beyond cut off date	Amount capitalised and proposed to be capitalised	Justification as per propose	Regulation under which covered	Admitted Cost
1	2	3	4	5	6	7
1.	2013-2014	BUILDING	127.16	Balance & Retention Payment	9(i)	
		TR LINE	3432.41	Balance & Retention Payment	9(i)	
		SUB STATION	2539.85	Balance & Retention Payment	9(i)	
		PLCC	12.17	Balance & Retention Payment	9(i)	
	Total		6111.59			
2.	2014-2015	FREEHOLD LAND	570.44	Balance & Retention Payment	9(i)	
		TR LINE	1471.03	Balance & Retention Payment	9(i)	
		SUB STATION	1093.73	Balance & Retention Payment	9(i)	
	Total		3135.20			

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Petitioner

Financing of Additional Capitalisation

Name of the Transmission Licensee:
Name of Region:
Name of the Project:
Name of the Transmission Element:

POWERGRID CORPORATION OF INDIA LTD.
SOUTHERN REGION
Transmission System associated with Krishnapatnam UMPP-Part B
765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014

(Rs in Lacs)

Financial Year (Starting from COD)	Projected/Actual					Admitted				
	From COD to31- Mar-2014	Year2	Year3	Year4	Year5& So on	Year1	Year2	Year3	Year4	Ycar5 & so on
1	2	3	4	5	6	7	8	9	10	11
Amount capitalised in Work/Equipmen t	6111.59									
Financing Details										
Loan-1										
Loan-2										
Loan-3 and so on										
Total Loan	4278.11									
Equity	1833.48									
Internal Resources										
Others										
Total	6111.59									

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Calculation of Depreciation Rate

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

SOUTHERN REGION

Name of the Project:

Transmission System associated with Krishnapatnam UMPP-Part B

Name of the Transmission Element:

765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.No.	Name of the Assets	Gross Block as on 31.03.2013 or as on COD, whichever is later	Addcap during the year	Gross Block as on 31.03.2014 or as on COD, whichever is later	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount up to 31.03.2014
	1	2	3	4	5	6=Col.4 X Col.5
2013-2014						
1	FREEHOLD LAND	1061.00	0.00	1061.00	0.00%	0.00
2	BUILDING	1997.48	127.16	2124.64	3.34%	11.47
3	TR LINE	21413.11	3432.41	24845.52	5.28%	203.54
4	SUB STATION	26548.84	2539.85	29088.69	5.28%	244.81
5	PLCC	118.29	12.17	130.46	6.33%	1.31
6	LEASEHOLD LAND	0.00	0.00	0.00	3.34%	0.00
	Total	51138.72	6111.59	57250.31		461.13
Weighted Average Rate of Depreciation (%)						0.85
Elapsed Life						0

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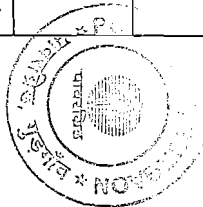


Statement of Depreciation

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: 765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kV S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014

(Rs in Lacs)

Financial Year	Upto 2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Depreciation on Capital Cost														434.43
Depreciation on Additional Capitalisation														
Amount of Additional Capitalisation														6,111.59
Depreciation Amount														26.70
Details of FERV														
Amount of FERV on which depreciation charged														
Depreciation Amount														
Depreciation Recovered during the year														461.13
Advance against Depreciation recovered during the year														
Depreciation and Advance against Depreciation recovered during the year														461.13
Cumulative Depreciation And Advance against Depreciation recovered upto the year														461.13



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Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
IBRD V (Proposed loan)						
Gross Loan Opening						35797.11
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						35797.11
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						35797.11
Average Net Loan						35797.11
Rate of Interest on Loan		0%	0%	0%	0%	1.76%
Interest on Loan						630.03
Total						
Gross Loan Opening						35797.11
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						35797.11
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						35797.11
Average Net Loan						35797.11
Interest on Loan						630.03
Weighted Average Rate of Interest on Loans						1.7600%

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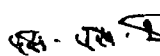


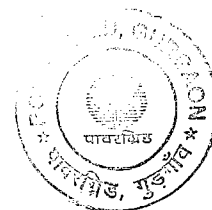
Calculation of Interest on Normative Loan

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Gross Normative Loan - Opening						35,797.11
Cumulative repayment of Normative Loan upto previous year						
Net Normative loan - Opening						35,797.11
Increase/Decrease due to ACE during the Year						4,278.11
Repayments of Normative Loan during the year						461.13
Net Normative loan - Closing						39,614.09
Average Normative Loan						37,705.60
Weighted average Rate of Interest on actual Loans						1.7600%
Interest on Normative loan						110.60


Petitioner



Loans in Foreign Currency

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014**

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
IBRD V (USD in LACs) EXCHANGE RATE : 63.12						
Gross Loan Opening						567.13
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						567.13
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						567.13
Average Net Loan						567.13
Rate of Interest on Loan						1.76%
Interest on Loan						9.98

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1.76
 (+) Guarantee fee 120
 Int. Rate 0.56
 (%)

Principal	Outstanding	Interest	Accrued	Deferred	
USD	310,853,100.34	USD	335,962.59	USD	18,674.63
Amount	310,853,100.34	354,837.22	354,837.22	354,837.22	
Current USD Eq	310,853,100.34				

Guarantor	Commitment Rate	Current Interest Rate	Maturity Dates	Payment Dates
POWER GRID CORPORATION OF INDIA LIMITED	0.000000	0.560000	15-Jan-2015, 15-Jan-2039	15-Jan, 15-Jul

Currency of Commitment	Original Principal	Disbursed	Recalled/repaid	Unwithdrawn Balance
USD	1,000,000,000.00	310,853,100.34	0.00	689,146,899.66

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
 STATEMENT OF ACCOUNT
 As of 31-MAR-2013
 Loan No. 77870 Country India Product FSL



IBRD-V



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- 1. One signed original and one conformed copy of the Loan Agreement between Power Grid Corporation of India Limited and the International Bank for Reconstruction and Development (the Bank).
- 2. One conformed copy of the Guarantee Agreement between India and the Bank.
- 3. One signed original of the Performance Monitoring Indicators Letter.
- 4. One signed original of the Representations Letter.
- 5. One signed original of the Disbursement Letter.
- 6. One copy of the "International Bank for Reconstruction and Development General Conditions for Loans", dated July 1, 2005 (as amended through February 12, 2008).
- 7. One copy of the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006.
- 8. One copy of the "Guidelines: Procurement under IBRD Loans and IDA Credits" published by the Bank in May 2004, and revised in October 2006.

Enclosed are the following documents regarding above-mentioned Project, which are delivered to you as the authorized representative of Power Grid Corporation of India Limited:

Dear Mr. Chaturvedi:

INDIA: Loan No. 7787-IN
Fifth Power System Development Project

Mr. S. K. Chaturvedi
Chairman and Managing Director
Power Grid Corporation of India Limited
B-9, Qutab Institutional Area
Katwaria Sarai
New Delhi - 110016

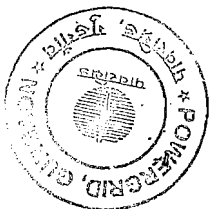
October 13, 2009

Telephone : 24617241/24619491
Cable Address: INTBAFRAD
Mailing Address : P. O Box 416
Facsimile : 24619393

New Delhi Office
70 Lodi Estate
New Delhi - 110 003
India

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
INTERNATIONAL DEVELOPMENT ASSOCIATION

IBRD-V



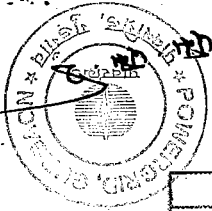
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[Handwritten initials or signature, possibly 'A. K. S.']

Enclosures

Sincerely,
[Handwritten signature]
Gennady Pich
Senior Counsel
Legal Vice Presidency

Pursuant to Section 5.01 of the Loan Agreement, *[Handwritten signature]* is the terminal date for effectiveness of the Loan Agreement.
Please confirm, on behalf of Power Grid Corporation of India Limited receipt of the documents listed above by signing the enclosed copy of this letter.



Principal Payment Date	Installment Share (Expressed as a Percentage)
January 15, 2015	1.81%
July 15, 2015	1.82%
January 15, 2016	1.83%
July 15, 2016	1.84%
January 15, 2017	1.85%
July 15, 2017	1.86%
January 15, 2018	1.87%
July 15, 2018	1.87%
January 15, 2019	1.88%
July 15, 2019	1.89%
January 15, 2020	1.90%
July 15, 2020	1.91%
January 15, 2021	1.92%
July 15, 2021	1.93%
January 15, 2022	1.94%
July 15, 2022	1.95%
January 15, 2023	1.96%
July 15, 2023	1.97%
January 15, 2024	1.98%
July 15, 2024	1.99%
January 15, 2025	2.00%
July 15, 2025	2.01%
January 15, 2026	2.02%
July 15, 2026	2.03%
January 15, 2027	2.04%
July 15, 2027	2.05%
January 15, 2028	2.06%
July 15, 2028	2.07%

The following table sets forth the Principal Payment Dates of the Loan and the percentage of the total principal amount of the Loan payable on each Principal Payment Date ("Installment Share"). If the proceeds of the Loan have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined by the Bank by multiplying: (a) Withdrawn Loan Balance as of the first Principal Payment Date; by (b) the Installment Share for each Principal Payment Date, such repayable amount to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

Amortization Schedule

SCHEDULE 3



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(b) Any amount withdrawn after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by the Bank by multiplying the amount of each such withdrawal by a fraction, the numerator of which is the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date ("Original Installment Share") and the denominator of which is the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such amounts repayable to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

(a) To the extent that any proceeds of the Loan have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the Withdrawn Loan Balance as of such date in accordance with paragraph 1 of this Schedule.

2. If the proceeds of the Loan have not been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:

January 15, 2029	2.08%
July 15, 2029	2.09%
January 15, 2030	2.10%
July 15, 2030	2.11%
January 15, 2031	2.12%
July 15, 2031	2.13%
January 15, 2032	2.14%
July 15, 2032	2.16%
January 15, 2033	2.17%
July 15, 2033	2.18%
January 15, 2034	2.19%
July 15, 2034	2.20%
January 15, 2035	2.21%
July 15, 2035	2.22%
January 15, 2036	2.23%
July 15, 2036	2.24%
January 15, 2037	2.25%
July 15, 2037	2.27%
January 15, 2038	2.28%
July 15, 2038	2.29%
January 15, 2039	2.09%

Calculation of Interest on Working Capital

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

SOUTHERN REGION

Name of the Project:

Transmission System associated with Krishnapatnam UMPP-Part B

Name of the Transmission Element:

765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kV S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.N o.	Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
1	O and M Expenses						75.99
2	Maintenance Spares						136.77
3	Receivables						1,244.70
4	Total Working Capital						1,457.46
5	Rate of Interest						13.20
6	Interest on Working Capital						32.06



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Draw Down Schedule for Calculation of IDC & Financing Charges

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765 kv S/C Raichur-Sholapur line alongwith bay extension at Raichur S/s with ICTs&Reactors And bays for Raichur-Sholapur 765 kv S/C line at Sholapur S/s alongwith 240 MVAR switchable line Reactor :DOCO :01-FEB-2014**

(Rs in Lacs)

Draw Down Schedule for Calculation of IDC & Financing Charges										
Sl.No	Drawn Down	Quarter 1			Quarter 2			Quarter n(COD)		
Sl.No.	Particulars	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee
1.	Loans									
1.1	Foreign Loans									
1.2	Indian Loans									
1.2.1	IBRD V									
	Draw Down Amount									35797.11
	IDC									
	Financing Charges									
	Total Indian Loans									
	Draw Down Amount									35797.11
	IDC									0.00
	Financing Charges									0.00
	Total of Loans Drawn									
	Draw Down Amount									35797.11
	IDC									1401.89
	Financing Charges									0.00
2	Equity									
2.1	Foreign Equity Drawn									
2.2	Indian Equity Drawn									0
	Total Equity Deployed									0.00

The project has been funded through domestic loans allocated from the common pool based on the phasing of expenditure and IDC has been booked accordingly. As the loans are allocated from common pool, quarter wise drawl is not furnished.



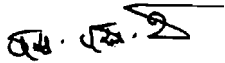
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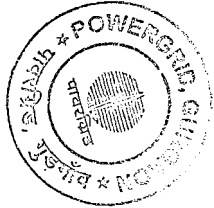
Summary Sheet

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
Name of Region: SOUTHERN REGION
Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
Name of the Transmission Element: LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.No.	Particulars	Form No.	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014(Pro Rata)
1	2	3	4	5	6	7	8	9
1	Depreciation	FORM-12	0.00					23.11
2	Interest on Loan	FORM-13A	0.00					5.33
3	Return on Equity	FORM-01A	0.00					23.55
4	Interest On Working Capital	FORM-13B	0.00					3.58
5	O & M Expenses		0.00					44.66
6	Total		0.00					100.23


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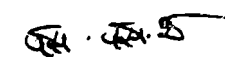


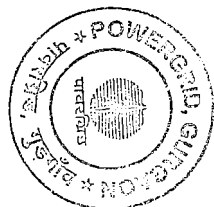
Calculation Of Return On Equity

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOC0 :01-FEB-2014

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Equity as DOC0						762.40
Notional Equity for Add Cap						41.46
Total Equity						803.86
Return on Equity @ 17.401% 18.044%						23.55


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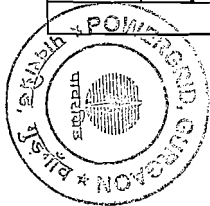


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Details of Transmission Lines And Substations

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014**

Transmission Lines											
Sl.No.	Name of Line	Type of Line AC/HVDC	S/C or D/C	No. of Sub-Conductors	Voltage level kV	Line Length (Km.)	Date of Commercial operation	Covered in the present petition			
								Yes/No	If No, petition No.		
1	Raichur-Gooty	AC	D/C	4	400	5.202	01-FEB-2014	Yes			
Substations											
Sl.No.	Name of Sub-Station	Type of Substation Conventional /GIS/ HVDC Terminal/ HVDC Back to Back	Voltage level kV	No. of Transformers / Reactors/ SVC etc (with Capacity)	No. of Bays				Date of Commercial operation	Covered in the present petition	
					765 KV	400 KV	220 KV	132 KV & below		Yes/No	If No, petition No.
1	Raichur (NEW S/S)	Conventional	765/400 kV								
	Raichur (old)-bay 1		400			1			01-FEB-2014	Yes	
	Raichur (old)-bay 2		400			1			01-FEB-2014	Yes	
	Gooty-bay 1		400			1			01-FEB-2014	Yes	
	Gooty-bay 2		400			1			01-FEB-2014	Yes	
Total						4					



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Normative Parameters considered For tariff calculations

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014

Particulars	Unit	Year Ending March					
		Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
Base Rate of Return on Equity	%						17.481
Tax Rate	%						11.33
Target Availability	%						98.00
Normative O&M per Km.	Rs. lacs	Given Below					
Normative O&M per bay	Rs. lacs	Given Below					
Spares for WC as % of O&M	%						15.00
Receivables in Months for WC	months						2.00
Prime lending Rate of SBI as on 01-APR-2009	%						13.20
Norms for O&M expenditure for Transmission System							
		2009-10	2010-11	2011-12	2012-13	2013-14	
Norms for sub-station (Rs Lakh per bay)							
765 KV		73.36	77.56	81.99	86.68	91.64	
400 KV		52.40	55.40	58.57	61.92	65.46	
220 KV		36.68	38.78	41.00	43.34	45.82	
132 KV and below		26.20	27.70	29.28	30.96	32.73	
Norms for AC and HVDC Lines (Rs Lakhs per km)							
Single Circuit (Bundled conductor with four or more sub-conductors)		0.537	0.568	0.600	0.635	0.671	
Single Circuit (Twin & Triple Conductor)		0.358	0.378	0.400	0.423	0.447	
Single Circuit (Single Conductor)		0.179	0.189	0.200	0.212	0.224	
Double Circuit (Bundled conductor with four or more sub-conductors)		0.940	0.994	1.051	1.111	1.174	
Double Circuit (Twin & Triple Conductor)		0.627	0.663	0.701	0.741	0.783	
Double Circuit (Single Conductor)		0.269	0.284	0.301	0.318	0.336	
Norm for HVDC Stations							
HVDC Back-to-back Stations (Rs lakh per 500 MW)		443.00	468.00	495.00	523.00	553.00	
Rihand-Badri HVDC bipole scheme (Rs Lakh)		1450.00	1533.00	1621.00	1713.00	1811.00	
Talcher-Kolar HVDC bipole scheme (Rs Lakh)		1699.00	1796.00	1899.00	2008.00	2122.00	



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 Petitioner

Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Transmission Licensee : POWERGRID CORPORATION OF INDIA Ltd
Name of the Project : TRANSMISSION SYSTEM ASSOCIATED WITH KUMPP-B
Name of Region: SR-1
Elements: LILO of 400 kV D/C Quad Raichur-Gooty TL along with the associated bay equipments at 765/400 kV Raichur Substation.

Capital Cost Estimates**Amount in Crores**

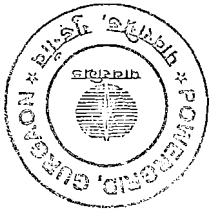
Board of Director/ Agency approving the Capital cost estimates:	Board of Directors 267th meeting	
Date of approval of the Capital cost estimates:	9th Feb 2012	
	Present Day Cost	Completed Cost
Price level of approved estimates	As of End of 4th Qtr. Of the year 2011	As on Scheduled COD of the System
Foreign Exchange rate considered for the Capital cost estimates		1USD = Rs.58 & 1 EURO = Rs. 76.80
Capital Cost excluding IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Cr.)		
Capital cost excluding IDC & FC (Rs. Cr)	33.10	39.38
IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Cr.)		
Total IDC & FC (Rs.Cr.)	1.59	1.78
Rate of taxes & duties considered		
Capital cost Including IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Cr.)		
Total Capital cost Including IDC & FC (Rs. Cr)	34.68	41.16
Schedule of Commissioning	09.10.2014	01.02.2014(Anticipated)
(Scheduled DOCO elementwise)		

Note:

1. Copy of approval letter should be enclosed.
2. Details of Capital cost are to be furnished as per FORM-5B or 5C as applicable.
3. Details of IDC & Financing Charges are to be furnished as per FORM-16.

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Sl.No.	Break Down	Cost in Rs. Crores				Reasons for Variation	
		As per original estimates (Anticated)	As on COD 01.02.2014	Liabilities/ Provision	Variation		
1.00	A	2	3	4	5	6=(3-4-5)	7
	TRANSMISSION LINE						
	Preliminary works						
1.10	Design & Engineering						
1.20	Preliminary investigation, Right of way, forest clearance, PTCC, general civil works etc.	0.33	0.30	0.30	0.03	0.00	
	Total Preliminary works	0.33	0.30	0.30	0.03	0.00	
2.00	Transmission Lines material						
2.10	Towers Steel	4.75	3.94	3.94	0.44	0.37	
2.20	Conductor	6.66	3.10	3.10	0.34	3.22	
2.30	Earth Wire	0.11	0.06	0.06	0.01	0.04	
2.40	Insulators	1.06	0.75	0.75	0.08	0.23	
2.50	Hardware fittings	0.85	1.12	1.12	0.12	-0.40	As per the awarded cost
2.60	Conductor & Earthwire accessories	0.44	0.22	0.22	0.02	0.19	Awarded cost
2.70	Erection, Stringing & Civil works	3.07	1.95	1.95	0.22	0.91	
	Total Transmission Lines material	16.94	11.15	11.15	1.24	4.55	
3.00	Taxes and Duties						
3.10	Custom Duty	0.00	0.00	0.00	0.00	0.00	
3.20	F&I, Other Taxes & Duties	0.80	0.78	0.78	0.09	-0.07	
	Total	0.80	0.78	0.78	0.09	-0.07	
	Total-Transmission lines	18.06	12.23	12.23	1.36	4.47	
	B. SUBSTATIONS						
4.00	Preliminary works & land						
4.10	Design & Engineering (prem survey & soil investigation)						
4.20	Land						
4.30	Site preparation						
4.40	R&R compensation						
	Total Preliminary works & land						
5.00	Civil Works						
5.10	Control Room, office building, store, FPH, DG set building etc including HVAC						
5.20	Township and colony						
5.30	Roads and drainage						
5.40	Foundation for structures						
5.50	Substation infrastructure						
	Total Civil Works						

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD
 Name of the Project: TRANSMISSION SYSTEM ASSOCIATED WITH KUMPP-B
 SR-1
 Name of Region: LEO of 400 KV D/C Quad Ratihur-Geoty TL along with the associated bay equipments at 765/400 KV
 Ratihur Substation.



Petitioner **RAI . 101.2**

Sl.No.	Break Down	Cost in Rs. Crores			
		1	2	3	4
1.00					
6.00	Substation Equipments				
6.10	Switchgear (CT, PT, Circuit Breaker, Isolator, etc) 765 KV, 400 KV, 72.5 KV and 33 KV.	4.99	5.69	0.63	-1.38
					1. As per the awarded cost, variation 2. variation in conversion rate from Rs. 71 to Rs. 76.8 per EURD 3. Price variation
6.20	Transformers, 7*500 MVA		0.00		
6.30	Reactor 80 MVAR (Line as well as bus reactor)		0.00		0.00
6.40	Control, Relay, Protection Panel and Substation Automation system	1.09	0.87	0.10	0.12
6.50	PLCC	1.15	0.76	0.08	0.31
6.60	HVDC Package		0.00		0.00
6.70	Bus Bars/ conductors/insulators (erection hardware)	2.21	1.67	0.19	0.35
6.80	Auxiliaries		0.00		0.00
6.90	Emergency D.G. Set		0.00		0.00
6.10	Grounding System		0.00		0.00
6.11	Structure for switchyard	2.11	3.26	0.36	-1.51
					Awarded cost
6.12	Erection	0.62	0.48	0.05	0.08
					Awarded cost
	Total Substation Equipments	12.12	12.73	1.41	-2.02
7.00	Mandatory Spares				
8.00	Taxes and Duties				
8.10	Custom Duty		0.00		0.00
8.20	f&t, Other Taxes & Duties	0.47	0.20	0.02	0.24
8.30	Total Taxes & Duties	0.47	0.20	0.02	0.24
	Total (Sub-station)	12.58	12.93	1.44	-1.78
					0.00
9	Construction and pre-commissioning expenses				
9.1	Site supervision & site admn, etc.		0.00		0.00
9.2	Tools and Plants		0.00		0.00
9.3	construction insurance		0.00		0.00
	Total Construction and pre commissioning expenses		0.00		0.00
10	Overheads		0.00		0.00
10.1	Establishment		0.04		0.00
10.2	Audit & Accounts	2.45	0.00		2.41
10.3	Contingency		0.00		0.00
	Total Overheads	2.45	0.04		2.41
11	Project cost without IDC & FC	33.10	25.19	2.79	5.11
					0.00
12	IDC & FC	1.59	0.22		1.37
13	Project cost including IDC & FC	34.68	25.41	2.79	6.47

Name of the Transmitter: POWERGRID CORPORATION OF INDIA Ltd
Name of the Project : 400 KV D/C (Quad) Raichur-Gooty line & associated bays at 765/400 KV Raichur Substation
Name of Region: SR-1

Rs. in Crores

S.N	Name/No. of Construction/Supply/service package	Scope of works ¹ (In line with head of cost break-ups as applicable)	No. of bids received	Date of Award	Date of Start of work	Date of Completion of Work	Value of Award ² in			Amendment Value of Award ² in			Firm or With Escalation in prices	Actual expenditure till the completion or up to COD whichever is earlier	Taxes & duties and IEDC	IDC, FC, FERV & Hedging cost	Sub-total	Liabilities	
							INR (in Cr)	USD (in Million)	EURO (in Million)	INR (in Cr)	USD (in Million)	EURO (in Million)							
1	CC-CS/147-SR-1/TW-1255/IG/4NDA-1/157 did 01.03.2012		13	01.03.2012	01.03.2012	31.12.2013	5.61			5.39			PV						
2	CC-CS/147-SR-1/TW-1255/IG/4NDA-1/158 did 01.03.2012		13	01.03.2012	01.03.2012	31.12.2013	2.24			2.13			PV						
3	CC-CS/147-SR-1/CD-1259/IG/4NDA/192 did 14.03.2012	L.I.O of Existing 400 KV D/C (Quad) Raichur-Gooty Transmission Line		5	14.03.2012	14.03.2012	31.12.2013	0.20	1.17		0.11	0.61		PV					
4	CC-CS/147-SR/1/INS-1264/IG/4NDA-1/433 did 21.06.2012			4	21.06.2012	21.06.2012	31.12.2013		0.13			0.14		PV	24.17	1.02	0.22	25.41	2.79
5	CC-CS/147-SR/1/INS-1264/IG/4NDA-1/433 did 21.06.2013			4	21.06.2012	21.06.2012	31.12.2013	0.16			0.17			PV					
6	CC-CS/147-SR/1/SS-1217/IG/4NDA-1/181 did 12.03.2012	765/400 KV Raichur Substation (400 KV Line bays)		6	12.03.2012	12.03.2012	31.12.2013	11.41			12.70			PV					
7	CC-CS/147-SR/1/SS-1217/IG/4NDA-1/182 did 12.03.2013			6	12.03.2012	12.03.2012	31.12.2013	0.62			0.71			PV					
TOTAL							20.24	1.31	0.00	21.21	0.75	0.00		24.17	1.02	0.22	25.41	2.79	
TOTAL IN INR (Rs Crore)							20.24	7.59	0.00	21.21	4.36	0.00		24.17	1.02	0.22	25.41	2.79	

NOTE:-



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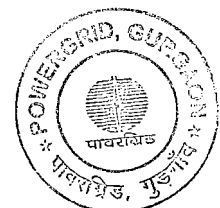
Financial package upto COD

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014
 Project Cost as on COD/31.03.2009: 2541.35 (Rs. in Lakhs)
 Date of Commercial Operation of the Transmission element: (ant) 01-FEB-2014

(Rs in Lacs)

Transmission Lines						
	Financial Package as apportioned/ Approved		Financial Package as on COD		As Admitted on COD	
	Currency and Amount		Currency and Amount		Currency and Amount	
Loans						
Loans - Domestic	INR	2427.60	INR	0.00		
Loans - Foreign			INR	1778.95		
Total Loans		2427.60		1778.95		
Equity						
Foreign						
Domestic	INR	1040.40	INR	762.40		
Notional				0.00		
Total Equity		1040.40		762.40		
Debt Equity Ratio		70.00:30.00		70.00:30.00		
Total Cost		3468.00		2541.35		
	Debt	Equity	Total			
Add Cap For 2013-2014			138.19			
Add Cap For 2013-2014	Actual	Normative				
Debt		96.73				
Equity		41.46				
Total		138.19				
Total Capital Cost with ADDCAP upto 01.04.2014			2679.54			


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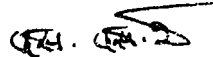
Statement of Additional Capitalisation after COD

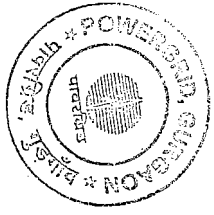
Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014
 COD: 01-FEB-2014

(Rs in Lacs)

Sl.No.	Year	Work/Equipment proposed to be added after COD upto cut off date/ beyond cut off date	Amount capitalised and proposed to be capitalised	Justification as per propose	Regulation under which covered	Admitted Cost
1	2	3	4	5	6	7
1.	2013-2014	TR LINE	95.10	Balance & Retention Payments	9(i)	
		SUB STATION	34.69	Balance & Retention Payments	9(i)	
		PLCC	8.40	Balance & Retention Payments	9(i)	
	Total		138.19			
2.	2014-2015	TR LINE	40.76	Balance & Retention Payments	9(i)	
		SUB STATION	100.54	Balance & Retention Payments	9(i)	
	Total		141.30			

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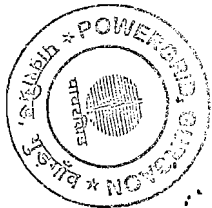
Financing of Additional Capitalisation

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014**

(Rs in Lacs)

Financial Year (Starting from COD)	Projected/Actual					Admitted				
	From COD to31- Mar-2014	Year2	Year3	Year4	Year5& So on	Year1	Year2	Year3	Year4	Year5 & so on
1	2	3	4	5	6	7	8	9	10	11
Amount capitalised in Work/Equipment	138.19									
Financing Details										
Loan-1										
Loan-2										
Loan-3 and so on										
Total Loan	96.73									
Equity	41.46									
Internal Resources										
Others										
Total	138.19									

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Calculation of Depreciation Rate

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014**

(Rs in Laacs)

Sl.No.	Name of the Assets	Gross Block as on 31.03.2013 or as on COD, whichever is later	Addcap during the year	Gross Block as on 31.03.2014 or as on COD, whichever is later	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount up to 31.03.2014
	1	2	3	4	5	6=Col.4 X Col.5
2013-2014						
1	FREEHOLD LAND	0.00	0.00	0.00	0.00%	0.00
2	BUILDING	0.00	0.00	0.00	3.34%	0.00
3	TR. LINE	1236.16	95.10	1331.26	5.28%	11.30
4	SUB STATION	1228.95	34.69	1263.64	5.28%	10.97
5	PLCC	76.24	8.40	84.64	6.33%	0.85
6	LEASEHOLD LAND	0.00	0.00	0.00	3.34%	0.00
	Total	2541.35	138.19	2679.54		23.11
Weighted Average Rate of Depreciation (%)						0.89
Elapsed Life						0

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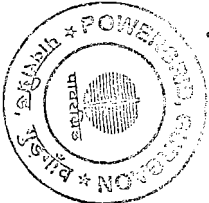
Statement of Depreciation

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014

(Rs in Laacs)

Financial Year	Upto 2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Depreciation on Capital Cost														22.50
Depreciation on Additional Capitalisation														
Amount of Additional Capitalisation														138.19
Depreciation Amount														0.62
Details of FERV														
Amount of FERV on which depreciation charged														
Depreciation Amount														
Depreciation Recovered during the year														23.11
Advance against Depreciation recovered during the year														
Depreciation and Advance against Depreciation recovered during the year														23.11
Cumulative Depreciation And Advance against Depreciation recovered upto the year														23.11

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Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
IBRD V (Proposed Loan)						
Gross Loan Opening						1778.95
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						1778.95
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						1778.95
Average Net Loan						1778.95
Rate of Interest on Loan		0%	0%	0%	0%	1.76%
Interest on Loan						31.31
Total						
Gross Loan Opening						1778.95
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						1778.95
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						1778.95
Average Net Loan						1778.95
Interest on Loan						31.31
Weighted Average Rate of Interest on Loans						1.7600%

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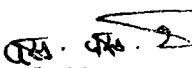


Calculation of Interest on Normative Loan

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Gross Normative Loan - Opening						1,778.95
Cumulative repayment of Normative Loan upto previous year						
Net Normative loan - Opening						1,778.95
Increase/Decrease due to ACE during the Year						96.73
Repayments of Normative Loan during the year						23.11
Net Normative loan - Closing						1,852.58
Average Normative Loan						1,815.76
Weighted average Rate of Interest on actual Loans						1.7600%
Interest on Normative loan						5.33

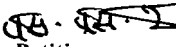

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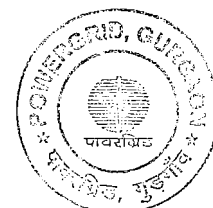


Loans in Foreign Currency

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014**

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
IBRD V (USD in LACs) EXCHANGE RATE : 63.12						
Gross Loan Opening						28.18
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						28.18
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						28.18
Average Net Loan						28.18
Rate of Interest on Loan						1.76%
Interest on Loan						0.50


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Calculation of Interest on Working Capital

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

SOUTHERN REGION

Name of the Project:

Transmission System associated with Krishnapatnam UMPP-Part B

Name of the Transmission Element:

LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.No.	Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
1	O and M Expenses						22.33
2	Maintenance Spares						40.19
3	Recievables						100.23
4	Total Working Capital						162.75
5	Rate of Interest						13.20
6	Interest on Working Capital						3.58

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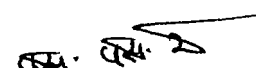
Draw Down Schedule for Calculation of IDC & Financing Charges

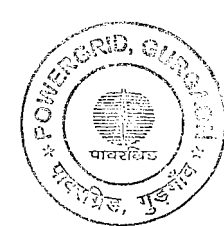
Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **LILO of existing Raichur-Gooty 400 kV D/C Quad line at Raichur(New) S/S :DOCO :01-FEB-2014**

(Rs in Lacs)

Draw Down Schedule for Calculation of IDC & Financing Charges										
Sl.No	Drawn Down	Quarter 1			Quarter 2			Quarter n(COD)		
Sl.No.	Particulars	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee
1.	Loans									
1.1	Foreign Loans									
1.2	Indian Loans									
1.2.1	IBRD V									
	Draw Down Amount									1778.95
	IDC									
	Financing Charges									
	Total Indian Loans									
	Draw Down Amount									1778.95
	IDC									0.00
	Financing Charges									0.00
	Total of Loans Drawn									
	Draw Down Amount									1778.95
	IDC									21.99
	Financing Charges									0.00
2	Equity									
2.1	Foreign Equity Drawn									
2.2	Indian Equity Drawn									0
	Total Equity Deployed									0.00

The project has been funded through domestic loans allocated from the common pool based on the phasing of expenditure and IDC has been booked accordingly. As the loans are allocated from common pool, quarter wise drawl is not furnished.


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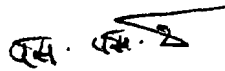
Summary Sheet

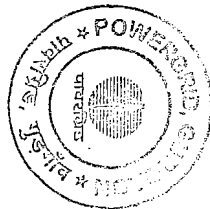
Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
Name of Region: **WESTERN REGION**
Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Sl.No.	Particulars	Form No.	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014(Pro Rata)
1	2	3	4	5	6	7	8	9
1	Depreciation	FORM-12	0.00					35.01
2	Interest on Loan	FORM-13A	0.00					8.76
3	Return on Equity	FORM-01A	0.00					38.70
4	Interest On Working Capital	FORM-13B	0.00					2.68
5	O & M Expenses		0.00					15.27
6	Total		0.00					100.42

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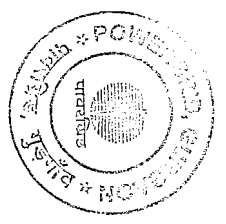
Calculation Of Return On Equity

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**

Particulars	(Rs in Lacs)					
	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Equity as DOCO						1,257.46
Notional Equity for Add Cap						58.75
Total Equity						1,316.21
Return on Equity @ 17.481% 18.044						38.70

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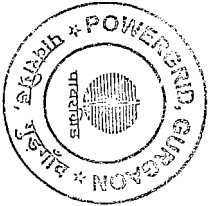


Details of Transmission Lines And Substations

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: WESTERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: 765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014

Transmission Lines										
Sl.No.	Name of Line	Type of Line AC/HVDC	S/C or D/C	No. of Sub- Conductors	Voltage level kV	Line Length (Km.)	Date of Commercial operation	Covered in the present petition		
								Yes/No	If No, petition No.	
Substations										
Sl.No.	Name of Sub-Station	Type of Substation Conventional /GIS/ HVDC Terminal/ HVDC Back to Back	Voltage level kV	No. of Transformers / Reactors/ SVC etc (with Capacity)	No. of Bays				Date of Commercial operation	Covered in the present petition
					765 KV	400 KV	220 KV	132 KV & below	Yes/No	If No, petition No.
1	Solapur(PG) New	Conventional	765	1 X 240 MVAR Bus Reactor						
	Bus Reactor Bay		765		1				01-FEB-2014	Yes
Total					1					

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Normative Parameters considered For tariff calculations

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**

Year Ending March

Particulars	Unit	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
Base Rate of Return on Equity	%						17.481
Tax Rate	%						11.33
Target Availability	%						98.00
Normative O&M per Km.	Rs. lacs	Given Below					
Normative O&M per bay	Rs. lacs	Given Below					
Spares for WC as % of O&M	%						15.00
Receivables in Months for WC	months						2.00
Prime lending Rate of SBI as on 01-APR-2009	%						13.20
Norms for O&M expenditure for Transmission System							
		2009-10	2010-11	2011-12	2012-13	2013-14	
Norms for sub-station (Rs Lakh per bay)							
765 KV		73.36	77.56	81.99	86.68	91.64	
400 KV		52.40	55.40	58.57	61.92	65.46	
220 KV		36.68	38.78	41.00	43.34	45.82	
132 KV and below		26.20	27.70	29.28	30.96	32.73	
Norms for AC and HVDC Lines (Rs Lakhs per km)							
Single Circuit (Bundled conductor with four or more sub-conductors)		0.537	0.568	0.600	0.635	0.671	
Single Circuit (Twin & Triple Conductor)		0.358	0.378	0.400	0.423	0.447	
Single Circuit (Single Conductor)		0.179	0.189	0.200	0.212	0.224	
Double Circuit (Bundled conductor with four or more sub-conductors)		0.940	0.994	1.051	1.111	1.174	
Double Circuit (Twin & Triple Conductor)		0.627	0.663	0.701	0.741	0.783	
Double Circuit (Single Conductor)		0.269	0.284	0.301	0.318	0.336	
Norm for HVDC Stations							
HVDC-Back-to-back stations (Rs lakh per 500 MW)		443.00	468.00	495.00	523.00	553.00	
Rihand-Dadri HVDC bipole scheme (Rs Lakh)		1450.00	1533.00	1621.00	1713.00	1811.00	
Talcher-Kolar HVDC bipole scheme (Rs Lakh)		1699.00	1796.00	1899.00	2008.00	2122.00	



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**PART-III
FORM-5A**

Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Transmission Licensee :	POWER GRID CORPORATION OF INDIA	
Name of Region:	WESTERN REGION	
Name of the Project :	Transmission system associated with Krishnapatnam UMPP - Part B	
Name of Element:	765 / 400kV Solapur SS alongwith 240 MAVR Bus Reactor and associated bays under Transmission System associated with Krishnapatnam UMPP - PART B	
Capital Cost Estimates		
Board of Director/ Agency approving the Capital cost estimates:	Board of Directors	
Date of approval of the Capital cost estimates:	9th Feb 2012	
	Present Day Cost	Completed Cost
Price level of approved estimates	As of End of 4th Qtr. Of the year 2011	As on Scheduled COD of the System
Foreign Exchange rate considered for the Capital cost estimates		
Capital Cost excluding IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)	3897.68	4639.19
Capital cost excluding IDC & FC (Rs. Lakh)	3897.68	4639.19
IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)	186.78	209.68
Total IDC & FC (Rs. Lakh)	186.78	209.68
Rate of taxes & duties considered		
Capital cost Including IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)		
Total Capital cost Including IDC & FC (Rs. Lakh)	4084.45	4848.87
Schedule of Commissioning		
(Scheduled DOCO elementwise)		
COD of Unit-1/Block-1	1-Nov-14	1-Feb-14
COD of Unit-1/Block-2		
COD of Unit-1/Block-3		
COD of Unit-1/Block-4		

Note:

- Copy of approval letter should be enclosed.
- Details of Capital cost are to be furnished as per FORM-5B or 5C as applicable.
- Details of IDC & Financing Charges are to be furnished as per FORM-16.


PETITIONER

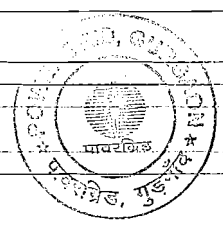


Element wise Break-up of Project Cost for Transmission System

Name of the Transmission Licensee : Power Grid Corporation of India Ltd.
 Name of Region: Western Region-I
 Name of the Project : KRISHNAPATNAM UMPP - PART B
 Name of the Transmission Element: 765 / 400kV Solapur SS alongwith 240 MAVR Bus Reactor and associated bays
 DOCO: 01.02.2014

(Rs in Lakhs)

Sl.No.	Break Down	As per Original Estimate	As on COD 01.02.2014 (Anticipated)	Liabilities / Provision	Variation	Reasons for Variation
1	2	3	4	5	6=(3-4-5)	7
A	TRANSMISSION LINE					
1.0	Preliminary works					
1.1	Design & Engineering					
1.2	Preliminary investigation, Right of way, forest clearance, PTCC, general civil works, compensation etc.			0.00	0.00	
1.3	Total Preliminary works		0.00	0.00	0.00	
2.0	Transmission Lines material					
2.1	Towers Steel			0.00	0.00	
2.2	Conductor			0.00	0.00	
2.3	Earth Wire			0.00	0.00	
2.4	Insulators			0.00	0.00	
2.5	Hardware Fittings			0.00	0.00	
2.6	Conductor & Earthwire accessories			0.00	0.00	
2.7	Spares			0.00	0.00	
2.8	Erection, Stringing & Civil works including foundation			0.00	0.00	
2.9	Total Transmission Lines material	0.00	0.00	0.00	0.00	
3.0	Taxes and Duties					
3.1	Custom Duty					
3.2	Other Taxes & Duties					
	Total Taxes & Duties	0.00	0.00	0.00	0.00	
	Total -Transmission lines	0.00	0.00	0.00	0.00	
B	SUBSTATIONS	BR				
4.0	Preliminary works & land					
4.1	Design & Engineering				0.00	
4.2	Land				0.00	
4.3	Site preparation		0.00	0.00	0.00	
	Total Preliminary works & land	0.00	0.00	0.00	0.00	
5.0	Civil Works					
5.1	Control Room & Office Building including HVAC	20.00	10.78	1.97	7.25	
5.2	Township & Colony	0.00	0.00	0.00	0.00	
5.3	Roads and Drainage	135.00	345.92	63.26	-274.18	
5.4	Foundation for structures	115.36	449.89	82.27	-416.80	
5.5	Misc. civil works	5.00	0.00	0.00	5.00	
	Total Civil Works	275.36	806.59	147.50	-678.73	
6.0	Substation Equipments					
6.1	Switchgear (CT, PT, Circuit Breaker, Isolator etc)	312.39	449.62	106.30	-243.52	Variation is due to increase in the awarded cost as compared to FR.
6.2	Transformers	0.00	0.00	0.00	0.00	
6.3	Compensating Equipment(Reactor, SVCs etc)	1634.06	1158.56	544.30	-68.79	Variation is due to increase in the awarded cost as compared to FR.
6.4	Control, Relay & Protection Panel	78.59	72.59	17.16	-11.16	Variation is due to increase in the awarded cost as compared to FR.
6.5	PLCC	0.00	0.00	0.00	0.00	
6.6	HVDC /FSC package	0.00	0.00	0.00	0.00	
6.7	Bus Bars/ conductors/insulators	67.14	60.14	14.22	-7.21	
6.8	outdoor lighting	103.00	21.45	5.07	76.48	
6.9	Emergency DG set	42.85	24.10	5.70	13.05	
6.10	Grounding System	0.00	0.00	0.00	0.00	
6.11	Structure for Switch yard	793.23	1327.71	313.89	-848.37	Variation is due to increase in the awarded cost as compared to FR.
6.12	Auxiliary System	302.34	183.85	43.47	75.02	Variation is due to increase in the awarded cost as compared to FR.
	Total Substation Equipments	3333.60	3298.02	1050.10	-1014.52	
7.0	Spares (incl. in eqpt. cost)					
8.0	Taxes and Duties					
8.1	Custom Duty	0.00	0.00	0.00	0.00	
8.2	Other Taxes & Duties	0.00	0.00	0.00	0.00	
8.3	Total Taxes & Duties	0.00	0.00	0.00	0.00	
	Total (Sub-station)	3608.96	4104.61	1197.60	-1693.25	
9.0	Construction and pre-commissioning expenses					
9.1	Site supervision & site admn. etc.	0.00	0.00	0.00	0.00	
9.2	Tools and Plants	0.00	0.00	0.00	0.00	
9.3	construction Insurance	0.00	0.00	0.00	0.00	
	Total Construction and pre commissioning expenses	0.00	0.00	0.00	0.00	
10.0	Overheads					
10.1	Establishment	288.72	76.03	0.00	212.69	
10.2	Audit & Accounts	0.00	0.00	0.00	0.00	
10.3	Contingency	0.00	0.00	0.00	0.00	
	Total Overheads	288.72	76.03	0.00	212.69	
11.0	Project cost without IDC, FC, FERV & Hedging cost	3897.68	4180.64	1197.60	-1480.56	
12.0	Total Cost (Plant & Equipment)					
12.1	Interest During Construction (IDC)	186.78	10.91	0.00	175.87	
12.2	Financing Charges (FC)	0.00	0.00	0.00	0.00	
12.3	Foreign Exchange Rate Variation (FERV)	0.00	0.00	0.00	0.00	
12.4	Hedging Cost	0.00	0.00	0.00	0.00	
13	Project cost including IDC, FC, FERV & Hedging cost	4084.45	4191.55	1197.60	-1304.70	



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27/12/14

Break-up of Construction / Supply / Service packages

FORM - 5 C

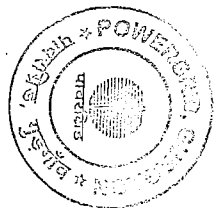
Name of the Transmission Licensee : Power Grid Corporation of India Ltd.
 Name of the Region : Western Region-I
 Name of the project : TRANSMISSION SYSTEM Associated with Krishnapatnam UMPP - PART B
 Name of the Transmission Element : 765/400kV SOLAPUR S/S alongwith 240 MAVR Bus Reactor and associated bays.
 Anticipated DOCO: 01.02.2014

(Rs in Lakhs)

SL	Package / Scope of works	LOA NO	Date of award	No of bids received	Awarded value INR	Amended Value INR	Firm or with escalation in prices	Expenditure excluding Taxes & Duties as on COD	Taxes & duties and IEDC	IDC, FC, FERV & Hedging cost	Sub-total	FROM 01.02.2014 TO 31.03.2014	FROM 01.04.2014 TO 31.03.2015
1	New 765/400 kV substation at Solapur (P260 SS02) - Supply	CC-CS/147-WR1/SS-1334/1/G5/NOA-II/4316	30.05.2012	7	SEK - 2750000 EURO - 1936216	SEK - 2750000 EURO - 1773027	With Escalation	279.27	14.09	1.64	295.01	31.02	54.76
2	New 765/400 kV substation at Solapur (P260 SS02) - Supply	CC-CS/147-WR1/SS-1334/1/G5/NOA-II/4317	30.05.2012	7	410,811,693	391,676,984	With Escalation	1,569.28	24.80	17.32	1,611.40	63.33	288.11
3	New 765/400 kV substation at Solapur (P260 SS02) - Erection	CC-CS/147-WR1/SS-1334/1/G5/NOA-III/4318	30.05.2012	7	307,300,950	333,626,466	With Escalation	785.41	18.63	2.83	806.87	20.78	49.74
4	Circuit Breaker for Solapur s/s	CC-CS/256-WR1/CB-1507/3/G10/NOA/4331	19.06.2012	3	117,489,529	117,489,529	With Escalation	130.73	2.54	0.65	133.92	23.55	27.23
7	7 nos. 765 kV 80 MVAR single phase Shunt reactor at Solapur S/S, 4 nos. single phase Bus reactor at Solapur S/S (P260 RT02) - Erection	CC-CS/147-WR1/RT-1338/1/G4/NOA-II/4467	05.10.2012		403,390,517	403,390,517	With Escalation	1,091.86	15.95	27.64	1,135.46	22.32	477.51
8	7 nos. 765 kV 80 MVAR single phase Shunt reactor at Solapur S/S, 4 nos. single phase Bus reactor at Solapur S/S (P260 RT02) - Erection	CC-CS/147-WR1/RT-1338/1/G4/NOA-III/4468	05.10.2012		USD - 41800 91,224,472	USD - 41800 91,224,472	With Escalation	208.89	0.00	0.00	208.89	34.81	104.44
TOTAL SOLAPUR S/S								4065.44	76.02	50.09	4191.55	195.82	1001.78

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Financial package upto COD

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**
 Project Cost as on COD/31.03.2009: **4191.55 (Rs. in Lakhs)**
 Date of Commercial Operation of the Transmission element: **01-FEB-2014 (94)**

(Rs in Lacs)

Transmission Lines						
	Financial Package as apportioned/ Approved		Financial Package as on COD		As Admitted on COD	
	Currency and Amount		Currency and Amount		Currency and Amount	
Loans						
Loans - Domestic	INR	2859.40	INR	0.00		
Loans - Foreign			INR	2934.09		
Total Loans		2859.40		2934.09		
Equity						
Foreign						
Domestic	INR	1225.06	INR	1257.46		
Notional				0.00		
Total Equity		1225.06		1257.46		
Debt Equity Ratio		70.01:29.99		70.00:30.00		
Total Cost		4084.45		4191.55		
	Debt	Equity	Total			
Add Cap For 2013-2014			195.82			
Add Cap For 2013-2014	Actual	Normative				
Debt		137.07				
Equity		58.75				
Total		195.82				
Total Capital Cost with ADDCAP upto 01.04.2014			4387.37			


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Statement of Additional Capitalisation after COD

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: WESTERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: 765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOC0 :01-FEB-2014
 COD: 01-FEB-2014

(Rs in Lacs)

Sl.No.	Year	Work/Equipment proposed to be added after COD upto cut off date/ beyond cut off date	Amount capitalised and proposed to be capitalised	Justification as per propose	Regulation under which covered	Admitted Cost
1	2	3	4	5	6	7
1.	2013-2014	BUILDING	40.55		9(i)	
		SUB STATION	155.27		9(i)	
	Total		195.82			
2.	2014-2015	BUILDING	106.95		9(i)	
		SUB STATION	894.83		9(i)	
	Total		1001.78			

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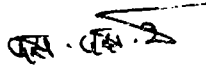
Financing of Additional Capitalisation

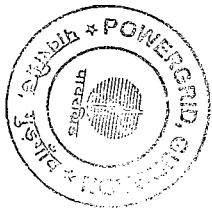
Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Financial Year (Starting from COD)	Projected/Actual					Admitted				
	From COD to31- Mar-2014	Year2	Year3	Year4	Year5& So on	Year1	Year2	Year3	Year4	Year5 & so on
1	2	3	4	5	6	7	8	9	10	11
Amount capitalised in Work/Equipment	195.82									
Financing Details										
Loan-1										
Loan-2										
Loan-3 and so on										
Total Loan	137.07									
Equity	58.75									
Internal Resources										
Others										
Total	195.82									

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Calculation of Depreciation Rate

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays :
 Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Sl.No.	Name of the Assets	Gross Block as on 31.03.2013 or as on COD, whichever is later	Addcap during the year	Gross Block as on 31.03.2014 or as on COD, whichever is later	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount up to 31.03.2014
	1	2	3	4	5	6=Col.4 X Col.5
2013-2014						
1	FREEHOLD LAND	0.00	0.00	0.00	0.00%	0.00
2	BUILDING	825.08	40.55	865.63	3.34%	4.71
3	TR LINE	0.00	0.00	0.00	5.28%	0.00
4	SUB STATION	3366.47	155.27	3521.74	5.28%	30.31
5	PLCC	0.00	0.00	0.00	6.33%	0.00
6	LEASEHOLD LAND	0.00	0.00	0.00	3.34%	0.00
	Total	4191.55	195.82	4387.37		35.01
Weighted Average Rate of Depreciation (%)						0.82
Elapsed Life						0

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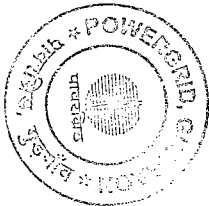
Statement of Depreciation

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Financial Year	Upto 2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Depreciation on Capital Cost														34.22
Depreciation on Additional Capitalisation														
Amount of Additional Capitalisation														195.82
Depreciation Amount														0.80
Details of FERV														
Amount of FERV on which depreciation charged														
Depreciation Amount														
Depreciation Recovered during the year														35.01
Advance against Depreciation recovered during the year														
Depreciation and Advance against Depreciation recovered during the year														35.01
Cumulative Depreciation And Advance against Depreciation recovered upto the year														35.01

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Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
IBRD V						
Gross Loan Opening <i>(Proposed)</i>						2934.09
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						2934.09
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						2934.09
Average Net Loan						2934.09
Rate of Interest on Loan		0%	0%	0%	0%	1.76%
Interest on Loan						51.64
Total						
Gross Loan Opening						2934.09
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						2934.09
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						2934.09
Average Net Loan						2934.09
Interest on Loan						51.64
Weighted Average Rate of Interest on Loans						1.7600%

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Calculation of Interest on Normative Loan

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)						
Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Gross Normative Loan - Opening						2,934.09
Cumulative repayment of Normative Loan upto previous year						
Net Normative loan - Opening						2,934.09
Increase/Decrease due to ACE during the Year						137.07
Repayments of Normative Loan during the year						35.01
Net Normative loan - Closing						3,036.15
Average Normative Loan						2,985.12
Weighted average Rate of Interest on actual Loans						1.7600%
Interest on Normative loan						8.76

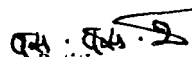
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Petitioner



Loans in Foreign Currency

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
IBRD V (USD in LACs) EXCHANGE RATE : 63.12						
Gross Loan Opening						46.48
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						46.48
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						46.48
Average Net Loan						46.48
Rate of Interest on Loan						1.76%
Interest on Loan						0.82


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Calculation of Interest on Working Capital

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

Transmission System associated with Krishnapatnam UMP-Part B

Name of the Transmission Element:

765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays :
Ant. :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.No.	Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
1	O and M Expenses						7.64
2	Maintenance Spares						13.74
3	Receivables						100.42
4	Total Working Capital						121.80
5	Rate of Interest						13.20
6	Interest on Working Capital						2.68

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Draw Down Schedule for Calculation of IDC & Financing Charges

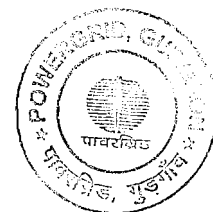
Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 240 MVAR Bus Reactor and associated bays : Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Draw Down Schedule for Calculation of IDC & Financing Charges										
Sl.No	Drawn Down	Quarter 1			Quarter 2			Quarter n(COD)		
Sl.No.	Particulars	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee
1.	Loans									
1.1	Foreign Loans									
1.2	Indian Loans									
1.2.1	IBRD V									
	Draw Down Amount									2934.09
	IDC									
	Financing Charges									
	Total Indian Loans									
	Draw Down Amount									2934.09
	IDC									0.00
	Financing Charges									0.00
	Total of Loans Drawn									
	Draw Down Amount									2934.09
	IDC									10.91
	Financing Charges									0.00
2	Equity									
2.1	Foreign Equity Drawn									
2.2	Indian Equity Drawn									0
	Total Equity Deployed									0.00

The project has been funded through domestic loans allocated from the common pool based on the phasing of expenditure and IDC has been booked accordingly. As the loans are allocated from common pool, quarter wise drawl is not furnished.

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Summary Sheet

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

Transmission System associated with Krishnapatnam UMPP-Part B

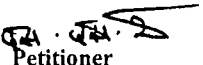
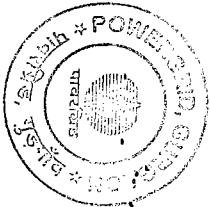
Name of the Transmission Element:

765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.No.	Particulars	Form No.	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014(Pro Rata)
1	2	3	4	5	6	7	8	9
1	Depreciation	FORM-12	0.00					43.00
2	Interest on Loan	FORM-13A	0.00					11.02
3	Return on Equity	FORM-01A	0.00					48.69
4	Interest On Working Capital	FORM-13B	0.00					3.72
5	O & M Expenses		0.00					26.18
6	Total		0.00					132.61

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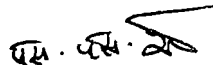
Calculation Of Return On Equity

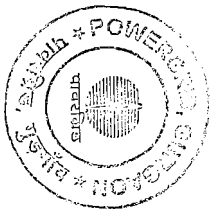
Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Equity as DOCO						1,540.91
Notional Equity for Add Cap						156.00
Total Equity						1,696.92
Return on Equity @ 17.481% 18.044%						48.69

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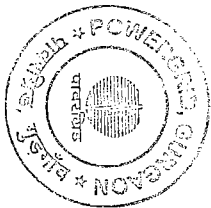
Details of Transmission Lines And Substations

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**

Transmission Lines										
Sl.No.	Name of Line	Type of Line AC/HVDC	S/C or D/C	No. of Sub- Conductors	Voltage level kV	Line Length (Km.)	Date of Commercial operation	Covered in the present petition		
								Yes/No	If No, petition No.	
Substations										
Sl.No.	Name of Sub-Station	Type of Substation Conventional /GIS/ HVDC Terminal/ HVDC Back to Back	Voltage level kV	No. of Transformers / Reactors/ SVC etc (with Capacity)	No. of Bays				Date of Commercial operation	Covered in the present petition
					765 KV	400 KV	220 KV	132 KV & below	Yes/No	If No, petition No.
1	Solapur(PG) New	Conventional	765/400 kV	1 X 1 No. 765/400 kV, 1500 MVA ICT-1 (1 ph. 500 MVA, 765/400 kV, 3 nos.)						
	ICT-1 Bay		765		1				01-FEB-2014	Yes
	ICT-1 Bay		400			1			01-FEB-2014	Yes
Total					1	1				

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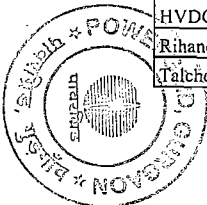

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Normative Parameters considered For tariff calculations

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**

Particulars	Unit	Year Ending March					
		Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
Base Rate of Return on Equity	%						17.481
Tax Rate	%						11.33
Target Availability	%						98.00
Normative O&M per Km.	Rs. lacs	Given Below					
Normative O&M per bay	Rs. lacs	Given Below					
Spares for WC as % of O&M	%						15.00
Receivables in Months for WC	months						2.00
Prime lending Rate of SBI as on 01-APR-2009	%						13.20
Norms for O&M expenditure for Transmission System							
		2009-10	2010-11	2011-12	2012-13	2013-14	
Norms for sub-station (Rs Lakh per bay)							
765 KV		73.36	77.56	81.99	86.68	91.64	
400 KV		52.40	55.40	58.57	61.92	65.46	
220 KV		36.68	38.78	41.00	43.34	45.82	
132 KV and below		26.20	27.70	29.28	30.96	32.73	
Norms for AC and HVDC Lines (Rs Lakhs per km)							
Single Circuit (Bundled,conductor with four or more sub-conductors)		0.537	0.568	0.600	0.635	0.671	
Single Circuit (Twin & Triple Conductor)		0.358	0.378	0.400	0.423	0.447	
Single Circuit (Single Conductor)		0.179	0.189	0.200	0.212	0.224	
Double Circuit (Bundled conductor with four or more sub-conductors)		0.940	0.994	1.051	1.111	1.174	
Double Circuit (Twin & Triple Conductor)		0.627	0.663	0.701	0.741	0.783	
Double Circuit (Single Conductor)		0.269	0.284	0.301	0.318	0.336	
Norm for HVDC Stations							
HVDC Back-to-back stations (Rs lakh per 500 MW)		443.00	468.00	495.00	523.00	553.00	
Rihand-Dadri HVDC bipole scheme (Rs Lakh)		1450.00	1533.00	1621.00	1713.00	1811.00	
Talcher-Kolar HVDC bipole scheme (Rs Lakh)		1699.00	1796.00	1899.00	2008.00	2122.00	



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Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Transmission Licensee :	POWER GRID CORPORATION OF INDIA	
Name of Region:	WESTERN REGION	
Name of the Project :	Transmission system associated with Krishnapatnam UMPP - Part B	
Name of Element:	765 / 400KV Solapur 55 alongwith 1 x 1500 MVA ICT-1 and its associated bays under Transmission System associated with Krishnapatnam UMPP - PART B	
Capital Cost Estimates		
Board of Director/ Agency approving the Capital cost estimates:	Board of Directors	
Date of approval of the Capital cost estimates:	9th Feb 2012	
	Present Day Cost	Completed Cost
Price level of approved estimates	As of End of 4th Qtr. Of the year 2011	As on Scheduled COD of the System
Foreign Exchange rate considered for the Capital cost estimates		
Capital Cost excluding IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)	5695.53	6779.08
Capital cost excluding IDC & FC (Rs. Lakh)	5695.53	6779.08
IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)	272.93	306.39
Total IDC & FC (Rs. Lakh)	272.93	306.39
Rate of taxes & duties considered		
Capital cost Including IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)		
Total Capital cost Including IDC & FC (Rs. Lakh)	5968.46	7085.47
Schedule of Commissioning		
(Scheduled DOCO elementwise)		
COD of Unit-1/Block-1	1-Nov-14	1-Feb-14
COD of Unit-1/Block-2		
COD of Unit-1/Block-3		
COD of Unit-1/Block-4		

Note:

1. Copy of approval letter should be enclosed.
2. Details of Capital cost are to be furnished as per FORM-5B or 5C as applicable.
3. Details of IDC & Financing Charges are to be furnished as per FORM-16.


PETITIONER



Element wise Break-up of Project Cost for Transmission System

Name of the Transmission Licensee : Power Grid Corporation of India Ltd.

Name of Region: Western Region-I

Name of the Project : KRISHNAPATNAM UMPP - PART B

Name of the Transmission Element: 765 / 400kV Solapur SS alongwith 1 x 1500 MVA ICT-1 and its associated bays

DOCO: 01.02.2014

Sl.No.	Break Down	As per Original Estimate	As on COD 01.02.2014 (Anticiated)	Liabilities / Provision	Variation	Reasons for Variation
1	2	3	4	5	6=(3-4-5)	7
A	TRANSMISSION LINE					
1.0	Preliminary works					
1.1	Design & Engineering					
1.2	Preliminary investigation, Right of way, forest clearance, PTCC, general civil works, compensation etc.		0.00	0.00	0.00	
1.3	Total Preliminary works	0.00	0.00	0.00	0.00	
2.0	Transmission Lines material					
2.1	Towers Steel		0.00	0.00	0.00	
2.2	Conductor		0.00	0.00	0.00	
2.3	Earth Wire		0.00	0.00	0.00	
2.4	Insulators		0.00	0.00	0.00	
2.5	Hardware Fittings		0.00	0.00	0.00	
2.6	Conductor & Earthwire accessories		0.00	0.00	0.00	
2.7	Spares		0.00	0.00	0.00	
2.8	Erection, Stringing & Civil works including foundation		0.00	0.00	0.00	
2.9	Total Transmission Lines material	0.00	0.00	0.00	0.00	
3.0	Taxes and Duties					
3.1	Custom Duty					
3.2	Other Taxes & Duties					
	Total Taxes & Duties	0.00	0.00	0.00	0.00	
	Total -Transmission lines	0.00	0.00	0.00	0.00	
B.	SUBSTATIONS					
4.0	Preliminary works & land					
4.1	Design & Engineering				0.00	
4.2	Land	100.00	205.31	0.00	-105.31	
4.3	Site preparation	360.00	131.96	79.45	148.59	
	Total Preliminary works & land	460.00	337.27	79.45	43.28	
5.0	Civil Works					
5.1	Control Room & Office Building including HVAC	105.00	38.16	61.20	5.64	
5.2	Township & Colony	0.00	0.00	0.00	0.00	
5.3	Roads and Drainage	0.00	0.00	0.00	0.00	
5.4	Foundation for structures	100.94	393.97	295.37	-588.41	
5.5	Misc. civil works	250.00	76.17	39.85	133.99	
	Total Civil Works	455.94	508.30	396.42	-448.78	
6.0	Substation Equipments					
6.1	Switchgear (CT,PT, Circuit Breaker, Isolator etc)	681.39	763.99	103.95	-186.55	Variation is due to increase in the awarded cost as compared to FR.
6.2	Transformers	3248.06	2801.00	611.26	-164.19	Variation is due to increase in the awarded cost and consideration of spare & type test charges.
6.3	Compensating Equipment(Reactor, SVCs etc)	0.00	0.00	0.00	0.00	
6.4	Control, Relay & Protection Panel	91.94	93.89	12.77	-14.73	There is no scope change and Variation is due to increase in the awarded cost and consideration of augmentation of existing busbar along with ICT#1, as ICT#1 is planned to be charged before ICT#2
6.5	PLCC	0.00	0.00	0.00	0.00	
6.6	HVDC /FSC package	0.00	0.00	0.00	0.00	
6.7	Bus Bars/ conductors/Insulators	164.12	150.64	20.50	-7.02	Variation is due to increase in the awarded cost and consideration of future jack bus along with ICT#1, as ICT#1 is planned to be charged before ICT#2
6.8	outdoor lighting	1.00	0.61	0.08	0.30	
6.9	Emergency DG set	0.00	3.07	0.42	-3.48	
6.10	Grounding System	0.00	0.00	0.00	0.00	
6.11	Structure for Switch yard	86.93	159.18	21.66	-93.91	Variation is due to increase in the awarded cost as compared to FR.
6.12	Auxiliary System	84.26	118.17	16.08	-49.99	Variation is due to increase in the awarded cost as compared to FR.
	Total Substation Equipments	4357.70	4090.55	786.71	-519.57	
7.0	Spares (incl.in eqpt. cost)					
8.0	Taxes and Duties					
8.1	Custom Duty		0.00	0.00	0.00	
8.2	Other Taxes & Duties		0.00	0.00	0.00	
8.3	Total Taxes & Duties		0.00	0.00	0.00	
	Total (Sub-station)	5273.64	4936.13	1262.59	-925.07	

(Rs in Lakhs)





24.04.2014

Sl.No.	Break Down	As per Original Estimate	As on COD 01.02.2014 (Anticipated)	Liabilities / Provision	Variation	Reasons for Variation
9.0	Construction and pre-commissioning expenses					
9.1	Site supervision & site admn.etc		0.00	0.00	0.00	
9.2	Tools and Plants		0.00	0.00	0.00	
9.3	construction insurance		0.00	0.00	0.00	
	expenses	0.00	0.00	0.00	0.00	
10.0	Overheads					
10.1	Establishment	421.89	171.85	0.00	250.04	
10.2	Audit & Accounts		0.00	0.00	0.00	
10.3	Contingency		0.00	0.00	0.00	
	Total Overheads	421.89	171.85	0.00	250.04	
11.0	Project cost without IDC, FC, FERV & Hedging cost	5695.53	5107.98	1262.59	-675.03	
12.0	Total Cost (Plant & Equipment)					
12.1	Interest During Construction (IDC)	272.93	28.40	0.00	244.53	
12.2	Financing Charges (FC)		0.00	0.00	0.00	
12.3	Foreign Exchange Rate Variation (FERV)		0.00	0.00	0.00	
12.4	Hedging Cost		0.00	0.00	0.00	
13	Project cost including IDC, FC, FERV & Hedging cost	5968.46	5136.38	1262.59	-430.50	

Break-up of Construction / Supply / Service packages

FORM - 5 C

Name of the Transmission Licensee : Power Grid Corporation of India Ltd.

Name of the Region : Western Region-I

Name of the project : TRANSMISSION SYSTEM Associated with Krishnapatnam UMPP - PART B

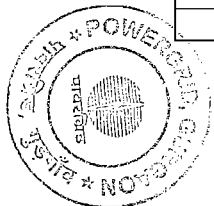
Name of the Transmission Element : 765/400kV Solapur SS alongwith 1x1500MVA ICT1 and its associated bays.

Anticipated DOCO: 01.02.2014

(Rs in Lakhs)

SL	Package / Scope of works	LOA NO	Date of award	No of bids received	Firm or with escalation in prices	Expenditure excluding Taxes & Duties as on COD	Taxes & duties and IEDC	IDC, FC, FERV & Hedging cost	Sub-total	FROM 01.02.2014 TO 31.03.2014	FROM 01.04.2014 TO 31.03.2015
1	New 765/400 kV substation at Sholapur (P260 SS02) - Supply	CC-CS/147-WR1/SS-1334/1/G5/NOA-I/4316	30.05.2012	7	With Escalation	287.73	0.00	0.00	287.73	16.27	33.78
2	New 765/400 kV substation at Sholapur (P260 SS02) - Supply	CC-CS/147-WR1/SS-1334/1/G5/NOA-II/4317	30.05.2012	7	With Escalation	683.01	14.52	1.52	699.05	48.56	0.00
3	New 765/400 kV substation at Sholapur (P260 SS02) - Erection	CC-CS/147-WR1/SS-1334/1/G5/NOA-III/4318	30.05.2012	7	With Escalation	353.85	20.03	8.60	382.48	107.71	24.82
4	Circuit Breaker for Solapur s/s	CC-CS/256-WR1/CB-1507/3/G10/NOA/4331	19.06.2012	3	With Escalation	196.41	0.44	0.04	196.89	7.19	35.93
5	765 KV Auto Transformer : Supply, Erection, Testing & Commissioning of 7X500 MVA, 1-phase Transformer at 765/400 kV Sholapur S/S - Supply	CC-CS/147-WR1/TR-1337/1/G4/NOA-I/4342	26.06.2012	6	With Escalation	2751.00	3.35	0.86	2755.21	180.53	325.73
6	765 KV Auto Transformer : Supply, Erection, Testing & Commissioning of 7X500 MVA, 1-phase Transformer at 765/400 kV Sholapur S/S - Erection	CC-CS/147-WR1/TR-1337/1/G4/NOA-II/4343	26.06.2012	6	With Escalation	100.00	93.81	123.82	317.63	100.78	200.78
7	Site Awarded Packages				FIRM	451.60	39.70	6.10	497.39	58.96	101.53
	TOTAL SOLAPUR S/S					5275.20	211.56	147.04	5633.77	578.97	844.10

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DR. CH. S.

Financial package upto COD

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**
 Project Cost as on COD/31.03.2009: **5136.38 (Rs. in Lakhs)**
 Date of Commercial Operation of the Transmission element: **01-FEB-2014** (ant)

(Rs in Lacs)

Transmission Lines					
	Financial Package as apportioned/ Approved		Financial Package as on COD		As Admitted on COD
	Currency and Amount		Currency and Amount		Currency and Amount
Loans					
Loans - Domestic	INR	4177.60	INR	0.00	
Loans - Foreign			INR	3595.47	
Total Loans		4177.60		3595.47	
Equity					
Foreign					
Domestic	INR	1790.86	INR	1540.91	
Notional				0.00	
Total Equity		1790.86		1540.91	
Debt Equity Ratio		69.99:30.01		70.00:30.00	
Total Cost		5968.46		5136.38	
	Debt	Equity	Total		
Add Cap For 2013-2014			520.01		
Add Cap For 2013-2014	Actual	Normative			
Debt		364.01			
Equity		156.00			
Total		520.01			
Total Capital Cost with ADDCAP upto 01.04.2014			5656.39		

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Statement of Additional Capitalisation after COD

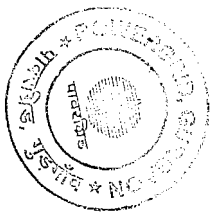
Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: WESTERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: 765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014
 COD: 01-FEB-2014

(Rs in Lacs)

Sl.No.	Year	Work/Equipment proposed to be added after COD upto cut off date/ beyond cut off date	Amount capitalised and proposed to be capitalised	Justification as per propose	Regulation under which covered	Admitted Cost
1	2	3	4	5	6	7
1.	2013-2014	BUILDING	207.83		9(i)	
		SUB STATION	312.18		9(i)	
	Total		520.01			
2.	2014-2015	BUILDING	268.04		9(i)	
		SUB STATION	474.53		9(i)	
	Total		742.57			

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Financing of Additional Capitalisation

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Financial Year (Starting from COD)	Projected/Actual					Admitted				
	From COD to31- Mar-2014	Year2	Year3	Year4	Year5& So on	Year1	Year2	Year3	Year4	Year5 & so on
1	2	3	4	5	6	7	8	9	10	11
Amount capitalised in Work/Equipment	520.01									
Financing Details										
Loan-1										
Loan-2										
Loan-3 and so on										
Total Loan	364.01									
Equity	156.00									
Internal Resources										
Others										
Total	520.01									

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Calculation of Depreciation Rate

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

Transmission System associated with Krishnapatnam UMPP-Part B

Name of the Transmission Element:

765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.No.	Name of the Assets	Gross Block as on 31.03.2013 or as on COD, whichever is later	Addecap during the year	Gross Block as on 31.03.2014 or as on COD, whichever is later	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount up to 31.03.2014
	1	2	3	4	5	6=Col.4 X Col.5
2013-2014						
1	FREEHOLD LAND	222.19	0.00	222.19	0.00%	0.00
2	BUILDING	680.55	207.83	888.38	3.34%	4.37
3	TR LINE	0.00	0.00	0.00	5.28%	0.00
4	SUB STATION	4233.64	312.18	4545.82	5.28%	38.63
5	PLCC	0.00	0.00	0.00	6.33%	0.00
6	LEASEHOLD LAND	0.00	0.00	0.00	3.34%	0.00
	Total	5136.38	520.01	5656.39		43.00
Weighted Average Rate of Depreciation (%)						0.80
Elapsed Life						0

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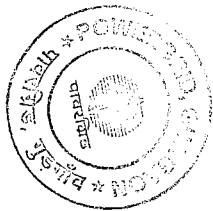
Statement of Depreciation

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Financial Year	Upto 2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Depreciation on Capital Cost														41.04
Depreciation on Additional Capitalisation														
Amount of Additional Capitalisation														520.01
Depreciation Amount														1.95
Details of FERV														
Amount of FERV on which depreciation charged														
Depreciation Amount														
Depreciation Recovered during the year														43.00
Advance against Depreciation recovered during the year														
Depreciation and Advance against Depreciation recovered during the year														43.00
Cumulative Depreciation And Advance against Depreciation recovered upto the year														43.00

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Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
IBRD V <i>(Proposed)</i>						
Gross Loan Opening						3595.47
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						3595.47
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						3595.47
Average Net Loan						3595.47
Rate of Interest on Loan		0%	0%	0%	0%	1.76%
Interest on Loan						63.28
Total						
Gross Loan Opening						3595.47
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						3595.47
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						3595.47
Average Net Loan						3595.47
Interest on Loan						63.28
Weighted Average Rate of Interest on Loans						1.7600%

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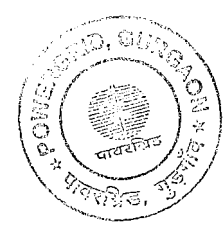
Calculation of Interest on Normative Loan

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Laacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Gross Normative Loan - Opening						3,595.47
Cumulative repayment of Normative Loan upto previous year						
Net Normative loan - Opening						3,595.47
Increase/Decrease due to ACE during the Year						364.01
Repayments of Normative Loan during the year						43.00
Net Normative loan - Closing						3,916.47
Average Normative Loan						3,755.97
Weighted average Rate of Interest on actual Loans						1.7600%
Interest on Normative loan						11.02

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Loans in Foreign Currency

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
IBRD V (USD in LACs) EXCHANGE RATE : 63.12						
Gross Loan Opening						56.96
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						56.96
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						56.96
Average Net Loan						56.96
Rate of Interest on Loan						1.76%
Interest on Loan						1.00

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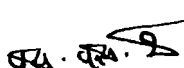


Calculation of Interest on Working Capital

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
Name of Region: WESTERN REGION
Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
Name of the Transmission Element: 765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.No.	Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
1	O and M Expenses						13.09
2	Maintenance Spares						23.56
3	Receivables						132.61
4	Total Working Capital						169.26
5	Rate of Interest						13.20
6	Interest on Working Capital						3.72


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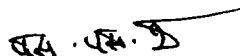
Draw Down Schedule for Calculation of IDC & Financing Charges

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/S alongwith 1X1500 MVA ICT- 1 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Draw Down Schedule for Calculation of IDC & Financing Charges										
Sl.No	Drawn Down	Quarter 1			Quarter 2			Quarter n(COD)		
Sl.No.	Particulars	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee
1.	Loans									
1.1	Foreign Loans									
1.2	Indian Loans									
1.2.1	IBRD V									
	Draw Down Amount									3595.47
	IDC									
	Financing Charges									
	Total Indian Loans									
	Draw Down Amount									3595.47
	IDC									0.00
	Financing Charges									0.00
	Total of Loans Drawn									
	Draw Down Amount									3595.47
	IDC									28.40
	Financing Charges									0.00
2	Equity									
2.1	Foreign Equity Drawn									
2.2	Indian Equity Drawn									0
	Total Equity Deployed									0.00

The project has been funded through domestic loans allocated from the common pool based on the phasing of expenditure and IDC has been booked accordingly. As the loans are allocated from common pool, quarter wise drawl is not furnished.


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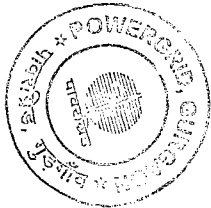
Summary Sheet

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: WESTERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: 765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.No.	Particulars	Form No.	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014(Pro Rata)
1	2	3	4	5	6	7	8	9
1	Depreciation	FORM-12	0.00					44.71
2	Interest on Loan	FORM-13A	0.00					10.62
3	Return on Equity	FORM-01A	0.00					46.93
4	Interest On Working Capital	FORM-13B	0.00					3.71
5	O & M Expenses		0.00					26.18
6	Total		0.00					132.15

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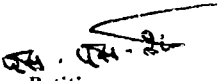


Calculation Of Return On Equity

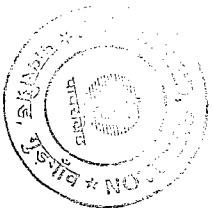
Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Equity as DOCO						1,481.96
Notional Equity for Add Cap						157.24
Total Equity						1,639.20
Return on Equity @ 17.481% 18.044%						46.93


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Details of Transmission Lines And Substations

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**

Transmission Lines											
Sl.No.	Name of Line	Type of Line AC/HVDC	S/C or D/C	No. of Sub- Conductors	Voltage level kV	Line Length (Km.)	Date of Commercial operation	Covered in the present petition			
								Yes/No	If No, petition No.		
Substations											
Sl.No.	Name of Sub-Station	Type of Substation Conventional /GIS/ HVDC Terminal/ HVDC Back to Back	Voltage level kV	No. of Transformers / Reactors/ SVC etc (with Capacity)	No. of Bays				Date of Commercial operation	Covered in the present petition	
					765 KV	400 KV	220 KV	132 KV & below		Yes/No	If No, petition No.
1	Solapur(PG) New	Conventional	765/400 kV	1 X 1 No. 765/400 kV, 1500 MVA ICT-2 (1 ph. 500 MVA, 765/400 kV, 3 nos.)							
	ICT-II BAY		765		1				01-FEB-2014	Yes	
	ICT-II Bay		400			1			01-FEB-2014	Yes	
Total					1	1					

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Normative Parameters considered For tariff calculations

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**

Particulars	Unit	Year Ending March					
		Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
Base Rate of Return on Equity	%						17.481
Tax Rate	%						11.33
Target Availability	%						98.00
Normative O&M per Km.	Rs. lacs	Given Below					
Normative O&M per bay	Rs. lacs	Given Below					
Spares for WC as % of O&M	%						15.00
Receivables in Months for WC	months						2.00
Prime lending Rate of SBI as on 01-APR-2009	%						13.20
Norms for O&M expenditure for Transmission System							
		2009-10	2010-11	2011-12	2012-13	2013-14	
Norms for sub-station (Rs Lakh per bay)							
765 KV		73.36	77.56	81.99	86.68	91.64	
400 KV		52.40	55.40	58.57	61.92	65.46	
220 KV		36.68	38.78	41.00	43.34	45.82	
132 KV and below		26.20	27.70	29.28	30.96	32.73	
Norms for AC and HVDC Lines (Rs Lakhs per km)							
Single Circuit (Bundled conductor with four or more sub-conductors)		0.537	0.568	0.600	0.635	0.671	
Single Circuit (Twin & Triple Conductor)		0.358	0.378	0.400	0.423	0.447	
Single Circuit (Single Conductor)		0.179	0.189	0.200	0.212	0.224	
Double Circuit (Bundled conductor with four or more sub-conductors)		0.940	0.994	1.051	1.111	1.174	
Double Circuit (Twin & Triple Conductor)		0.627	0.663	0.701	0.741	0.783	
Double Circuit (Single Conductor)		0.269	0.284	0.301	0.318	0.336	
Norms for HVDC Stations							
HVDC Back-to-back stations (Rs lakh per 500 MW)		443.00	468.00	495.00	523.00	553.00	
Rihand-Dadri HVDC bipole scheme (Rs Lakh)		1450.00	1533.00	1621.00	1713.00	1811.00	
Talcher-Kolar HVDC bipole scheme (Rs Lakh)		1699.00	1796.00	1899.00	2008.00	2122.00	

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 Petitioner

**PART-III
FORM-5A**

Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Transmission Licensee :	POWER GRID CORPORATION OF INDIA	
Name of Region:	WESTERN REGION	
Name of the Project :	Transmission system associated with Krishnapatnam UMPP - Part B	
Name of Element:	765 / 400kV Solapur SS alongwith 1 x 1500 MVA ICT-2 and its associated bays under Transmission System associated with Krishnapatnam UMPP - PART B	
Capital Cost Estimates		
Board of Director/ Agency approving the Capital cost estimates:	Board of Directors	
Date of approval of the Capital cost estimates:	9th Feb 2012	
	Present Day Cost	Completed Cost
Price level of approved estimates	As of End of 4th Qtr. Of the year 2011	As on Scheduled COD of the System
Foreign Exchange rate considered for the Capital cost estimates		
Capital Cost excluding IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)	5812.53	6918.34
Capital cost excluding IDC & FC (Rs. Lakh)	5812.53	6918.34
IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)	278.54	312.69
Total IDC & FC (Rs. Lakh)	278.54	312.69
Rate of taxes & duties considered		
Capital cost Including IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)		
Total Capital cost Including IDC & FC (Rs. Lakh)	6091.06	7231.02
Schedule of Commissioning		
(Scheduled DOCO elementwise)		
COD of Unit-1/Block-1	1-Nov-14	1-Feb-14
COD of Unit-1/Block-2		(Anticipated)
COD of Unit-1/Block-3		
COD of Unit-1/Block-4		
Note:	<p>1. Copy of approval letter should be enclosed. 2. Details of Capital cost are to be furnished as per FORM-5B or 5C as applicable. 3. Details of IDC & Financing Charges are to be furnished as per FORM-16.</p>	

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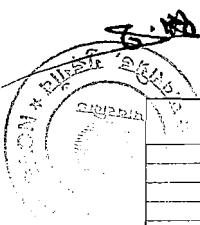
Element wise Break-up of Project Cost for Transmission System

Name of Region: Western Region-1
Name of the Transmission Licensee: Power Grid Corporation of India Ltd.

Name of the Project: KRISHNAPATNAM UMP (PART-B)
Name of the Transmission Element: 765 / 400KV Solapur SS alongwith 1 x 1500 MVA ICT-2 and its associated bays

DDCO: 01.02.2014

Sl.No.	Break Down	As per Original Estimate 01.02.2014	As on COD (Anticipated)	Provision / Liabilities	Variation	Reasons for Variation	TRANSMISSION LINE	
							1	2
1.0	Preliminary works							
1.1	Design & Engineering							
1.2	Preliminary investigation, Right of way, forest clearance, P.T.C., general civil works, compensation etc.				0.00			
1.3	Total Preliminary works				0.00			
2.0	Transmission Lines material							
2.1	Towers Steel							
2.2	Conductor							
2.3	Earth Wire							
2.4	Insulators							
2.5	Hardware Fittings							
2.6	Conductor & Earthwire accessories							
2.7	Spares							
2.8	Erection, stringing & Civil works including foundation							
2.9	Total Transmission Lines material				0.00			
3.0	Taxes and Duties							
3.1	Custom Duty							
3.2	Other Taxes & Duties							
	Total Taxes & Duties				0.00			
	Total -Transmission lines				0.00			
B. SUBSTATIONS								
ICT 2								
4.0	Preliminary works & land							
4.1	Design & Engineering							
4.2	Land							
4.3	Site preparation							
	Total Preliminary works & land				0.00			
5.0	Civil Works							
5.1	Control Room & Office Building including HVAC							
5.2	Township & Colony							
5.3	Roads and Drainage							
5.4	Foundation for structures							
5.5	Misc. civil works							
	Total Civil Works				522.57			
6.0	Substation Equipments							
6.1	Switchgear (CT, PT, Circuit Breaker, Isolator etc)							
6.2	Transformers							
6.3	Compensating Equipment (Reactor, SVCs etc)							
6.4	Control, Relay & Protection Panel							
6.5	PLCC							
6.6	HVDC /FSC package							
6.7	Bus Bars/ conductors/insulators							
6.8	Outdoor Lighting							
6.9	Emergency DC set							
6.10	Grounding System							
6.11	Structure for Switch yard							
6.12	Auxiliary System							
	Total Substation Equipments				4509.64			
7.0	Spares (incl. in eqpt cost)							
8.0	Taxes and Duties							
8.1	Custom Duty							
8.2	Other Taxes & Duties							
8.3	Total Taxes & Duties							
	Total (Sub-station)				1519.89			
9.0	Construction and pre-commissioning expenses							
9.1	Site supervision & site admn. etc.							
9.2	Tools and Plants							
9.3	Construction Insurance							
	Total Construction and pre commissioning expenses				0.00			
10.0	Overheads							
10.1	Establishment							
10.2	Audit & Accounts							
10.3	Contingency							
	Total Overheads				154.54			
11.0	Project cost without IDC, FC, FERV & Hedging cost				4913.15			
	Hedging cost							
	Total Cost (Plant & Equipment)				4913.15			
12.0	Interest During Construction (IDC)							
12.1	Financing Charges (FC)							
12.2	Foreign Exchange Rate Variation (FERV)							
12.3	Hedging Cost							
13	Project cost including IDC, FC, FERV & Hedging cost				1519.89			



Break-up of Construction / Supply / Service packages

FORM - 5 C

Name of the Transmission Licensee : Power Grid Corporation of India Ltd.
 Name of the Region : Western Region-I
 Name of the project : TRANSMISSION SYSTEM Associated with Krishnapatnam UMPP - PART B
 Name of the Transmission Element : 1x1500 MVA ICT2 at 765/400kV Solapur SS
 Anticipated DOCO: 01.02.2014

Rs in lakhs

SL	Package / Scope of works	Party	LOA NO	Date of award	No of bids received	Firm or with escalation in prices	Expenditure excluding Taxes & Duties as on COD	Taxes & duties and IEDC	IDC, FC, FERV & Hedging cost	Sub-total	FROM 01.02.2014 TO 31.03.2014	FROM 01.04.2014 TO 31.03.2015
1	New 765/400 kV substation at Sholapur (P260 SS02) - Supply	ABB	CC-CS/147-WR1/SS-1334/1/G5/NOA-II/4316	30.05.2012	7	With Escalation	324.85	16.39	1.69	342.94	19.84	38.30
2	New 765/400 kV substation at Sholapur (P260 SS02) - Supply	ABB	CC-CS/147-WR1/SS-1334/1/G5/NOA-II/4317	30.05.2012	7	With Escalation	402.30	6.25	4.37	412.92	7.95	0.00
3	New 765/400 kV substation at Sholapur (P260 SS02) - Erection	ABB	CC-CS/147-WR1/SS-1334/1/G5/NOA-III/4318	30.05.2012	7	With Escalation	211.63	10.39	1.58	223.61	27.42	238.25
4	Circuit Breaker for Solapur s/s	Siemens	CC-CS/256-WR1/CB-1507/3/G10/NOA/4331	19.06.2012	3	With Escalation	148.51	3.35	0.86	152.72	43.12	47.91
5	765 KV Auto Transformer : Supply, Erection, Testing & Commissioning of 7X500 MVA, 1-phase Transformer at 765/400 kV Sholapur S/S - Supply	JV of ABB, India & ABB AB, Sweden	CC-CS/147-WR1/TR-1337/1/G4/NOA-II/4342	26.06.2012	6	With Escalation	3468.60	118.15	155.94	3742.68	230.51	411.01
6	765 KV Auto Transformer : Supply, Erection, Testing & Commissioning of 7X500 MVA, 1-phase Transformer at 765/400 kV Sholapur S/S - Erection	JV of ABB, India & ABB AB, Sweden	CC-CS/147-WR1/TR-1337/1/G4/NOA-II/4343	26.06.2012	6	With Escalation	65.00	0.00	0.00	65.00	195.28	260.28
TOTAL SOLAPUR S/S							4620.89	154.54	164.44	4939.86	524.13	995.76

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Financial package upto COD

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**
 Project Cost as on COD/31.03.2009: **4939.86 (Rs. in Lakhs)**
 Date of Commercial Operation of the Transmission element: **01-FEB-2014** (Ant)

(Rs in Lacs)

Transmission Lines						
	Financial Package as apportioned/ Approved		Financial Package as on COD		As Admitted on COD	
	Currency	Amount	Currency	Amount	Currency	Amount
Loans						
Loans - Domestic	INR	4263.74	INR	0.00		
Loans - Foreign			INR	3457.90		
Total Loans		4263.74		3457.90		
Equity						
Foreign						
Domestic	INR	1827.32	INR	1481.96		
Notional				0.00		
Total Equity		1827.32		1481.96		
Debt Equity Ratio		70.00:30.00		70.00:30.00		
Total Cost		6091.06		4939.86		
	Debt	Equity	Total			
Add Cap For 2013-2014			524.13			
Add Cap For 2013-2014	Actual	Normative				
Debt		366.89				
Equity		157.24				
Total		524.13				
Total Capital Cost with ADDCAP upto 01.04.2014			5463.99			

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Statement of Additional Capitalisation after COD

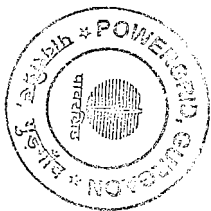
Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: WESTERN REGION
 Name of the Project: Transmission System associated with Krishnapatnam UMPP-Part B
 Name of the Transmission Element: 765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014
 COD: 01-FEB-2014

(Rs in Lacs)

Sl.No.	Year	Work/Equipment proposed to be added after COD upto cut off date/ beyond cut off date	Amount capitalised and proposed to be capitalised	Justification as per propose	Regulation under which covered	Admitted Cost
1	2	3	4	5	6	7
1.	2013-2014	BUILDING	136.80		9(i)	
		SUB STATION	387.33		9(i)	
	Total		524.13			
2.	2014-2015	BUILDING	385.77		9(i)	
		SUB STATION	609.99		9(i)	
	Total		995.76			

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Financing of Additional Capitalisation

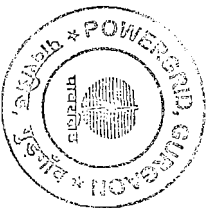
Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Financial Year (Starting from COD)	Projected/Actual					Admitted				
	From COD to31- Mar-2014	Year2	Year3	Year4	Year5& So on	Year1	Year2	Year3	Year4	Year5 & so on
1	2	3	4	5	6	7	8	9	10	11
Amount capitalised in Work/Equipment	524.13									
Financing Details										
Loan-1										
Loan-2										
Loan-3 and so on										
Total Loan	366.89									
Equity	157.24									
Internal Resources										
Others										
Total	524.13									

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Calculation of Depreciation Rate

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

Transmission System associated with Krishnapatnam UMPP-Part B

Name of the Transmission Element:

765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.No.	Name of the Assets	Gross Block as on 31.03.2013 or as on COD, whichever is later	Addcap during the year	Gross Block as on 31.03.2014 or as on COD, whichever is later	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount up to 31.03.2014
	1	2	3	4	5	6=Col.4 X Col.5
2013-2014						
1	FREEHOLD LAND	0.00	0.00	0.00	0.00%	0.00
2	BUILDING	260.34	136.80	397.14	3.34%	1.83
3	TR LINE	0.00	0.00	0.00	5.28%	0.00
4	SUB STATION	4679.52	387.33	5066.85	5.28%	42.88
5	PLCC	0.00	0.00	0.00	6.33%	0.00
6	LEASEHOLD LAND	0.00	0.00	0.00	3.34%	0.00
	Total	4939.86	524.13	5463.99		44.71
Weighted Average Rate of Depreciation (%)						0.86
Elapsed Life						0

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Statement of Depreciation

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of the Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**

Financial Year	Upto 2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1														
Depreciation on Capital Cost														42.63
Depreciation on Additional Capitalisation														524.13
Amount of Additional Capitalisation														2.09
Depreciation Amount														
Details of FERV														
Amount of FERV on which depreciation charged														
Depreciation Amount														
Depreciation Recovered during the year														44.71
Advance against Depreciation recovered during the year														
Depreciation and Advance against Depreciation recovered during the year														44.71
Cumulative Depreciation And Advance against Depreciation recovered upto the year														44.71

(Rs in Lacs)

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Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**

Particulars	(Rs in Lacs)					
	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
IBRD V (Proposed)						
Gross Loan Opening						3457.90
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						3457.90
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						3457.90
Average Net Loan						3457.90
Rate of Interest on Loan		0%	0%	0%	0%	1.76%
Interest on Loan						60.86
Total						
Gross Loan Opening						3457.90
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						3457.90
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						3457.90
Average Net Loan						3457.90
Interest on Loan						60.86
Weighted Average Rate of Interest on Loans						1.7600%

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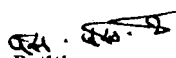


Calculation of Interest on Normative Loan

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
Gross Normative Loan - Opening						3,457.90
Cumulative repayment of Normative Loan upto previous year						
Net Normative loan - Opening						3,457.90
Increase/Decrease due to ACE during the Year						366.89
Repayments of Normative Loan during the year						44.71
Net Normative loan - Closing						3,780.08
Average Normative Loan						3,618.99
Weighted average Rate of Interest on actual Loans						1.7600%
Interest on Normative loan						10.62


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Loans in Foreign Currency

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7
IBRD V (USD in LACs) EXCHANGE RATE : 63.12						
Gross Loan Opening						54.78
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						54.78
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						54.78
Average Net Loan						54.78
Rate of Interest on Loan						-1.76%
Interest on Loan						0.96

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Calculation of Interest on Working Capital

Name of the Transmission Licensee: -

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

Transmission System associated with Krishnapatnam UMPP-Part B

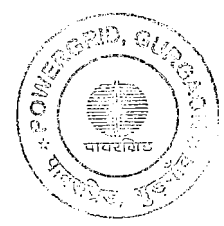
Name of the Transmission Element:

765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014

(Rs in Lacs)

Sl.N o.	Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
1	2	3	4	5	6	7	8
1	O and M Expenses						13.09
2	Maintenance Spares						23.56
3	Recievables						132.15
4	Total Working Capital						168.80
5	Rate of Interest						13.20
6	Interest on Working Capital						3.71


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Draw Down Schedule for Calculation of IDC & Financing Charges

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **WESTERN REGION**
 Name of the Project: **Transmission System associated with Krishnapatnam UMPP-Part B**
 Name of the Transmission Element: **765/400 kV Solapur S/s alongwith 1x1500 MVA ICT-2 and its associated bays :Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

Draw Down Schedule for Calculation of IDC & Financing Charges										
Sl.No	Drawn Down	Quarter 1			Quarter 2			Quarter n(COD)		
Sl.No.	Particulars	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee	Quantum In Foreign Currency	Exchange Rate on Draw Down Date	Amount In Indian Rupee
1.	Loans									
1.1	Foreign Loans									
1.2	Indian Loans									
1.2.1	IBRD V									
	Draw Down Amount									3457.90
	IDC									
	Financing Charges									
	Total Indian Loans									
	Draw Down Amount									3457.90
	IDC									0.00
	Financing Charges									0.00
	Total of Loans Drawn									
	Draw Down Amount									3457.90
	IDC									26.71
	Financing Charges									0.00
2	Equity									
2.1	Foreign Equity Drawn									
2.2	Indian Equity Drawn									0
	Total Equity Deployed									0.00

The project has been funded through domestic loans allocated from the common pool based on the phasing of expenditure and IDC has been booked accordingly. As the loans are allocated from common pool, quarter wise drawl is not furnished.

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CHECK LIST
PART-III

Name of the Company

Power Grid Corporation of India Ltd.

Name of the Project :

Transmission System associated with Krishnapatnam
UMPP-Part-B

Name of the Transmission Element:

Raichur-Solapur line and other four elements

Checklist of Forms and other information/ documents for tariff filing for Transmission System

Form No.	Tariff Filing Formats (Transmission)	Tick
FORM- 1	Summary Sheet	Yes
FORM-1A	Calculation of Return on Equity	Yes
FORM-2	Details of Transmission Lines and Substations	Yes
FORM-3	Normative Parameters considered for tariff calculations	Yes
FORM- 4	Details of Foreign loans	Not applicable and hence not enclosed
FORM-4A	Details of Foreign Equity	Not applicable and hence not enclosed
FORM-5	Abstract of Admitted Cost for the existing Projects	Not applicable and hence not enclosed
FORM-5A	Abstract of Project Cost Estimates and Schedule of Commissioning for the new Projects	Yes
FORM-5B	Element wise Break-up of Project Cost for Transmission System	Yes
FORM-5C	Break-up of Construction/Supply/Service packages	Yes
FORM-5D	Details of elementwise cost	Yes
FORM-6	Financial Package upto COD	Yes
FORM- 7	Details of Project Specific Loans	Not applicable and hence not enclosed
FORM- 8	Details of Allocation of corporate loans to various transmission elements	Not applicable and hence not enclosed
FORM-9	Statement of Additional Capitalisation after COD	Yes
FORM-9A	Statement of capital cost	Yes
FORM- 10	Financing of Additional Capitalisation	Yes
FORM- 11	Calculation of Depreciation Rate	Yes
FORM- 12	Statement of Depreciation	Yes
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	Yes
FORM- 13A	Calculation of Interest on Normative Loans	Yes
FORM-13B	Calculation of Interest on Working Capital	Yes
FORM- 14	Draw down Schedule for Calculation of IDC & Financing Charges	Yes
FORM-14A	Actual Cash Expenditure	Not applicable and hence not enclosed

Other Information/ Documents		
Sl. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Station setup by a company making tariff application for the first time to CERC)	- Not Applicable -
2	Regionwise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the new Transmission System & for the relevant years.	Consolidated Balancesheet of POWERGRID & Regional Balance Sheet of SR for FY 2012-13 shall be submitted shortly
3	Copies of relevant loan Agreements	
4	Copies of the approval of Competent Authority for the Capital Cost and	
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	Equity contribution by GOI (69.42%) and others(30.58%)
6	Copies of the BPTA/TSA with the beneficiaries, if any	Covered in petition
7	Detailed note giving reasons of time and cost over run, if applicable.	Covered in petition
8	Any other relevant information, (Please specify)	-Not Applicable -

Handwritten signature/initials

