

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 anticipated DOCO to 31.03.2014 for Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line (Ant. DOCO : 01.02.2014) under Transmission System associated with Synchronous Inter-connection between SR and WR in SR & WR.

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 petition under Regulation-86 for approval of transmission tariff for the above said assets under Transmission System associated with Synchronous Inter-connection between SR and WR in SR & WR.

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 respondents (beneficiaries of **Western & Southern 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., ----- **RESPONDENTS**
(KPTCL), Kaveri Bhavan, Bangalore – 560 009
Represented by its Chairman
- 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
Government of Goa
Vidyuti Bhawan, Panaji, Goa 403001
Represented by Chief Engineer (Electrical)
- 6 Electricity Department
Govt of Pondicherry,
Pondicherry - 605001
Represented by its Chief Secretary
- 7 Eastern Power Distribution Company of Andhra Pradesh
Limited (APEPDCL)
APEPDCL, P&T Colony,
Seethmmadhara, VISHAKHAPATNAM
Andhra Pradesh,
Represented by its Managing Director
- 8 Southern Power Distribution Company of Andhra
Pradesh Limited (APSPDCL)
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
TIRUPATI-517 501,
Chittoor District, Andhra Pradesh
Represented by Its Managing Director
- 9 Central Power Distribution Company of Andhra Pradesh
limited (APCPDCL)
Corporate Office, Mint Compound,
HYDERABAD – 500 063
Andhra Pradesh
Represented by Its Managing Director
- 10 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
- 11 Bangalore Electricity Supply Company Ltd.,
(BESCOM), Corporate Office, K.R.Circle
BANGALORE – 560 001
Karanataka
Represented by Its Managing Director

- 12 Gulbarga Electricity Supply Company Ltd., (GESCOM)
Station Main Road, GULBURGA
Karnataka
Represented by Its Managing Director

- 13 Hubli Electricity Supply Company Ltd., (HESCOM)
Navanagar, PB Road
HUBLI, Karnataka
Represented by Its Managing Director

- 14 MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle
MANGALORE – 575 001
Karnataka
Represented by Its Managing Director

- 15 Chamundeswari Electricity Supply Corporation Ltd.,
(CESC)
927, L J Avenue
Ground Floor, New Kantharaj Urs Road
Saraswatipuram, MYSORE – 570 009
KARNATAKA
Represented by Its Managing Director

16. MADHYA PRADESH POWER MANAGEMENT CO. LTD.
SHAKTI BHAWAN, RAMPUR
JABALPUR - 482 008
REPRESENTED BY ITS MD

17. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.
PRAKASHGAD, 4TH FLOOR
ANDHERI (EAST), MUMBAI - 400 052
REPRESENTED BY ITS MD


18. GUJARAT URJA VIKAS NIGAM LTD.
SARDAR PATEL VIDYUT BHAWAN,
RACE COURSE ROAD
VADODARA - 390 007
REPRESENTED BY ITS CHAIRMAN

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.

PETITIONER
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 FOR

APPROVAL OF TRANSMISSION TARIFF
for

**“Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for
Raichur-Solapur Transmission Line (Ant. DOCO : 01.02.2014)”**

~~under Transmission System associated with Synchronous Inter-connection between SR~~
and WR
in
SR & WR

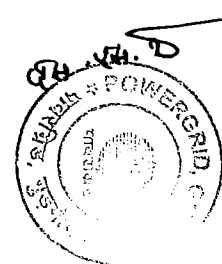
PETITION NO. :

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



**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 anticipated DOCO to 31.03.2014 for Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line (Ant. DOCO : 01.02.2014) under Transmission System associated with Synchronous Inter-connection between SR and WR in SR & WR.

Power Grid Corporation of India Ltd.

--- PETITIONER

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).

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

----- RESPONDENTS

To
The Secretary
Central Electricity Regulatory Commission
New Delhi 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.**

१५.०९.१३
**REPRESENTED BY S. S. RAJU
Dy. General Manager (Commercial)**

**GURGAON
DATED: 29.10.2013**



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

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

----- RESPONDENTS

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

--- PETITIONER

VERSUS

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

----- RESPONDENTS

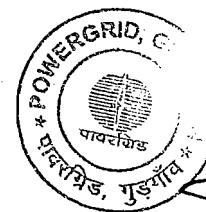
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REPRESENTED BY ITS MD

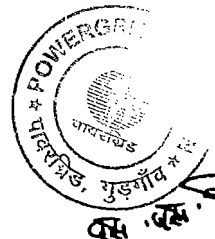
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SARDAR PATEL VIDYUT BHAWAN,
RACE COURSE ROAD
VADODARA - 390 007
REPRESENTED BY ITS CHAIRMAN

19. ELECTRICITY DEPARTMENT
ADMINISTRATION OF DAMAN & DIU
DAMAN - 396 210
REPRESENTED BY ITS SECRETARY (FIN.)

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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

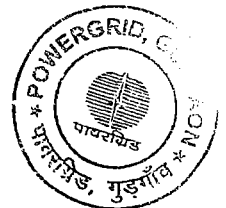


22. MADHYAPRADESH AUDYOGIK KENDRA
VIKAS NIGAM (INDORE) LTD.
3/54, PRESS COMPLEX, AGRA-BOMBAY ROAD,
INDORE-452 008

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.


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

GURGAON
DATED:..29.10.2013





हरियाणा HARYANA

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

30AA 425218

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 anticipated DOCO to 31.03.2014 for Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line (Ant. DOCO : 01.02.2014) under Transmission System associated with Synchronous Inter-connection between SR and WR in SR & WR.

Power Grid Corporation of India Ltd.

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Corporate Centre : 'SAUDAMINI', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

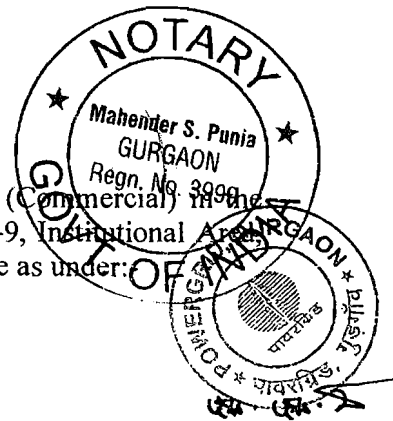
Tamil Nadu Generation and Distribution Corporation
Ltd (Formerly Tamilnadu Electricity Board -TNEB),
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002

--- RESPONDENT

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:



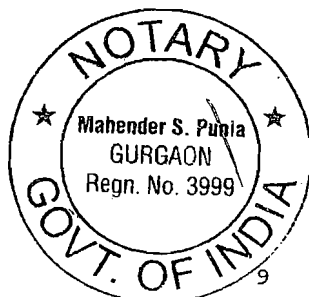
1. I am the Dy. General Manager of Power Grid Corporation of India Ltd., the representative of the Petitioner in the above matter, and am duly authorised to make this affidavit.
2. I submit that the enclosed tariff Petition is being filed for determination of Transmission Tariff for 2009-14 Block for Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line (Ant. DOCO : 01.02.2014) under Transmission System associated with Synchronous Inter-connection between SR and WR in Southern Region 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 Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line (Ant. DOCO : 01.02.2014) under Transmission System associated with Synchronous Inter-connection between SR and WR in Southern Region 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

(Signature)
(DEPONENT)

VERIFICATION

Solemnly affirmed at Gurgaon on this^{29th}.....^{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.

(Signature)
(DEPONENT)



ATTESTED
(Signature)
MAHENDER S. PUNIA
ADVOCATE & NOTARY
DISTT. GURGAON (Haryana) India

29 OCT 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 anticipated DOCO to 31.03.2014 for Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line (Ant. DOCO : 01.02.2014) under Transmission System associated with Synchronous Inter-connection between SR and WR in SR & WR.

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Corporate Centre : 'SAUDAMINI', Plot No-2,
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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 Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line (Ant. DOCO: 01.02.2014) under Transmission System associated with Synchronous Inter-connection between SR and WR in Southern Region and Western Region.

5.0 **Approval of the Scheme**

5.1 That the petitioner has been entrusted with the implementation of "Line bays and Reactors at POWERGRID S/S for Raichur-Solapur T/L for Synchronous Inter-connection between SR and WR". The investment approval of the project was accorded by Board of Directors of POWERGRID vide the Memorandum Ref.: C/CP/Line bays & React. provn. Syn SR-WR dated 04.06.2012, at an estimated cost of Rs 75.74 Crore including IDC of Rs 3.16 Crore price level – 4th Qtr, 2011-12, a copy whereof is attached hereto as **Encl.-1, page.18.to.23**... That the scope of the scheme was discussed and agreed in the 24th Standing Committee Meeting of Southern Region held on 18th June 2007. That the scope of the scheme was also agreed by GOI and the same was conveyed to the Petitioner vide letter dated 28.06.2011. Vide order dated 23.01.2013 in Petition no 197/2011, regulatory approval for the implementation was also granted by Hon'ble Commission. Copy of the Extract of the MOM, CEA letter dated 28.06.2011 and CERC order dated 23.01.2012 is Enclosed herewith as **Encl-2 page24.to.33**.. These bays are being implemented for 765 kV Raichur-Solapur Transmission Line, being developed under TBCB route.

5.2 The scope of work covered under "Synchronous Inter-connection between SR and WR" is as follows:

Sub-Stations:

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

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

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

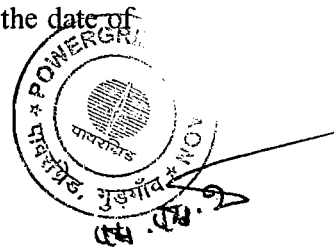
- 765 kV Line Bays : 1
- 240 MVar 765 kV Switchable Line Reactor : 1

The Schematic diagram of the scheme is attached hereto as **Encl. - 3, (page 34...)**.

6.0 **Implementation Schedule**

As per the approval, the transmission scheme was scheduled to be commissioned in 21 months from the date of investment approval. The date of Investment Approval is 04.06.2012. Hence the commissioning schedule comes to 04.03.2014 and DOCO as 01.04.2014 against which the subject asset is anticipated to be commissioned and put under commercial operation w.e.f. 01.02.2014. Hence there is no time overrun in commissioning of the subject asset.

That the subject asset covered under the current Petition is anticipated to be commissioned and put under commercial operation within 30 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)
- (4)

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), 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 paragraphs and tables:

C. Transmission Schemes

Qualifying time schedule in months

I- New 765 kV AC Sub-Station in Plain area is 30 months

The element covered in this project i.e. (plain terrain), **Asset I** : 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line, for which the qualified time schedule has been stipulated as 30 months in the Appendix-II to the Regulations. The element is anticipated to be completed within 30 months from the date of investment approval and therefore, the project 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 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 35 to 38)

(Rs in Lakhs)

| Name of the element | Approved Cost | Exp. Up to DOCO | Proj exp. from DOCO to 31.03.14 | Proj exp. 2014-15 | Estimated completion Cost |
|--|---------------|-----------------|---------------------------------|-------------------|---------------------------|
| 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line | 7574 | 5478.74 | 1273.13 | 2245.31 | 8997.18 |

Against the total apportioned approved cost of Rs 7574 lakhs, the anticipated completed cost as on DOCO is Rs. 5478.74 lakhs and completed cost is Rs 8997.18 lakhs, so, there is marginal cost overrun in comparison to apportioned approved cost. The cost over run is mainly due to higher award cost (being a small project) received in competitive bidding as compared to initial estimates. The reasons for item wise cost variation between approved cost (FR) and actual cost as on DOCO are explained in detail in Form-5B. The RCE of the project is under preparation and shall be submitted before the Hon'ble Commission on its approval.

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.

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 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line and Transmission System associated with Synchronous Inter-connection between SR and WR are:



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 | 753.27 | Balance & retention payment |
| | Sub station | 508.13 | |
| | PLCC | 11.73 | |
| | Subtotal | 1273.13 | |
| 01.04.2014 to 31.03.2015 | Building & other civil works | 99.73 | Balance & retention payment |
| | Sub station | 2126.05 | |
| | PLCC | 19.53 | |
| | Subtotal | 2245.31 | |

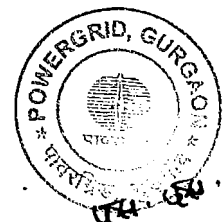
That the petition for determination of tariff is being filed in line with provision 5 (2) of tariff Regulation 2009 applicable for 2009-14 period.

Justification for high initial spares

It is submitted that the cost of initial spares included in capital cost is Rs. (121+260.27) lakhs = Rs. 381.27 lakhs which is 4.24% of the completed cost. The cost of allowable spares is 2.5% of Rs 8997.18 lakhs, i.e., 224.93 lakhs. The amount of Rs. (381.27-224.93) lakhs=156.34 lakhs towards initial spares above the ceiling limit of CERC Regulations may please be allowed by Hon'ble Commission because of the following reasons:

The bays at Raichur & Solapur S/S to be commissioned as extension of existing substation. In green field substations (i.e. new substation) normally a large number of bays are commissioned under single project and the spares are taken against these large numbers of bays. But in this case only two bays each at Raichur & Solapur S/S alongwith Reactors are commissioned instead of such large number bays and S/S equipments for green field project. This means population of equipments & total capital cost for green field project is much higher than the project cost of an extension project. Even though similar type of spares have been procured for this system as is normally done for green field project, the percentage of cost of initial spares w.r.t the project capital cost for this system is higher because of less project capital cost due to lesser population of equipments in present project for each substation compared to projects having assets in green field substations.

Hon'ble Commission shall appreciate that initial spare norms are for green field projects and not for small extension work. Therefore, spare covered under this small extension work may be retained and may please be considered for determination of transmission tariff.



Hence It is requested that the Hon'ble commission may kindly invoke the provision of Regulations 44 (Power to Relax) of CERC (Terms and Conditions of Tariff) Regulations, 2009, for relaxation of Regulation 8 (iv), CERC (Terms and Conditions of Tariff) Regulations, 2009 so that the initial spares of Sub Station may be allowed in full for the asset covered under current petition- as included in the capital cost.

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, pg 5.6 to 5.7

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

| Name of the asset | (Rs in Lacs) | | | | |
|--|--------------|---------|---------|---------|--------------------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 (pro-rata) |
| 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line(Ant. DOCO-01.02.2014) | - | - | - | - | 236.86 |

8.3 That, it is submitted in the Tariff indicated at 8.2 above, the ROE has been calculated @ 18.044 % (including additional ROE of 0.5 % on account of timely completion of the element) based on the rate notified by the Hon'ble Commission as per illustration under regulation 15 (4) (i) of the CERC (Terms and Conditions of Tariff) Regulations, 2009. It is further submitted that the above rate of 18.044 % is based on the MAT rate of 11.33 % being applicable for the year 2008-09.

8.4 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 tried up in accordance with Regulation 6 of the Principal Regulations.

8.5 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.

8.6 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.



- 8.7 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.
- 8.8 Petitioner submits that the License fee has been a new component of cost to the Transmission license under O&M stage of the project and has become incidental to the petitioner / CTU only from 2008-09. 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)."
- 8.9 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

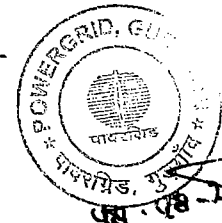
Tariff for Transmission of Electricity (Annual Fixed Cost) as per para 8.0 of petition shall be recovered on monthly basis and the billing collection and disbursement of Transmission Charges shall be governed by provision of CERC (sharing of interstate Transmission Charges and Losses) Regulations, 2010.

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) Allow the additional return on equity of 0.5% on account of timely completion as per the Annexure II of CERC Tariff regulations' 2009.



- 3) Approve the Additional Capitalisation incurred / projected to be incurred.
- 4) Invoke the provision of Regulations 44 (Power to Relax) of CERC (Terms and Conditions of Tariff) Regulations,2009, for relaxation of Regulation 8 (iv), CERC (Terms and Conditions of Tariff) Regulations,2009 so that ceiling norms for initial spares of Sub Station be relaxed to admit the initial spares included in the capital cost is allowed in full.
- 5) 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.
- 6) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and publishing of notices in newspapers in terms of Regulation 42 CERC (Terms and Conditions of Tariff) Regulations,2009, and other expenditure (if any) in relation to the filing of petition.
- 7) Allow the petitioner to bill and 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.
- 8) 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.
- 9) 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)."
- 10) 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).
- 11) 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

५५ . S. S. Raju
Dy. General Manager (Commercial)

Gurgaon
Dated: 29.10.2013



पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)



केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं-2, सेक्टर-29, गुरुगाँव-122 001, हरियाणा
फोन : 0124-2571700-719 फैक्स : 0124-2571760, 0124-2571761 तार : 'नेटग्रिड'
Corporate Office : "Saudamini" Plot No-2, Sector-29, Gurgaon - 122 001 Haryana
Tel.: 0124-2571700 - 719 Fax: 0124-2571760, 0124-2571761 Gram : 'NATGRID'

संलग्न संख्या / Ref. No.

केन्द्रीय कार्यालय / CORPORATE CENTRE

C/CP/Line bays & React. provn. Syn SR-WR

June 4, 2012

MEMORANDUM

SUB: INVESTMENT APPROVAL FOR "LINE BAYS AND REACTOR AT POWERGRID SUB-STATION FOR RAICHUR - SHOLAPUR TRANSMISSION LINE FOR SYNCHRONOUS INTERCONNECTION BETWEEN SR AND WR"

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.64 dated 5th August, 2005), have accorded investment approval for "Line bays and reactor at POWERGRID sub-station for Raichur - Sholapur transmission line for Synchronous interconnection between SR and WR" in its 272nd meeting held on May 29, 2012 as per the details given below:

1. **Broad Scope of the Project**

Substations

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

- 765 kV Line Bays : 1
- 240 MVAR 765 kV Switchable line reactor : 1

(ii) Extension of 765/400 kV substation at Sholapur to accommodate following:

- 765 kV Line Bays : 1
- 240 MVAR 765 kV Switchable line reactor : 1

2. **Project Cost & Funding**

The estimated cost of the project based on February, 2012 price level is Rs. 75.74 Crore including IDC of Rs. 3.16 Crore. The abstract cost estimate is attached as Annexure-I.

पंजीकृत कार्यालय : टी 9 कृतांग इस्तीद्दुल्लाह एरिया, कटवारीया सराय, नई दिल्ली-110016 दूरभाष : 011-26560121 फैक्स : 011-26560039 तार : 'नेटग्रिड'
Registered Office : B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016 Tel.: 011-26560121 Fax: 011-26560039 Gram: 'NATGRID'

रक्षित एवं राष्ट्रहित में ऊर्जा बचाएँ

Save Energy for Benefit of Self and Nation



Project is proposed to be implemented through domestic borrowings (loans/bonds) and Internal Resources of POWERGRID with a Debt: Equity ratio of 70:30.

3. **Commissioning Schedule**

The project is scheduled to be commissioned within **21 months** from the date of investment approval.

This is issued in pursuance of 272nd meeting of Board of Directors held on May 29, 2012.

2/27/12
4/6/12

(Seema Gupta)
General Manager (CP)

27.05.12



Distribution:

CEO, POSOCO

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GM: Cost Engg. / ESMD /OS

Dy. CVO

Company Secretary

For kind information of:

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

CH (HR) 24/6/12
CH (E) - EBU

24/6/12
(Seema Gupta)
General Manager (CP)

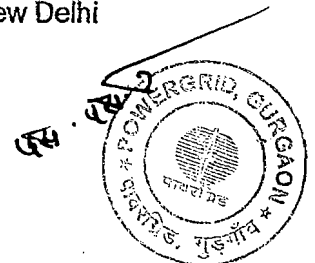
AB. 24.6

12 JUN 2012



Distribution:

1. PS to Secretary (Power), MoP, Shram Shakti Bhawan, New Delhi-110001
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3. Chairman, CEA , Sewa Bhawan, R.K.Puram, New Delhi -66
4. Chairman, Kerala State Electricity Board, Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram-695 004.
5. Chairman, Karnataka Power Transmission Corporation Ltd, Cauvery Bhawan, Bangalore -560 009
6. Chairman, Tamil Nadu Electricity Board, 800, NPKR Ramaswamy Maligai, Anna Salai, Chennai-600 002
7. Chairman, APTRANSCO, Vidyut Soudha, Hyderabad-500 049
8. Chief Secretary, Electricity Department of Pondicherry, Pondicherry-605001.
9. Chairman, Maharashtra State Electricity Transmission Company Limited, C-19, E-Block, MSETCL, Prakashganga, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051.
10. Chairman, Madhya Pradesh State Electricity Board, Shakti Bhawan, Vidyut Nagar, Rampur, Jabalpur - 482 008, Madhya Pradesh
11. Chairman, Gujarat Electricity Board, Sardar Patel Vidyut Bhawan, Race Course, Vadodara - 390 007, Gujarat
12. Chief Electrical Engineer, Govt. of Goa Electricity Department, 3rd Floor, Vidyut Bhawan, Panaji, Goa - 403 001
13. Chairman, Chhattisgarh State Power Transmission Company Limited, Dagania, Raipur, Chhattisgarh - 492 013
14. Secretary (Power), Electricity Department, Administration of Dadra Nagar Haveli, U.T. Silvassa - 396 230
15. Secretary (Power), Electricity Department, Administration of Daman and Diu, U.T. Daman - 396 210
16. Advisor, PAMD, Planning Commission , Yojana Bhawan, New Delhi
17. Additional Secretary, MoP, Shram Shakti Bhawan, New Delhi
18. Member Secretary, Planning Commission , Yojana Bhawan, New Delhi
19. Member Secretary, SRPC, Central Electricity Authority, No. 29 Race Course Cross Road, Bangalore-560 009
20. Member Secretary, WRPC, MIDC Area, Marol, Andheri East, Mumbai- 400 094
21. Member (Power Systems), CEA, R.K.Puram, New Delhi -66
22. Secretary, CEA, Sewa Bhawan, R.K.Puram, New Delhi -66 - 03 copies
23. Deputy Director General (PI), Ministry of Statistics & Programme Implementation, Sardar Patel Bhawan, New Delhi.
24. Joint Secretary & Financial Advisor, MoP, Shram Shakti Bhawan, New Delhi
25. Joint Secretary (Transmission), MoP, Shram Shakti Bhawan, New Delhi



26. Joint Secretary (Plan Finance Div.-II), Ministry of Finance, North Block, New Delhi
27. Director (Transmission), MoP, Shram Shakti Bhawan, New Delhi
28. Director, Ministry of Finance (Plan finance Div.), North Block, New Delhi
29. Deputy Secretary, Cabinet Secretariat, Rashtrapati Bhawan, New Delhi
30. Under Secretary, Finance & Budget Section, MoP, New Delhi

2A
4/6/12

(Seema Gupta)
General Manager (CP)

CP. 4/6/12



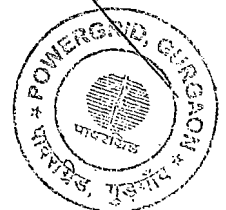
ANNEXURE -

ABSTRACT COST ESTIMATE
(BASE COST)

**LINE BAYS AND REACTOR AT POWERGRID SUB-STATION FOR RAICHUR-SHOLAPUR
TRANSMISSION LINE FOR SYNCHRONOUS INTERCONNECTION BETWEEN SR AND WR**

(Cost updated to February 2012 Price Level)

| Sr. No. | DESCRIPTION | AMOUNT (Rs. in Crs.) |
|--|--|-------------------------|
| A | Civil Works i) Infrastructure for substations | 0.40 |
| B | Equipment Cost a) Sub-Stations | 63.40 |
| C | Sub Total (A+B) | 63.80 |
| D | Incidental Expenditure During construction @ 10.75% of C | 6.86 |
| E | Contingencies @ 3% of C | 1.91 |
| | Sub Total (A to E) | 72.58 |
| F | Interest During Construction(IDC) | 3.16 |
| | GRAND TOTAL | 75.74 |
| Note: 1. Debt:Equity ratio has been considered as 70:30. 2. Debt component is envisaged to be covered under Domestic loan. Equity component is through IR. 3. Interest rate has been considered @ 10.5 % for Domestic Loan subject to actuals. | | |



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

- | | |
|---|--|
| <p>1. The Member Secretary, Southern Regional Power Committee, 29, Race Course Cross Road, Bangalore 560 009. FAX : 080-22259343</p> <p>3. The Director (Transmission), Transmission Corp. of Andhra Pradesh Ltd., Vidyut Soudha, Hyderabad - 500 082. FAX : 040-66665137</p> <p>5. The Member (Transmission), Kerala State Electricity Board, Vidyuthi Bhawanam, Pattom, P.B. No. 1028, Thiruvananthapuram - 695 004. FAX : 0471-2444738</p> <p>7. The Director (Power), Corporate Office, Block - I, Neyveli Lignite Corp. Ltd., Neyveli, Tamil Nadu - 607 801. FAX : 04142-252650</p> <p>9. Director (Projects), National Thermal Power Corp. Ltd. (NTPC), NTPC Bhawan, Core-7, Scope Complex, Lodhi Road, New Delhi-110003. FAX-011-24360912</p> <p>11. The Director (Operation), Power Trading Corp. of India Limited, 2nd Floor, NBCC Tower, 15 Bhikaji Cama Place, New Delhi 110066. FAX-011-41659504</p> | <p>2. The Director (Projects), Power Grid Corp. of India Ltd. "Saudamini", Plot No.2, Sector-29, Gurgaon 122 001, Haryana. FAX : 95124-2571932</p> <p>4. The Director (Transmission), Karnataka State Power Transmission Corp.Ltd., Cauvery Bhawan, Bangalore 560 009. FAX : 080 -22228367.</p> <p>6. Member (Distribution), Tamil Nadu electricity Board (TNEB), 6th Floor, Eastern Wing, 800 Anna Salai, Chennai - 600002. FAX : 044-28516362</p> <p>8. The Superintending Engineer -I, First Floor, Electricity Department, Gingy Salai, Puducherry - 605 001. FAX : 0413-2334277/2331556</p> <p>10. Shri N. S. M. Rao General Manager (Transmission), NPCIL, 12th Floor, Vikram Sarabhai Bhawan, Anushakti Nagar, Mumbai - 400 094. FAX : 022- 25993570/25991258</p> |
|---|--|

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.

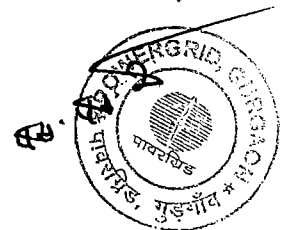
Your comments and observations, if any, may be sent to us at the earliest.

Encl: Minutes

Yours faithfully,

(Signature)
 17/07/2007
 (Pardeep Jindal)

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



Standing Committee on Power System Planning in Southern Region

Minutes of the 24th Meeting held on June 18, 2007 at Bangalore

- ❖ 24th meeting of the Standing Committee on Power System Planning in Southern Region (SCPSP-SR) was held on 18th June 2007 (Monday) at conference hall, SRPC, Bangalore.
- ❖ Agenda note for discussion for this meeting was circulated by CEA vide on June 04, 2007 and subsequently, additional agenda note was circulated on June 15, 2007. A copy of the agenda note is given at Annex-I, for reference.
- ❖ The meeting was chaired by Member (Power System), CEA. The list of participants is given at Annex-II.

Summary Record of Discussions:

- 1.0 Shri V. Ramakrishna, Member (Power System), CEA welcomed the participants and thanked SRPC for organizing the meeting. He emphasized the need for timely implementation of the decisions taken in meetings of Standing Committee on Power System Planning in Southern Region (SCPSP-SR) and said that monitoring of the progress of implementation would also be discussed in these meetings. He also said that the present standing committee was upgraded to include participation at the level of Member/Director of Corporations, to expedite the decision making and implementation process in transmission development. He, therefore, emphasized that the planning issues discussed and agreed in SCPSP may not be re-opened/ re-discussed in the TCC meetings, and any decision on issues relating to commercial aspects of the proposals may be discussed directly in the RPC forum.
- 2.0 **Confirmation of the minutes of 23rd meeting of the Standing Committee**
- 2.1 Shri A. K. Asthana, CE (SP&PA), CEA said that the minutes of the 24th meeting held on January 22, 2007 at Chennai, were circulated on 21-02-2007 and subsequently, based on observations received from NPCIL, a corrigendum to the minutes was circulated on 19-04-2007. He said that these minutes along with the circulated corrigendum might be confirmed.
- 2.2 NPCIL representative stated that the circulated corrigendum did not reflect the dissent of NPCIL on the decision taken in the 23rd meeting for implementation of the reactors in Southern Region grid. He said that, at the time of evolving transmission system for Kaiga APP Stage-I & II, no reactor had been envisaged at Kaiga and the over voltage problem in Southern Region had surfaced after addition of major regional power system elements in Southern Grid, that were added subsequently. Therefore, installation of



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



delay/deferment of Krishnapatnam generation project, the line-2 should also be considered as part of synchronous inter-connection between SR and WR till Krishnapatnam generation gets materialized.

10.6 Additional 400/220kV Substations/ Transformer Additions

It was agreed that additional 400/220kV substations would be provided as regional system strengthening scheme. In this regard, Member(PS), CEA asked all the constituents to provide suitable locations for new 400/220kV substations or transformer capacity additions that based on their requirement. State representatives agreed to provide the information after confirmation from their management. TNEB had given their demand for providing a new 400/220kV S/S near Karamadai with 2x315 MVA and a new 400/220kV S/S at Singarpet with 2x315 MVA to be covered as regional system strengthening. These substations were accepted and it was decided that the proposals along with inter-connecting lines would be firmed up in the next meeting.

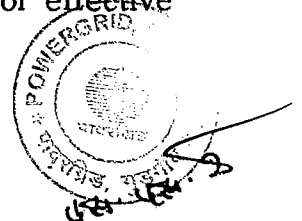
11.0 Transmission Addition requirements of APTRANSCO

11.1 CE(SP&PA), CEA said that APTRANSCO had proposed Bhoopalapally - Warrangal (PGCIL S/S), 400kV D/C line and Bhoopalapally - Gazwel, 400kV D/C line for evacuation of power from the Kakatiya (Bhoopalapally) TPS (1x500 MW) of APGENCO. The transmission system would be built by APTRANSCO at their cost. To a query from Member (PS), CEA, APTRANSCO officials informed that there was no proposal for any additional unit at the Bhoopalpalli TPS. In this regard it was felt that the transmission proposal of having four number of 400kV outlets for evacuation of power from 500 MW unit was an over-provision. After discussions, it was decided that APTRANSCO may plan 400kV D/C line to Warrangal, and a 220kV D/C line from Warrangal to Siddipet, which was actually connected to Gajwel by a 220kV D/C line, to optimize the investment in transmission.

11.2 APTRANSCO was also asked to firm up the transmission systems for evacuation of power from Kothagudam Stage-IV TPS (500MW), Lower Jurala HEP (240MW) and Vijayawada-VI TPS (500 MW) generation projects.

12.0 Transmission Addition requirements of KPTCL

12.1 CE, CEA stated that KPTCL had proposed establishment of a new 400kV S/S at Bidadi with 2x500MVA 400/220kV transformer by LILO of Nelamangla - Somanahalli 400kV D/C line at Bidadi, and construction of Bellary TPS - Hiriyur (PGCIL S/S), 400kV D/C line to evacuate power from expansion project of total 750 MW capacity at Bellary TPS complex. These transmission systems would be built by KPTCL at their cost. He informed that, in this proposal KPTCL had not considered the Bidadi 1400 MW project which was proposed in XI plan. He also said that the choice between LILO of Nelamangla - Somanahalli vis-à-vis Nelamangla - Mysore would depend on right of way feasibility for the LILO. Member(PS), CEA said that additional transmission system beyond Hiriyur and up to Bangalore would be required for effective



2.8 Establishment of a 400/230 kV S/S near Tirunelveli and Associated Transmission System for evacuation of power from Wind Projects of Tamil Nadu, by TNEB" (Refer Item 9.0 of the summary record of the 23rd meeting)

As agreed in the 23rd meeting, TNEB would build the above transmission system along with suitable reactors and should apply for long-term open access for the Tirunelveli - Pugalur corridor. TNEB may inform the progress on the agreed transmission scheme, including reactors and on the process of seeking long-term open access for the Tirunelveli - Pugalur corridor.

3.0 Transmission Systems for Evacuation of power from Krishnapattnam UMPP (4000 MW) and corresponding requirements for additional transmission capacity between SR-WR

3.1 For evolving an optimum transmission system for evacuation of power from Krishnapattnam UMPP (4000 MW) and corresponding requirements for additional transmission capacity between SR-WR, discussions were held in the previous meeting i.e. 23rd meeting of the Standing Committee in which, following emerged :

- (i) Step-up voltage for Krishnapattnam UMPP would be 400kV.
- (ii) There would be six outgoing circuits from generation switchyard, i.e. -
 - Krishnapattnam UMPP - Nellore 400 kV, Quad D/C line
 - Krishnapattnam UMPP - Kurnool 400 kV, Quad D/C line, and
 - Krishnapattnam UMPP - Gooty, 400 kV, Quad D/C line
- (iii) The Kurnool - Raichur link would be either a 400 kV Quad D/C line or 765kV 2xS/C lines. This would be decided based on studies for monsoon period. Further analysis was done after the meeting and it was found that for the emerged scenario during Monsoon period, the Kurnool - Raichur 400kV quad D/C line would be right option instead of the 765kV option.
- (iv) Following 765kV/400kV transformer capacity had been identified-
 - 765/400 kV S/S at Raichur, 3000 MVA,
 - 765/400 kV S/S at Sholapur 3000 MVA, and
 - 765/400 kV S/S at Pune, 3000 MVA
- (v) Depending upon share of various states, including Kerala, from Tamil Nadu UMPP and also considering feedback from state utilities regarding new 400kV S/Ss or transformer capacity augmentations in their States, the above transmission system may be updated.
- (vi) Following inter-regional links between SR and WR would be established for -
 - (i) transmission of share of Maharashtra from Krishnapattnam UMPP
 - (ii) transmission of share of other regions from Tamil Nadu UMPP, and
 - (iii) free flow of power to all beneficiaries of Krishnapattnam UMPP,
 - Raichur (SR) - Sholapur (WR) 765 kV 2xS/C lines
 - Narendra (SR) - Kohlapur (WR) 400 kV D/C line with a 1000 MW HVDC back-to-back at Narendra
 - Sholapur (WR) - Pune (WR) 765 kV S/C line



(vii) Regarding sharing of Transmission Charges, it was acknowledged that this would emerge after constituents of other regions had also discussed these issues.

3.2 The above transmission system was subsequently discussed in the 3rd meeting of SRPC held on 19-02-2007. There was general agreement on the above transmission system and it was discussed that sharing of transmission charges could be based on all beneficiaries of combined Krishnapatnam and Tamil Nadu UMPPs and complete account of sharing of charges would emerge after these issues are discussed with constituents of other regions.

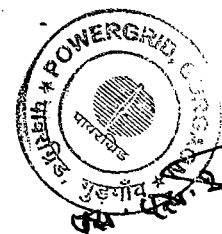
3.3 This issue was also discussed in the 26th meeting of the Standing Committee on Power System Planning in Western Region held on 23-02-2007. Following Transmission system was proposed for the Krishnapattnam UMPP:

1. Krishnapattnam UMPP - Nellore 400 kV, Quad D/C line
2. Krishnapattnam UMPP - Kurnool 400 kV, Quad D/C line, and
3. Krishnapattnam UMPP - Gooty, 400 kV, Quad D/C line
4. Raichur (SR) - Sholapur (WR) 765 kV 2xS/C lines
5. Narendra (SR) - Kohlapur (WR) 400 kV D/C line.
6. 1000 MW HVDC back-to-back at Narendra
7. Raichur (SR) - Sholapur (WR) 765 kV S/C line-1
8. Raichur (SR) - Sholapur (WR) 765 kV S/C line-2
9. Sholapur (WR) - Pune (WR) 765 kV S/C line
10. 765/400 kV S/S at Raichur, 3000 MVA
11. 765/400 kV S/S at Sholapur 3000 MVA
12. 765/400 kV S/S at Pune, 3000 MVA
13. Pune (WR) - Navi Mumbai (WR) 400kV D/C line

Further, it was also proposed that transmission charges for the works at Sl. No. 1,2,3,4,5,6 & 7 and 50% at Sl. No. 10 & 11 which would meet the requirement of Maharashtra were proposed to be borne by the beneficiaries of Krishnapatnam UMPP. Works at Sl. No. 8,9,12 &13 and 50% of the works at Sl. No. 10 & 11 were proposed as inter-regional system between SR and WR and accordingly, transmission charges to be shared by SR and WR in the ratio of 50:50 and recovered as pooled transmission charges for the regions. It was decided that the constituents would take up these proposals with their management.

3.4 Combined shares from Krishnapatnam and the Tamilnadu UMPPs (tentative) are given in the following table:

| Sl. No. | State/ Region | From Krishnapatnam UMPP | From Tamilnadu UMPP |
|---------|--------------------------|-------------------------|---------------------|
| 1. | Andhra Pradesh | 1600 | 400 |
| 2. | Karnataka | 800 | 800 |
| 3. | Kerala | ---nil- | 300 |
| 4. | Tamil Nadu | 800 | 1600 |
| 5. | Puducherry | ---nil- | ---nil- |
| 6. | Total in Southern Region | 3200 | 3100 |



| Sl. No. | State/ Region | From Krishnapatnam UMPP | From Tamilnadu UMPP |
|---------|--------------------------|-------------------------|---------------------|
| 7. | Maharashtra | 800 | 400 |
| 8. | Total in Western Region | 800 | 400 |
| 9. | Uttar Pradesh | ---nil- | 300 |
| 10. | Punjab | ---nil- | 200 |
| 11. | Total in Northern Region | ---nil- | 500 |
| 12. | Total | 4000 | 4000 |

3.5 Regarding new 400kV S/Ss or transformer capacity augmentations in the States, only TNEB has given their demand for providing a new 400/220kV S/S near Karamadai with 2x315 MVA under Krishnapatnam UMPP and a new 400/220kV S/S at Singarpet with 2x315 MVA under Tamilnadu UMP.

3.6 While firming-up the transmission system for Krishnapatnam UMPP, a 400kV line to Chittoor had also been envisaged from Krishnapatnam TPS of 1600MW of A.P. and confirmation from APTRANSCO for their programme of 400kV line to Chittoor was sought. However, definite proposal in this context has not been received. It is therefore proposed to include 400kV quad D/C line from Krishnapatnam UMPP to Chittoor under the Krishnapatnam UMPP transmission system.

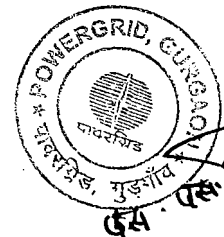
3.7 APTRANSCO have intimated Bhopalpalli TPS (500 MW) coming up near Warrangal. TNEB is also proposing additional generation at Mettur(500 MW), Tuticorin Stage-IV (1000 MW), North Chennai TNEB (500 MW), and Ennore TPS (500 MW). Further, Nagarjuna TPS (1015 MW) is coming up in Karnataka. In view of the above, additional power for export from SR may be available. It is therefore proposed to establish Kurnool as a 765kV S/S. In the National Electricity Plan-Transmission, corresponding to 2013-14 conditions, the SR is estimated to have winter months exportable surplus of 6700 MW (peak) and 12000 MW (off-peak). Considering above, following transmission schemes are proposed:

Scheme - A

‘ Increasing SR_WR inter-regional transmission capacity through HVDC back-to-back - Target - June/December 2010’ :

- 1) Narendra - Kohlapur 400kV D/C line
- 2) 1000 MW HVDC back-to-back at Narendra of which 500 MW through shifting of equipment from Sasaram.

Transfer of equipment from Sasaram would involve commercial and assets related issues. Transmission charges of the existing scheme at Sasaram for equipment to be shifted as well as unusable and leftover assets, from the date of decommissioning, would be required to be transferred to new scheme and would become payable by SR/WR constituents. The left over assets of land



and building, if and when usable at Sasaram, would be credited when utilized in some future scheme.

Scheme - B

' Synchronous Inter-connection of SR and WR - Target - December 2010' :

- 1) Raichur - Sholapur 765kV S/C line-1 at 400kV operation

Scheme - C

' Evacuation System for Krishnapatnam UMPP

- Target - to match with the generation project' :

- 1) Krishnapatnam UMPP - Nellore 400 kV, Quad D/C line
- 2) Krishnapatnam UMPP - Chittoor 400kV, Quad D/C line
- 3) Krishnapatnam UMPP - Gooty, 400 kV, Quad D/C line
- 4) Space provision for two additional 400kV bays at Krishnapatnam UMPP (for Krishnapatnam UMPP - Kurnool 400 kV, Quad D/C line covered in scheme F)
- 5) Raichur - Sholapur 765kV S/C line-2 at 400kV operation
- 6) Sholapur - Pune 765kV S/C line at 400kV operation

Scheme - D

' System strengthening in Western Region corresponding to power from Krishnapatnam UMPP - Target - to match with the generation project' :

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

Scheme - E

Additional 400/220kV sub-stations based on future request of state utilities to be provided as separate system strengthening scheme

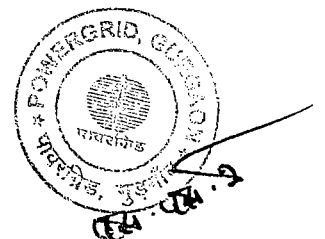
Scheme - F

To be tied-up with Krishnapatnam of APGENCO or Tamil Nadu UMPP or other generation projects or regional system strengthening schemes or inter-regional strengthening schemes

- KrishnapatnamAPGENCO- KrishnapatnamUMPP- Kurnool or KrishnapatnamUMPP- KrishnapatnamAPGENCO- Kurnool , 400kV Quad D/C line (with Krishnapatnam APGENCO)
- Kurnool - Raichur 765kV S/C line
- 765kV substations at Kurnool, Raichur, Sholapur and Pune
- 765kV operation of Kurnool - Raichur line
- 765kV operation of Raichur - Sholapur line-1 and line-2
- 765kV operation of Sholapur - Pune line

3.8 Regarding sharing of transmission charges it is proposed that

- Scheme - A: Regional pool schemes of SR and WR on 50:50 basis.
- Scheme - B: Regional pool schemes of SR and WR on 50:50 basis.





भारत सरकार / Government of India
 विद्युत मंत्रालय / Ministry of Power
 केन्द्रीय विद्युत प्राधिकरण / Central Electricity Authority
 प्रणाली योजना एवं परियोजना मूल्यांकन प्रभाग
 System Planning & Project Appraisal Division
 सेवा भवन, आर. के. पुरम, नई दिल्ली-110066
 Sewa Bhawan, R. K. Puram, New Delhi-110066 [ISO: 9001:2008]
 वेबसाइट / Website: www.cea.nic.in



No. 237/1/2011-SP&PAI 942

dated: 28-06-2011

Shri Y.K. Sehgal,
 Executive Director (SEF & IT),
 Power Grid Corporation India Ltd.,
 " Saudamini "Gurgaon.

Sub: Implementation of Transmission Schemes in Private Sector.

Ref: PGCIL letter no.C/ENG/E/SEF/00/PLG dated 11th May, 2011.

Sir,

Please refer to the letter cited above requesting for 'in principle' approval of CEA for the PGCIL scope of works related to line bays and reactor provision associated with:

- (i) System Strengthening common for WR and NR.
- (ii) System Strengthening common for WR.
- (iii) Transmission system associated with Krishnapattanam UMPP- Synchronous interconnection between SR and WR.

We are principally in agreement with the PGCIL's scope of works for line bays and reactor provisions associated with the above projects as indicated in Annex 1 of your letter. Regarding scope of works in the private sector the following may be noted.

- a) The 240 MVAR fixed line reactors at Bhopal end on Jabalapur-Bhopal 765kV S/C line under private sector scope are switchable reactors.
- b) The 240 MVAR fixed line reactors at Dhule end on Aurangabad-Dhule 765kV S/C line under private sector scope are switchable reactors.

The revised Annex incorporating the changes is enclosed

(Encl.: Annex)

Dr. Subir / Manoj
P. K. Sehgal
3053

P.K. Sehgal
 (P.K. Sehgal)
 Director



Annex

| Sl. | Transmission Lines | Line Bays | | From end (each ckt) | To end (each ckt) |
|-----|--------------------|-----------|--------|---------------------|-------------------|
| | | From end | To end | | |

A. Line Bays and Reactor Provision associated with System Strengthening common for WR & NR.

| | | | | | |
|----|---|-----------------------------------|-----------------------------------|--|---|
| 1. | Dharamjaygarh - Jabalpur Pool 765kV D/C | 2nos.765kV bays (POWERGRID Scope) | 2nos.765kV bays (POWERGRID Scope) | 1x330 (switchable) (each ckt.) (POWERGRID Scope) | 1x240 (fixed) (each ckt.) (POWERGRID Scope) |
| 2. | Jabalpur-Pool-Bina 765kV S/C | 1 no.765kV bay (POWERGRID Scope) | 1no.765kV bay (POWERGRID Scope) | 1x240 (switchable) (POWERGRID Scope) | 1X240 (fixed) (POWERGRID Scope) |

B. Line Bays and Reactor Provision associated with System Strengthening for WR.

| | | | | | |
|----|---------------------------------------|--|--------------------------------------|---|---|
| 1. | Jabalpur Pool-Bhopal 765kV S/C | 1no.765kV bay (POWERGRID Scope) | 1no.765kV bay (Private Sector Scope) | 1x240 (switchable) (POWERGRID Scope) | 1x240 (switchable) (Private Sector Scope) |
| 2. | Bhopal-Indora 765kV S/C | 1no 765kV bay (Private Sector Scope) | 1no.765kV bay (POWERGRID Scope) | 1x240 (switchable) (Private Sector Scope) | 1x240 (fixed) (POWERGRID Scope) |
| 3. | Bhopal-Bhopal (MP) 400 kV D/C (quad) | 2nos.400kV bays (Private Sector Scope) | 2nos 400kV bay (MPPTCL Scope) | Nil | Nil |
| 4. | Aurangabad-Dhule 765kV S/C | 1no.765kV bay (POWERGRID Scope) | 1no.765kV bay (Private Sector Scope) | Nil | 1x240 (switchable) (Private Sector Scope) |
| 5. | Dhule-Vadodra 765kV S/C | 1no 765kV bay (Private Sector Scope) | 1no 765kV bay (POWERGRID Scope) | 1x240 (switchable) (Private Sector Scope) | 1x240 (fixed) (POWERGRID Scope) |
| 6. | Dhule-Dhule (MSETCL) 400kV D/C (Quad) | 2nos.400kV bays (Private Sector Scope) | 2nos.400kV bays (MSETCL Scope) | Nil | Nil |

Bus Reactor

| Sl. | Bus | Reactor(Switchable) | |
|-----|--------|----------------------------------|------------------------|
| 1. | Bhopal | 1x240 (765 kV) 1X125 (400 kV) | (Private Sector Scope) |
| 2. | Dhule | 1x240 (765 kV) | (Private Sector Scope) |

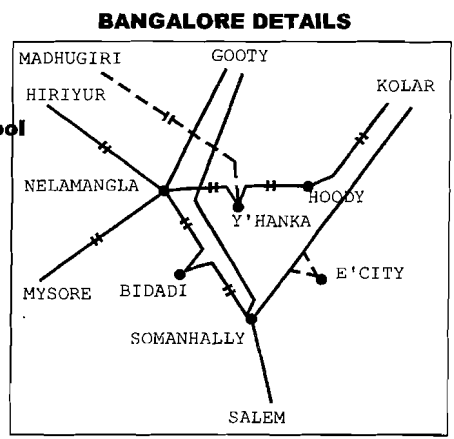
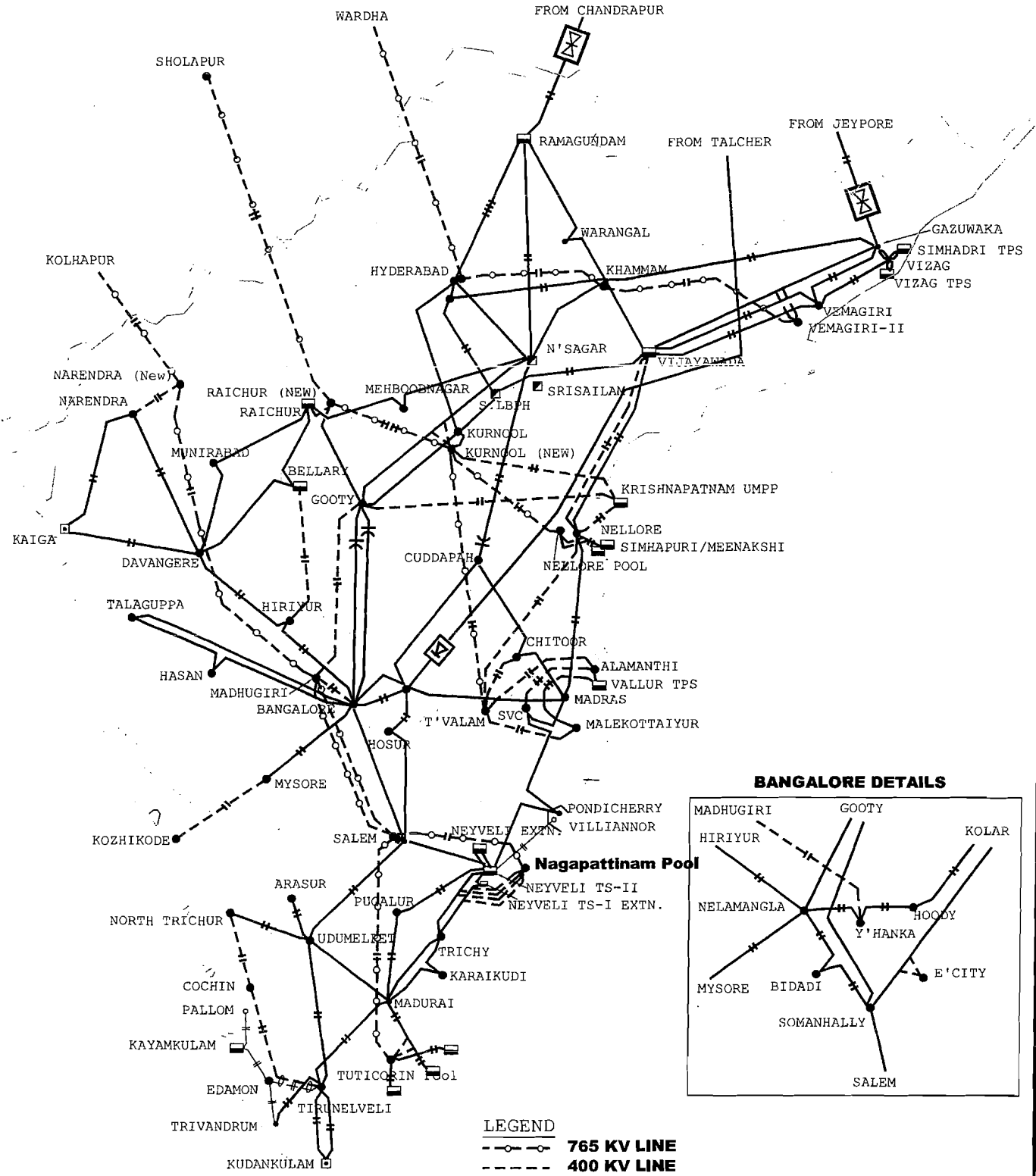
C. Line Bays and Reactor Provision associated with Transmission System associated with Krishnapatnam UMPP – Synchronous interconnection between SR and WR (Part-B).

| | | | | | |
|----|----------------------------|---------------------------------|---------------------------------|--------------------------------------|--------------------------------------|
| 1. | Raichur-Sholapur 765kV S/C | 1no.765kV bay (POWERGRID Scope) | 1no.765kV bay (POWERGRID Scope) | 1x240 (switchable) (POWERGRID Scope) | 1x240 (switchable) (POWERGRID Scope) |
|----|----------------------------|---------------------------------|---------------------------------|--------------------------------------|--------------------------------------|

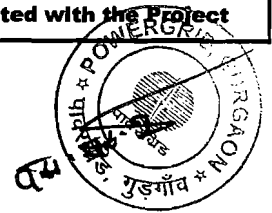
Note: Reactive compensation is based on the tentative line length.

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Line Bays and Reactors at POWERGRID sub-station for Raichur
- Sholapur Transmission line for Synchronous Interconnection
between SR and WR



LEGEND
 — 765 KV LINE
 - - - 400 KV LINE
 ■ Substation extension works associated with the Project





Certificate of Capital Cost for 765 kV Raichur Substation Exetsnsion, Line bay (Raichur-Sholapur-II) along with Line Reactor for Synchronous Interconnection between SR & WR Project -

It 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 | - | - | - | - |
| 2 | ESTIMATED EXPENDITURE FROM 01-04-2013 UPTO DOCO i.e., 01-02-2014 | 2,514.10 | 58.66 | 128.64 | 2,701.40 |
| 3 | ESTIMATED EXPENDITURE FROM DOCO to 31-03-2014. | 675.48 | - | - | 675.48 |
| 4 | BALANCE ESTIMATED EXPENDITURE IN 2014-15 | 1,576.13 | - | - | 1,576.13 |
| | TOTAL | 4,765.70 | 58.66 | 128.64 | 4,952.00 |
| | 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 | | | | 121.00 |

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.

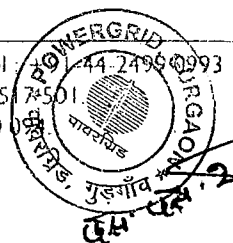
The estimated expenditure is on the basis of details furnished by management.

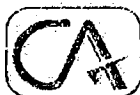
HYDERABAD
 DATE: 23-OCT-2013

For Sagar & Associates
 Chartered Accountants

Partner

B.O. No. 38, (Old No. 14), Second Main Road, C.I.T. Colony, Mylapore, Chennai - 600 004. Tel: 44-2496-0993
 B.O.: Flat No 3C, Jeevan Residency, Behind Kalanjali, Renigunta Road, Tirupati - 517-501
 B.O.: 130, III Main, First Block, Raj Mahal Vilas Extn., Phase II, Bangalore - 560 008





Certificate of Capital Cost for 765 kV Raichur Substation Extension, Line bay (Raichur-Sholapur-II) along with
Line Reactor for Synchronous Interconnection between SR & WR 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

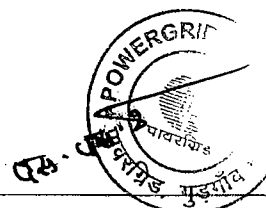
| SL. NO. | PARTICULARS | EXPENDITURE UPTO 31-03-2013 | ESTIMATED EXPENDITURE FROM 01-04-2013 UPTO DOCO i.e., 01-02-2014 | ESTIMATED EXPENDITURE FROM DOCO to 31-03-2014. | BALANCE ESTIMATED EXPENDITURE IN 2014-15 | TOTAL |
|---------|------------------------|-----------------------------|--|--|--|----------|
| 1 | LAND | - | - | - | - | - |
| 2 | BUILDING & CIVIL WORKS | - | 141.57 | 610.95 | - | 752.51 |
| 3 | SUBSTATION | - | 2,524.29 | 58.27 | 1,561.53 | 4,154.09 |
| 4 | TRANSMISSION LINE | - | - | - | - | - |
| 5 | IPCC | - | 25.54 | 5.26 | 14.80 | 46.39 |
| | TOTAL | - | 2,701.40 | 675.48 | 1,576.33 | 4,953.00 |

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.

HYDERABAD
DATE-23-OCT-2013

For Sagar & Associates
Chartered Accountants


Partner



K. G. Goyal & Associates

COST ACCOUNTANTS

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rajeshgoyaljaipur@yahoo.co.in

CERTIFICATE OF CAPITAL COST

Project Name: Line Bays and Reactor Provisions at POWERGRID Sub-Station for Raichur - Solapur TL for Synchronous Interconnection between SR and

Name of Element: 765kV Bay Extension at Solapur SS alongwith Switchable Line Reactor for 765 Kv S/C Raichur - Solapur Transmission Line.

Anticipated DCCO 01-02-2014

(RS./LAKHS)

| PARTICULARS | CAPITAL COST | IDC | IEDC | TOTAL |
|---|-----------------|----------|-------------|-----------------|
| Expenditure Upto 31.03.2013 | - | - | - | - |
| Expenditure from 01.04.2013 to 30.06.2013 | 347.21 | - | 0.33 | 347.54 |
| Estimated Expenditure from 01.07.2013 to 31.01.2014 | 2,429.04 | - | 0.76 | 2,429.80 |
| Estimated Expenditure from 01.02.2014 to 31.03.2014 | 597.65 | - | - | 597.65 |
| Estimated Expenditure from 01.04.2014 to 31.03.2015 | 669.18 | - | - | 669.18 |
| Total | 4,043.08 | - | 1.09 | 4,044.17 |

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

260.27

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.

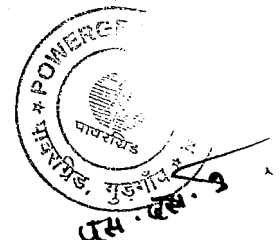
Place : Nagpur
 Date : 29-08-2013



For K.G. Goyal & Associates
 Cost Accountants

7-977

Rajesh Goyal
 (Partner)
 M-10884



K. G. Goyal & Associates

COST ACCOUNTANTS

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 4A, Pocket 2
 Mix Housing,
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 JAIPUR - 302018
 Mobile : 9829373503
rajeshgoyaljaipur@yahoo.co.in

CERTIFICATE OF CAPITAL COST

Project Name: Line Bays and Reactor Provisions at POWERGRID Sub-Station for Raichur - Solapur TL for Synchronous Interconnection between SR and WR.

Name of Element: 765kV Bay Extension at Solapur SS alongwith Switchable Line Reactor for 765 Kv 5/C Raichur - Solapur Transmission Line.

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 31.03.2014 | 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 | - | - | 137.70 | 142.32 | 99.73 | 379.75 |
| TRANSMISSION LINE | - | - | - | - | - | - |
| SUB-STATION | - | 343.13 | 2,257.55 | 449.86 | 564.52 | 3,615.06 |
| PLCC | - | 4.41 | 34.55 | 5.47 | 4.93 | 49.36 |
| | - | 347.54 | 2,429.80 | 597.65 | 669.18 | 4,044.17 |

Initial Spares included in the above :
 Transmission Line
 Sub Station 260.27

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

For K.G. Goyal & Associates
 Cost Accountants



7-577
 Rajesh Goyal
 (Partner)
 M-10884

Place : Nagpur
 Date : 29-08-2013



Summary Sheet

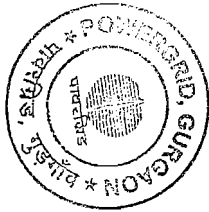
Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Synchronous Inter-Connection between Southern Region & Western Region
 Name of the Transmission Element: 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. 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 | | | | | 51.82 |
| 2 | Interest on Loan | FORM-13A | 0.00 | | | | | 61.69 |
| 3 | Return on Equity | FORM-01A | 0.00 | | | | | 55.17 |
| 4 | Interest On Working Capital | FORM-13B | 0.00 | | | | | 7.09 |
| 5 | O & M Expenses | | 0.00 | | | | | 61.09 |
| 6 | Total | | 0.00 | | | | | 236.86 |

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Petitioner



Encl-5

Calculation Of Return On Equity

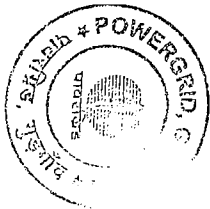
Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Synchronous Inter-Connection between Southern Region & Western Region
 Name of the Transmission Element: 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. 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 | | | | | | 1,643.62 |
| Notional Equity for Add Cap | | | | | | 381.94 |
| Total Equity | | | | | | 2,025.56 |
| Return on Equity @ 18.044% % | | | | | | 55.17 |

18.044%

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[Signature]
Petitioner

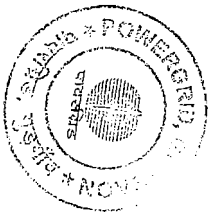


Details of Transmission Lines And Substations

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Synchronous Inter-Connection between Southern Region & Western Region
 Name of the Transmission Element: 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. Ant. :DOC0 :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 (anticipated) | 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 | | | | | | | |
| | Raichur-2 Bay | | 765 | | 1 | | | | 01-FEB-2014 | Yes |
| | Switchable Line reactor- Raichur-2 Bay | | 765 | | 1 | | | | 01-FEB-2014 | Yes |
| 3 | Raichur (PG) | Conventional | 765/400 kV | | | | | | | |
| | Solapur-2 Bay | | 765 | | 1 | | | | 01-FEB-2014 | Yes |
| | Switchable Line reactor- Solapur-2 Bay | | 765 | | 1 | | | | 01-FEB-2014 | Yes |
| Total | | | | | 4 | | | | | |

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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: Synchronous Inter-Connection between Southern Region & Western Region
 Name of the Transmission Element: 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. 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 | 1535.00 | 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**

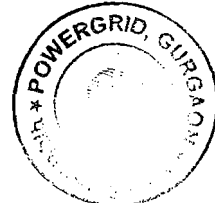
Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Transmission Licensee : POWER GRID CORPORATION OF INDIA
Name of Region: WESTERN REGION
Name of the Project : LINE BAYS AND REACTOR AT POWERGRID SUB-STATION for Raichur Solapur Transmission Line SYNCHRONOUS INTERCONNECTION BETWEEN SR AND WR.
Name of Element: 765kV Bay Extension at Sholapur and Raichur S/S alongwith Switchable Line Reactor for 765 Kv S/C Raichur - Solapur Transmission Line

Capital Cost Estimates

| | | |
|---|--|-----------------------------------|
| Board of Director/ Agency approving the Capital cost estimates: | Board of Directors 272th meeting | |
| Date of approval of the Capital cost estimates: | 29-May-12 | |
| | Present Day Cost | Completed Cost |
| Price level of approved estimates | As of End of 4th Qtr. Of the year 2012 | 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. Lacs.) | 7257.54 | 8068.61 |
| Capital cost excluding IDC & FC (Rs. Lacs) | 7257.54 | 8068.61 |
| IDC & FC | | |
| Foreign Component, if any (In Million US \$ or the relevant Currency) | | |
| Domestic Component (Rs. Lacs.) | 316.70 | 341.15 |
| Total IDC & FC (Rs.Lacs.) | 316.70 | 341.15 |
| 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. Lacs) | 7574.24 | 8409.76 |
| Schedule of Commissioning | | |
| (Scheduled DOCO elementwise) | | |
| COD of Unit-1/Block-1 | 01-Apr-14 | 2/1/2014 (anticipated) |
| 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.



63.44.2

Element wise Break-up of Project Cost for Transmission System

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

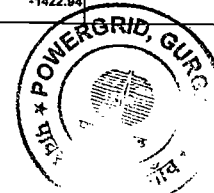
Name of Region: WR-1 & SR-1

Name of the Project : LINE BAYS AND REACTOR PROVISIONS AT POWERGRID SUB-STATION ASSOCIATED WITH TS ASSOCIATED WITH KRISHNAPATNAM UMPP SYNCHRONOUS INTERCONNECTION BETWEEN WR AND SR (PART-B).

Name of the Transmission Element: 765kV Bay Extension at Solapur S/S and Raichur S/S alongwith Switchable Line Reactor.
DOCO: 01.02.2014

(Rs in Lakhs)

| Sl.No. | Break Down | As per Original Estimate | As on COD 31.01.2014 | 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 | 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 | 0.00 | |
| 2.2 | Conductor | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2.3 | Earth Wire | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2.4 | Insulators | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2.5 | Hardware Fittings | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2.6 | Conductor & Earthwire accessories | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2.7 | Spare | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2.8 | Erection, Stringing & Cml works including foundation | 0.00 | 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 | | | 0.00 | |
| 4.2 | Land | 0.00 | | | 0.00 | |
| 4.3 | Site preparation | 20.00 | 17.00 | 3.00 | 0.00 | |
| | Total Preliminary works & land | 20.00 | 17.00 | 3.00 | 0.00 | |
| 5.0 | Civil Works | | | | | |
| 5.1 | Control Room & Office Building including HVAC | 0.00 | | 0.00 | 0.00 | |
| 5.2 | Township & Colony | 0.00 | | 0.00 | 0.00 | |
| 5.3 | Roads and Drainage | 0.00 | | 0.00 | 0.00 | |
| 5.4 | Foundation for structures | 310.00 | 269.79 | 853.00 | -812.79 | |
| 5.5 | Misc. civil works | 20.00 | 0.00 | 0.00 | 20.00 | |
| | Total Civil Works | 330.00 | 269.79 | 853.00 | -792.79 | |
| 6.0 | Substation Equipments | | | | | |
| 6.1 | Switchgear (CT,PT, Circuit Breaker, Isolator etc) | 1710.04 | 1544.83 | 630.06 | -464.85 | |
| 6.2 | Transformers | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6.3 | Compensating Equipment (Reactor, SVCs etc) | 3229.57 | 2475.27 | 949.45 | -195.15 | |
| 6.4 | Control, Relay & Protection Panel | 165.85 | 155.00 | 267.00 | -258.15 | |
| 6.5 | PLCC | 91.51 | 58.41 | 31.90 | 1.20 | |
| 6.6 | HVDC/FSC package | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6.7 | Bus Bars/ conductors/insulators | 112.00 | 182.30 | 159.88 | -240.18 | |
| 6.8 | outdoor lighting | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6.9 | Emergency DG set | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6.10 | Grounding System | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6.11 | Structure for Switch yard | 312.85 | 239.19 | 329.09 | -255.43 | |
| 6.12 | Auditory System | 84.00 | 134.28 | 118.09 | -168.35 | |
| 6.1 | Erection and Civil Works | | | | | |
| | Total Substation Equipments | 5705.82 | 4799.26 | 2485.47 | -1578.91 | |
| 7.0 | Spare (incl.in eqpt. cost) | 325.74 | 204.30 | 176.97 | | |
| 8.0 | Taxes and Duties | | | | | |
| 8.1 | Custom Duty | | | | | |
| 8.2 | Other Taxes & Duties | | | | | |
| 8.3 | Total Taxes & Duties | | | | 0.00 | |
| | Total (Sub-station) | 6381.56 | 5290.35 | 3518.44 | -2371.70 | |
| 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 | |
| | Total Construction and pre commissioning expenses | 0.00 | 0.00 | 0.00 | 0.00 | |
| 10.0 | Overheads | | | | | |
| 10.1 | Establishment | 877.01 | 129.73 | 0.00 | 747.28 | |
| 10.2 | Audit & Accounts | | 0.00 | 0.00 | 0.00 | |
| 10.3 | Contingency | | 0.00 | 0.00 | 0.00 | |
| | Total Overheads | 877.01 | 129.73 | 0.00 | 747.28 | |
| 11.0 | Project cost without IDC, FC, FERV & Hedging cost | 7258.57 | 5420.08 | 3518.44 | -1679.95 | |
| 12.0 | Total Cost (Plant & Equipment) | | | | | |
| 12.1 | Interest During Construction (IDC) | 315.67 | 58.66 | 0.00 | 0.00 | |
| 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 | 7574.24 | 5478.74 | 3518.44 | -1422.94 | |



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Break-up of Construction / Supply / Service packages

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

Name of the Region : Western Region-I

Name of the project : LINE BAYS AND REACTOR PROVISIONS AT POWERGRID SUB-STATION ASSOCIATED WITH TRANSMISSION SYSTEM ASSOCIATED WITH KRISHNAPATNAM UMPP SYNCHRONOUS INTERCONNECTION BETWEEN WR AND SR (PART-B)

Name of the Transmission Element: 765KV Bay extension at Solapur and Raichur S/S alongwith switchable line reactor

Anticipated DOCO: 01.02.2014

| SL | Package / Scope of works | Party | LOA NO | Date of award | Start date of work | No of bids received | Duration / completion date | 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 |
|--|---|---------|---|---------------|--------------------|---------------------|----------------------------|------------------------------------|---------------|------------------------------------|---------------|-----------------------------------|--|-------------------------|------------------------------|-----------------|
| | | | | | | | | | INR - 11 | | INR - 13 | | | | | |
| Extension of 765 kV Solapur and Raichur S/S | | | | | | | | | | | | | | | | |
| 1 | Extension of 765 kV substation at Sholapur (SS01) - Supply | L&T | CC-CS/182-WR1/SS-1809/3/G1/NOA-II/4566 | 11.01.2013 | 11.01.2013 | 6 | 10.08.14 | EUR - 3561007.64 USD - 64004.60 | 83,097,703.28 | EUR - 3561007.64 USD - 64004.60 | 83,097,703.28 | | 1,031.24 | 0.37 | - | 1,031.60 |
| 2 | Extension of 765 kV substation at Sholapur (SS01) - Erection | L&T | CC-CS/182-WR1/SS-1809/3/G1/NOA-II/4567 | 11.01.2013 | 11.01.2013 | 6 | 10.08.14 | | 30,082,619.00 | | 30,082,619.00 | | 131.08 | - | - | 131.08 |
| 3 | Circuit Breaker for Solapur s/s | Siemens | CC-CS/256-WR1/CB-1507/3/G10/NOA/4330 | 19.06.2012 | 19.06.2012 | 3 | 19.12.13 | | 43,788,585 | | 43,788,585 | | 355.27 | 0.73 | - | 356.00 |
| 4 | 3 nos. 765 kV 80 MVAR single phase Shunt reactor at Solapur S/S - Extn - Supply | TBEA | CC-CS/182-WR2/RT-1301/3/G1CA-II/4326 | 14.06.2012 | 14.06.2012 | 3 | 14.02.14 | USD - 2068146 | 0 | USD - 2068146 | 0 | | 1,156.13 | - | - | 1,156.13 |
| 5 | 3 nos. 765 kV 80 MVAR single phase Shunt reactor at Solapur S/S - Extn - Supply | TBEA | CC-CS/182-WR2/RT-1301/3/G1CA-II/4327 | 14.06.2012 | 14.06.2012 | 3 | 14.02.14 | | 11,313,087 | | 11,313,087 | | 37.33 | - | - | 37.33 |
| 6 | 3 nos. 765 kV 80 MVAR single phase Shunt reactor at Solapur S/S - Extn - Erection | TBEA | CC-CS/182-WR2/RT-1301/3/G1CA-II/4328 | 14.06.2012 | 14.06.2012 | 3 | 14.02.14 | | 19,981,512 | | 19,981,512 | | 42.59 | - | - | 42.59 |
| | | | | | | | | | | | | | 22.60 | | | 22.60 |
| 7 | 765 kV Raichur Substation Extension-Supply | L&T | CC-CS/182-WR1/SS-1809/3/G1/NOA-I/Errata-I dtd 19.02.2013 | 19.02.2013 | 19.02.2013 | | | | 108,300,000 | | | with escalation | | | | |
| 8 | 765 kV Raichur Substation Extension-Erection | L&T | CC-CS/182-WR1/SS-1809/3/G1/NOA-I/Errata-I dtd 19.02.2013 | 19.02.2013 | 19.02.2013 | | | | 60,900,000 | | | with escalation | | | | |
| 9 | 80 MVAR, 1 ph Reactor-Supply | TBEA | CC-CS/182-WR2/RT-1301/3/G1/NOA-II/4326 & NOA II/4327 dtd 14.06.2012 | 14.06.2012 | 14.06.2012 | 3 | 14.02.14 | | 11,300,000 | | | with escalation | | | | |
| 10 | 80 MVAR, 1 ph Reactor-Erection | TBEA | CC-CS/182-WR2/RT-1301/3/G1/NOA-II/4328 dtd 14.06.2012 | 14.06.2012 | 14.06.2012 | 3 | 14.02.14 | | 20,800,000 | | | with escalation | 2,395.00 | 2.48 | 0.59 | 2,701.00 |
| 11 | 765 kV Siemens CB-Supply | SIEMENS | CC-CS/256-WR1/CB-1506/3/G10/NOA/4330 dtd 19.06.2012 | 21.06.2012 | 21.06.2012 | 3 | 19.12.13 | | 21,200,000 | | | with escalation | | | | |
| 12 | 765 kV Siemens CB-F&I | SIEMENS | C-CS/256-WR-I/CB-1507/3/G10/CA/4331 dtd 16.07.2012 | 21.06.2012 | 21.06.2012 | 3 | 19.12.13 | | 400,000 | | | with escalation | | | | |
| 13 | 765 kV Alstom CB-Supply | ALSTOM | CC-CS/256-WR1/CB-1507/3/G10/CA/4483 dtd 07.11.2012 | 12.03.2012 | 12.03.2012 | 3 | | | 8,700,000 | | | with escalation | | | | |
| 14 | 765 kV Alstom CB-F&I | ALSTOM | CC-CS/256-WR1/CB-1507/3/G10/CA/4483 dtd 07.11.2012 | 12.03.2012 | 12.03.2012 | 3 | | | 100,000 | | | with escalation | | | | |
| | TOTAL SOLAPUR & RAICHUR S/S Extn | | | | | | | | | | | | 5,171.25 | 3.57 | 0.59 | 5,478.34 |

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(As in left)

024.024.28



**PART-III
Form 5D**

DETAILS OF ELEMENTWISE COST

Name of the Transmission Licensee : POWER GRID CORPORATION OF INDIA LTD.

Name of Region: WESTERN

Name of the Project : LINE BAYS AND REACTOR AT RAICHUR AND SOLAPUR POWERGRID SUB-STATION FOR RAICHUR SOLAPUR TRANSMISSION LINE SYNCHRONOUS INTERCONNECTION BETWEEN SR AND WR.

Substations

| S.NO. | Name of Substation | Apportioned approved Cost (Rs. Lacs) | Completed Cost (Rs. Lacs) | Covered in the present petition | |
|-------|---|--------------------------------------|---------------------------|---------------------------------|---------------------|
| | | | | yes/no | if no, petition no. |
| | | | | | |
| | | | | | |
| 1 | Extension of 765/400 KV substation at Raichur | 3749.57 | 4953.00 | YES | |
| 2 | Extension of 765/400 KV substation at Solapur | 3824.66 | 4044.18 | YES | |
| | Total | 7574.24 | 8997.18 | | |

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Petitioner



Financial package upto COD

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
Name of Region: **SOUTHERN REGION**
Name of the Project: **Synchronous Inter-Connection between Southern Region & Western Region**
Name of the Transmission Element: **765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. Ant. :DOCO :01-FEB-2014**
Project Cost as on COD/31.03.2009: **5478.74 (Rs. in Lakhs)**
Date of Commercial Operation of the Transmission element: **01-FEB-2014**

(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 | 5301.80 | INR | 3835.12 | | |
| Loans - Foreign | | | | | | |
| Total Loans | | 5301.80 | | 3835.12 | | |
| Equity | | | | | | |
| Foreign | | | | | | |
| Domestic | INR | 2272.20 | INR | 1643.62 | | |
| Notional | | | | 0.00 | | |
| Total Equity | | 2272.20 | | 1643.62 | | |
| Debt Equity Ratio | | 70.00:30.00 | | 70.00:30.00 | | |
| Total Cost | | 7574.00 | | 5478.74 | | |
| | Debt | Equity | Total | | | |
| Add Cap For 2013-2014 | | | 1273.13 | | | |
| Add Cap For 2013-2014 | Actual | Normative | | | | |
| Debt | | 891.19 | | | | |
| Equity | | 381.94 | | | | |
| Total | | 1273.13 | | | | |
| Total Capital Cost with ADDCAP upto 01.04.2009 | | | 6751.87 | | | |

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Petitioner



Statement of Additional Capitalisation after COD

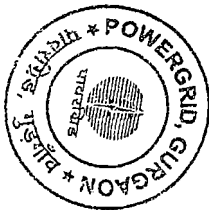
Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Synchronous Inter-Connection between Southern Region & Western Region
 Name of the Transmission Element: 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur
 Transmission Line. 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 | 753.27 | Balance & Retention Payments | 9(i) | |
| | | SUB STATION | 508.13 | Balance & Retention Payments | 9(i) | |
| | | PLCC | 11.73 | Balance & Retention Payments | 9(i) | |
| | Total | | 1273.13 | | | |
| 2. | 2014-2015 | BUILDING | 99.73 | Balance & Retention Payments | 9(i) | |
| | | SUB STATION | 2126.05 | Balance & Retention Payments | 9(i) | |
| | | PLCC | 19.53 | Balance & Retention Payments | 9(i) | |
| | Total | | 2245.31 | | | |

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Petitioner



Statement of Capital Cost

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.
 Name of Region: SOUTHERN REGION
 Name of the Project: Synchronous Inter-Connection between Southern Region & Western Region
 Name of the Transmission Element: 765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. Ant. :DOCO :01-FEB-2014

Statement of Capital Cost

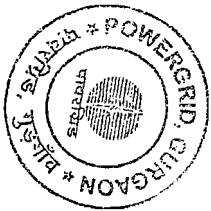
(To be given for relevant dates and year wise)

(Rs. in Crores)

| | | 01-APR-2009- 31-Mar-2010 | 01-APR-2010- 31-Mar-2011 | 01-APR-2011- 31-Mar-2012 | 01-APR-2012- 31-Mar-2013 | 01-FEB-2014- 31-Mar-2014 |
|---|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| A | a) Opening Gross Block Amount as per books | | | | | 54.79 |
| | b) Amount of capital liabilities in A(a) above | | | | | |
| | c) Amount of IDC, FC, FERV & Hedging cost included in A(a) above | | | | | 0.59 |
| | d) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) a | | | | | 1.3 |
| B | a) Addition in Gross Block Amount during the period | | | | | 12.73 |
| | b) Amount of capital liabilities in B(a) above | | | | | |
| | c) Amount of IDC, FC, FERV & Hedging cost included in B(a) above | | | | | |
| | d) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in B(a) a | | | | | |
| C | a) Closing Gross Block Amount as per books | | | | | 67.52 |
| | b) Amount of capital liabilities in C(a) above | | | | | |
| | c) Amount of IDC, FC, FERV & Hedging cost included in C(a) above | | | | | 0.59 |
| | d) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) a | | | | | 1.3 |

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Petitioner



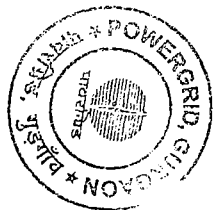
Financing of Additional Capitalisation

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Synchronous Inter-Connection between Southern Region & Western Region**
 Name of the Transmission Element: **765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. 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 | 1273.13 | | | | | | | | | |
| Financing Details | | | | | | | | | | |
| Loan-1 | | | | | | | | | | |
| Loan-2 | | | | | | | | | | |
| Loan-3 and so on | | | | | | | | | | |
| Total Loan | 891.19 | | | | | | | | | |
| Equity | 381.94 | | | | | | | | | |
| Internal Resources | | | | | | | | | | |
| Others | | | | | | | | | | |
| Total | 1273.13 | | | | | | | | | |

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[Signature]
Petitioner

Calculation of Depreciation Rate

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

SOUTHERN REGION

Name of the Project:

Synchronous Inter-Connection between Southern Region & Western Region

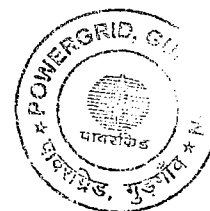
Name of the Transmission Element:

765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. 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 | 279.27 | 753.27 | 1032.54 | 3.34% | 3.65 |
| 3 | TR LINE | 0.00 | 0.00 | 0.00 | 5.28% | 0.00 |
| 4 | SUB STATION | 5134.97 | 508.13 | 5643.10 | 5.28% | 47.42 |
| 5 | PLCC | 64.50 | 11.73 | 76.23 | 6.33% | 0.74 |
| 6 | LEASEHOLD LAND | 0.00 | 0.00 | 0.00 | 3.34% | 0.00 |
| | Total | 5478.74 | 1273.13 | 6751.87 | | 51.82 |
| Weighted Average Rate of Depreciation (%) | | | | | | 0.85 |
| Elapsed Life | | | | | | 0 |


Petitioner



Statement of Depreciation

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Synchronous Inter-Connection between Southern Region & Western Region**
 Name of the Transmission Element: **765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. 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 | | | | | | | | | | | | | | 47.42 |
| Depreciation on Additional Capitalisation | | | | | | | | | | | | | | |
| Amount of Additional Capitalisation | | | | | | | | | | | | | | 1,273.13 |
| Depreciation Amount | | | | | | | | | | | | | | 4.39 |
| Details of FERV | | | | | | | | | | | | | | |
| Amount of FERV on which depreciation charged | | | | | | | | | | | | | | |
| Depreciation Amount | | | | | | | | | | | | | | |
| Depreciation Recovered during the year | | | | | | | | | | | | | | 51.82 |
| Advance against Depreciation recovered during the year | | | | | | | | | | | | | | |
| Depreciation and Advance against Depreciation recovered during the year | | | | | | | | | | | | | | 51.82 |
| Cumulative Depreciation And Advance against Depreciation recovered upto the year | | | | | | | | | | | | | | 51.82 |

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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: **Synchronous Inter-Connection between Southern Region & Western Region**
 Name of the Transmission Element: **765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. Ant. :DOCO :01-FEB-2014**

(Rs in Lacs)

| Particulars | Existing 2008-2009 | 2009-2010 | 2010-2011 | 2011-2012 | 2012-2013 | 2013-2014 |
|---|-----------------------|-----------|-----------|-----------|-----------|-----------|
| Proposed Loan 2013-14 (8.70%) | | | | | | |
| Gross Loan Opening | | | | | | 3835.12 |
| Cumulative Repayments of Loans upto Previous Year | | | | | | |
| Net Loans Opening | | | | | | 3835.12 |
| Add : Drawal(s) during the year | | | | | | |
| Less : Repayments(s) of Loans during the year | | | | | | |
| Net Loan Closing | | | | | | 3835.12 |
| Average Net Loan | | | | | | 3835.12 |
| Rate of Interest on Loan | | 0% | 0% | 0% | 0% | 8.7% |
| Interest on Loan | | | | | | 333.66 |
| Total | | | | | | |
| Gross Loan Opening | | | | | | 3835.12 |
| Cumulative Repayments of Loans upto Previous Year | | | | | | |
| Net Loans Opening | | | | | | 3835.12 |
| Add : Drawal(s) during the year | | | | | | |
| Less : Repayments(s) of Loans during the year | | | | | | |
| Net Loan Closing | | | | | | 3835.12 |
| Average Net Loan | | | | | | 3835.12 |
| Interest on Loan | | | | | | 333.66 |
| Weighted Average Rate of Interest on Loans | | | | | | 8.7000% |

(Signature)
Petitioner



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: **Synchronous Inter-Connection between Southern Region & Western Region**
 Name of the Transmission Element: **765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. 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 | | | | | | 3,835.12 |
| Cumulative repayment of Normative Loan upto previous year | | | | | | |
| Net Normative loan - Opening | | | | | | 3,835.12 |
| Increase/Decrease due to ACE during the Year | | | | | | 891.19 |
| Repayments of Normative Loan during the year | | | | | | 51.82 |
| Net Normative loan - Closing | | | | | | 4,674.49 |
| Average Normative Loan | | | | | | 4,254.81 |
| Weighted average Rate of Interest on actual Loans | | | | | | 8.7000% |
| Interest on Normative loan | | | | | | 61.69 |

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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:

Synchronous Inter-Connection between Southern Region & Western Region

Name of the Transmission Element:

765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. 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 | | | | | | 30.55 |
| 2 | Maintenance Spares | | | | | | 54.98 |
| 3 | Receivables | | | | | | 236.86 |
| 4 | Total Working Capital | | | | | | 322.39 |
| 5 | Rate of Interest | | | | | | 13.20 |
| 6 | Interest on Working Capital | | | | | | 7.09 |

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Petitioner



Draw Down Schedule for Calculation of IDC & Financing Charges

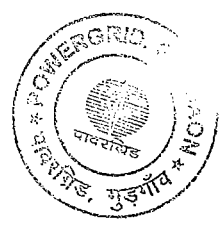
Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**
 Name of Region: **SOUTHERN REGION**
 Name of the Project: **Synchronous Inter-Connection between Southern Region & Western Region**
 Name of the Transmission Element: **765 kV Bay Extension at Solapur and Raichur S/S alongwith Switchable Line Reactor for 765 kV S/C Raichur-Solapur Transmission Line. 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 | Proposed Loan 2013-14 (8.70%) | | | | | | | | | |
| | Draw Down Amount | | | | | | | | | 3835.12 |
| | IDC | | | | | | | | | |
| | Financing Charges | | | | | | | | | |
| | Total Indian Loans | | | | | | | | | |
| | Draw Down Amount | | | | | | | | | 3835.12 |
| | IDC | | | | | | | | | 0.00 |
| | Financing Charges | | | | | | | | | 0.00 |
| | Total of Loans Drawn | | | | | | | | | |
| | Draw Down Amount | | | | | | | | | 3835.12 |
| | IDC | | | | | | | | | 58.66 |
| | 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.

[Signature]
Petitioner





Ref.: NSE/LIST/211749-W

July 30, 2013

The Dy. General Manager (Finance),
Power Grid Corporation of India Limited
"Saudamini", Plot No.2, Sector - 29,
Gurgaon - 122 001.

Kind Attn. : Mr. Sandeep Kumar Jain

Dear Sir,

**Sub: Listing of Secured, Redeemable, Non-Convertible, Non-Cumulative,
Taxable Bonds (Series - XLIV) issued by Power Grid Corporation of
India Limited**

This has reference to your listing application for the listing of Secured Redeemable, Non - Convertible, Non - Cumulative, Taxable Bonds (Series - XLIV).

In this connection, we are pleased to inform you that the securities as specified in the application are duly listed on the WDM segment with effect from July 30, 2013 and all members have been suitably informed as per details given below:

| Sr. No | Security Description | Sec Type | Security | Issue | Issue Size (Rs. in lakhs) | Maturity Date |
|--------|--|----------|----------|-------|---------------------------|---------------|
| 1 | Power Grid Corp 8.70% 2018 (S-XLIV) | PT | PGC18 | 8.70% | 132200 | 15-Jul-2018 |
| 2 | Power Grid Corp 8.70% 2023 (S-XLIV) | PT | PGC23 | 8.70% | 132200 | 15-Jul-2023 |
| 3 | Power Grid Corp 8.70% 2028 (S-XLIV) | PT | PGC28 | 8.70% | 132200 | 15-Jul-2028 |

A Trade Statistics report will be provided to you on a monthly basis in the first week of the following month, if the security was traded during the previous month. This report will contain price volume details for each day traded.

Yours truly,
For National Stock Exchange of India Limited

S. Rajdev
Samir Rajdev
Manager



INDEX

**CHECK LIST
PART-III**

Name of the Company

Power Grid Corporation of India Ltd.

Name of the Project :

Transmission System associated with Synchronous Inter-connection between SR and WR

Name of the Transmission Element:

Line Bays and Reactor at 765/400 kV Raichur and Solapur POWERGRID S/S for Raichur-Solapur Transmission Line

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 WR 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 - |

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