

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

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Sipat-LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranchi-Sipat TL along with associated bays at Sipat end under Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Western Region for tariff block 2009-14 period.

**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 for tariff block 2009-14 period.

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 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. MADHYA PRADESH POWER TRADING COMPANY LTD.  
SHAKTI BHAWAN, RAMPUR  
JABALPUR - 482 008  
REPRESENTED BY ITS MD
2. MADHYAPRADESH AUDYOGIK KENDRA  
VIKAS NIGAM (INDORE) LTD.  
3/54, PRESS COMPLEX, AGRA-BOMBAY ROAD,  
INDORE-452 008
3. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.  
PRAKASHGAD, 4TH FLOOR  
ANDHERI (EAST), MUMBAI - 400 052  
REPRESENTED BY ITS MD



4. GUJARAT URJA VIKAS NIGAM LTD.  
SARDAR PATEL VIDYUT BHAWAN,  
RACE COURSE ROAD  
VADODARA - 390 007  
REPRESENTED BY ITS CHAIRMAN
5. ELECTRICITY DEPARTMENT  
GOVT. OF GOA  
VIDYUT BHAWAN, PANAJI,  
NEAR MANDVI HOTEL, GOA - 403 001  
• REPRESENTED BY ITS CHIEF ENGINEER (ELECTRICAL)
6. ELECTRICITY DEPARTMENT  
ADMINISTRATION OF DAMAN & DIU  
DAMAN - 396 210  
REPRESENTED BY ITS SECRETARY (FIN.)
7. ELECTRICITY DEPARTMENT.  
ADMINISTRATION OF DADRA NAGAR HAVELI  
U.T., SILVASSA - 396 230  
REPRESENTED BY ITS SECRETARY (FIN.)
8. CHHATTISGARH STATE ELECTRICITY BOARD  
P.O.SUNDER NAGAR, DANGANIA, RAIPUR  
CHHATISGAARH-492013  
REPRESENTED BY ITS CHAIRMAN

Kindly acknowledge the receipt.

PETITIONER  
POWER GRID CORPORATION OF INDIA LTD.  
REPRESENTED BY

  
S. S. Raju

Dy. GENERAL MANAGER (COMMERCIAL)

GURGAON  
DATED: 18.11.2013



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

**PETITION FOR**

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Sipat-LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranch-Sipat TL along with associated bays at Sipat end under Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Western Region for tariff block 2009-14 period.

PETITION NO. : .....

TARIFF BLOCK: 2009 - 2014

**POWER GRID CORPORATION OF INDIA LTD.**

**REGISTERED OFFICE**

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

**CORPORATE CENTRE**

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

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

**PETITION NO.: .....**

**IN THE MATTER OF:**

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Sipat-LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranchi-Sipat TL along with associated bays at Sipat end under Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Western Region for tariff block 2009-14 period.

**IN THE MATTER OF:**

Power Grid Corporation of India Ltd.  
**Registered office:** B-9, Qutab Institutional Area,  
Katwaria Sarai, New Delhi 110 016 and  
**Corporate office:** "Saudamini" ,Plot no.2,  
Sector-29, Gurgaon -122 001. ( Haryana)

---PETITIONER

Madhya Pradesh Power Trading Company Ltd.  
Shati Bhawan, Rampur  
Jabalpur - 482 008  
Represented By Its MD

----- RESPONDENTS

And Others

**INDEX**

Sl. No.	Description	Enclosure No.	Page No.
1	Letter for registration	-	3
2	Memo of Parties	-	4-5
3	Affidavit	-	6-7
4	Petition	-	8-10
5	Investment approval dated 29.08.2008	Encl-1	19-27
6	Schematic Diagram of Transmission asset	Encl-2	28
8	MOM of 22 <sup>nd</sup> Standing Committee of NR	Encl-3	29-32
9	CERC Letter dated 28.03.2012	Encl-4	33
10	Copy of Auditor's certificates	Encl-5	34-35
11	Tariff Forms	Encl-6	36-73
12	Check List		74

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

**REPRESENTED BY S.S.RAJU  
DY. GENERAL MANAGER (COMMERCIAL)**

**GURGAON  
DATED: 12.11.2013**



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

**PETITION NO.: .....**

**IN THE MATTER OF:**

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Sipat-LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranchi-Sipat TL along with associated bays at Sipat end under Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Western Region for tariff block 2009-14 period.

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Sector-29, Gurgaon -122 001. ( Haryana)

---PETITIONER

Madhya Pradesh Power Trading Company Ltd.  
Shati Bhawan, Rampur  
Jabalpur - 482 008  
Represented By Its MD

----- RESPONDENTS

And Others

**To**  
The Secretary  
Central Electricity Regulatory Commission  
New Delhi. 110 001

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 anticipated DOCO to 31.03.2014 may please be registered.

**PETITIONER  
POWER GRID CORPORATION OF INDIA LTD.**

**REPRESENTED BY S.S.RAJU  
DY. GENERAL MANAGER (COMMERCIAL)**

**GURGAON  
DATED: 12.11.2013**



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

**FILE NO:.....  
PETITION NO.: .....**

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---PETITIONER

Madhya Pradesh Power Trading Company Ltd.  
Shati Bhawan, Rampur  
Jabalpur - 482 008  
Represented By Its MD

---- RESPONDENTS

And Others

**MEMO OF PARTIES**

POWER GRID CORPORATION OF INDIA LTD.  
VERSUS

---PETITIONER

VERSUS

1. MADHYA PRADESH POWER TRADING COMPANY LTD.  
SHAKTI BHAWAN, RAMPUR  
JABALPUR - 482 008  
REPRESENTED BY ITS MD
2. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD.  
5<sup>TH</sup> FLOOR, PRAKASHGAD,  
BANDRA (EAST), MUMBAI - 400 051  
REPRESENTED BY ITS CHIEF ENGINEER (POWER PURCHASE CELL)
3. GUJARAT URJA VIKAS NIGAM LTD.  
SARDAR PATEL VIDYUT BHAWAN,  
RACE COURSE ROAD  
VADODARA - 390 007  
REPRESENTED BY ITS CHAIRMAN

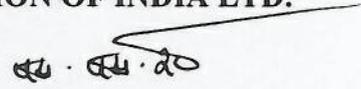


*[Handwritten signature]*

4. ELECTRICITY DEPARTMENT  
GOVT. OF GOA  
VIDYUT BHAWAN, PANAJI,  
NER MANDVI HOTEL, GOA - 403 001  
REPRESENTED BY ITS CHIEF ENGINEER (ELECTRICAL) .
5. 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.)
7. CHHATTISGARH STATE ELECTRICITY BOARD  
P.O.SUNDER NAGAR, DANGANIA, RAIPUR  
CHHATISGAARH-492013  
REPRESENTED BY ITS CHAIRMAN
8. MADHYAPRADESH AUDYOGIK KENDRA  
VIKAS NIGAM (INDORE) LTD.  
3/54, PRESS COMPLEX, AGRA-BOMBAY ROAD,  
INDORE-452 008

---RESPONDENTS

PETITIONER  
POWER GRID CORPORATION OF INDIA LTD.



REPRESENTED BY S.S.RAJU  
DY. GENERAL MANAGER (COMMERCIAL)

GURGAON  
DATED: 12.11.2013





हरियण HARYANA

30AA 425211

BEFORE

THE CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI

PETITION NO.: .....

IN THE MATTER OF:

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Sipat (Bilaspur PS) - LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranch-Sipat TL along with associated bays at Bilaspur PS under Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Western Region for tariff block 2009-14 period.

Power Grid Corporation of India Ltd  
**Registered office:** B-9, Qutab Institutional Area  
Katwaria Sarai, New Delhi 110 016 and  
**Corporate office:** "Saudamini" ,Plot no.2,  
Sector-29, Gurgaon -122 001. ( Haryana)



---PETITIONER

Madhya Pradesh Power Trading Company Ltd.  
Shati Bhawan, Rampur  
Jabalpur - 482 008  
Represented By Its MD  
And Others

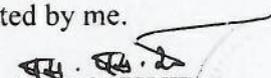
--- RESPONDENTS

Affidavit verifying the Petition

I, S.S.Raju, S/o Shri 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:

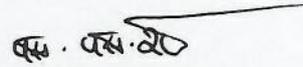


1. I am the Dy. General Manager (Commercial) of Power Grid Corporation of India Ltd., the representative of the Petitioner in the above matter, and am duly authorised to make this affidavit.
2. I submit that the enclosed petition is being filed determination of Transmission Tariff from DOCO to 31.03.2014 for determination of Transmission Tariff from DOCO to 31.03.2014 for Sipat (Bilaspur PS) - LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranch-Sipat TL along with associated bays at Bilaspur PS under Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Western Region for tariff block 2009-14 period.
3. I submit that no other petition except this petition has been filed directly or indirectly for approval of Transmission Tariff of Elements from DOCO to 31.03.2014 for Sipat (Bilaspur PS) - LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranch-Sipat TL along with associated bays at Bilaspur PS under Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Western Region for tariff block 2009-14 period.
4. The statements made in the petition herein are based on petitioner company's official records maintained in the ordinary course of business and I believe them to be true and correct.
5. The documents attached with the petition are legible copies and duly attested by me.

  
(DEPONENT)

#### VERIFICATION

Solemnly affirmed at Gurgaon on...12.....day of Nov. '2013 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.

  
(DEPONENT)



**ATTESTED**

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

**2 NOV 2013**

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

**FILE NO.....  
PETITION NO.: .....**

**IN THE MATTER OF:**

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999 and CERC (Terms and Conditions of Tariff) Regulations'2009 for determination of Transmission Tariff from DOCO to 31.03.2014 for Sipat-LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranchi-Sipat TL along with associated bays at Sipat end under Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER in Western Region for tariff block 2009-14 period.

Power Grid Corporation of India Ltd.  
**Registered office:** B-9, Qutab Institutional Area,  
Katwaria Sarai, New Delhi 110 016 and  
**Corporate office:** "Saudamini" ,Plot no.2,  
Sector-29, Gurgaon -122 001. ( Haryana)

---PETITIONER

Madhya Pradesh Power Trading Company Ltd.  
Shati Bhawan, Rampur  
Jabalpur - 482 008  
Represented By Its MD

---- RESPONDENTS

And Others

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. The Petitioner herein, Power Grid Corporation of India Ltd. Is a Government Company within the meaning of Companies Act, 1956. The Petitioner is also discharging the statutory functions under various applicable provisions, including in particular section 28 and 38 of the Electricity Act, 2003. 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.
2. That, Hon'ble Commission have notified CERC (Terms and Conditions of Tariff) Regulations, 2009, in accordance with which tariff based on capital cost of the transmission projects shall be determined. These Regulations have come in to force on 1.4.2009 and shall remain in force for a period of 5 years, unless reviewed earlier or extended by the Hon'ble Commission.

3. That the petitioner has been entrusted with the implementation of Transmission System associated with Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER) in Western Region. The administrative approval and expenditure sanction to the transmission project was accorded by the Board of Directors of POWERGRID vide C/CP/DVC and Maithon RB Project dated 29<sup>th</sup> August, 2008 for Rs 7075.33 crores including an IDC of Rs 713.60 crores based on 1<sup>st</sup> Quarter, 2008 price level, a copy whereof is attached hereto as **Encl.-1, page.....to.....**
4. The scope of work covered under “Common Scheme for 765 kV Pooling Stations and Network for NR , Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NER/SR/WR via ER) in Western Region” is as follows:

**Transmission Lines:**

- 1) Maithon-Gaya 400 kV Quad D/C line
- 2) Gaya – Sasaram 765 kV S/C line
- 3) Gaya – Balia 765 kV S/C line
- 4) Balia – Lucknow 765 kV S/C line
- 5) **Ranchi – WR Pooling Station 765 kV S/C line**
- 6) Lucknow 765 / 400 kV new sub-station – Lucknow 400/220 kV existing sub-station 400 kV quad D/c line
- 7) Ranchi 765/400 kV new sub-station – Ranchi 400/220 kV existing sub-station 400 kV Quad 2xD/c line
- 8) LILO of both circuits of Allahabad- Mainpuri 400 kV D/C line at Fatehpur 765/400 kV sub-station of POWERGRID
- 9) LILO of Barh-Balia 400 kV Quad D/C line at Patna

**Substations:**

1. Augmentation of Maithon400/220 kV sub-station
  - 2 nos of 400 kV line bays (for terminating Maithon-Gaya D/C line)
  - 2 nos of 400 kV line bays (for terminating Mejia-Maithon D/C line)
2. New 765/400 kV sub-station at Gaya
  - 3x1500 MVA, 765/400 kV Transformer alongwith associated bays
  - 2 nos.of 765 kV line bays (for Gaya-Sasaram & Gaya-Balia 765 kV lines)
  - 4 nos.of 400 kV line bays (for Maithon-Gaya line & Kodarm-Gaya line)
3. New 765/400 kV sub-station at Sasaram
  - 2x1500 MVA, 765/400 kV Transformer alongwith associated bays
  - 2 nos.of 765 kV line bays (for Gaya-Sasaram 765 kV S/C & Sasaram – Fatehpur 765 kV S/c)
  - 2 nos.of 400 kV bays (for Biharshariff-Sasaram 400 kV quad D/c line)

*\*NOTE: New 765 / 400 kV sub-station at Sasaram is to be accommodated in the premises of existing Sasaram sub-station.*



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4. Augmentation of Biharshariff 400/220 kV sub-station
  - 2 nos of 400 kV bays (for Biharshariff – Sasaram 400 kV Quad D/C line)
5. New 765/400 kV sub-station at Fatehpur
  - 2x1500 MVA, 765/400 kV Transformer alongwith associated bays
  - 2 nos.of 765 kV line bays (for Sasaram-Fatehpur & Fatehpur-Agra 765 kV lines)
  - 4 nos.of 400 kV line bays (for LILO of Allahabad-Mainpuri 400 kV D/c line)
6. Augmentation of 400 kV Agra sub-station to 765 kV
  - 2x1500 MVA, 765/400 kV transformer alongwith associated bays
  - 1 nos of 765 kV line bay (for Fatehpur-Agra 765 kV line)
7. Augmentation of 400 kV Balia sub-station to 765 kV
  - 2x1500 MVA, 765/400 kV transformer alongwith associated bays
  - 2 nos of 765 kV line bay (for Gaya-Balia & Balia-Lucknow 765 kV lines)
8. New 765/400 kV sub-station at Lucknow
  - 2x1500 MVA, 765/400 kV transformer alongwith associated bays
  - 1 nos of 765 kV line bay (for Balia-Lucknow 765 kV line)
  - 2 nos.of 400 kV bays (for Lucknow 765/400 kV new sub-station – Lucknow 400/220 kV existing sub-station 400 kV quad D/c line)
9. Augmentation of existing Lucknow 400/220 kV sub-station
  - 2 nos.of 400 kV bays (for Lucknow 765/400 kV new sub-station – Lucknow 400/220 kV existing sub-station 400 kV quad D/c line)
10. New 2x1500 MVA, 765/400 kV sub-station at Ranchi
  - 1 nos of 765 kV line bays (for Ranchi-WR Pooling 765 kV S/C line)
  - 4 nos.of 400 kV bays (for Rancji 400 kV new sub-station – Ranchi 400/220 kV existing sub-station 400 kV quad 2xD/c line)
11. Augmentation of Ranchi 400/220 kV sub-station
  - 6 nos.of 400 kV bays (4 nos. for Ranchi 765/400 kV new sub-station – Ranchi 400/220 kV existing sub-station 400 kV, quad 2xD/c line and 2 nos for Raghunathpur TPS – Ranchi line)
12. **765/400 kV WR Pooling sub-station**
  - **1 nos of 765 kV line bays (for Ranchi – WR Pooling 765 kV S/C line)**
13. Augmentation of Patna 400/220 kV sub-station
  - 4 nos.of 400 kV line bay (for LILO of Barh-Balia 400 kV Quad line)

The schematice diagram(colour coded for easy reference) is attached hereto as **Encl-2, ( page .....).**



As per Investment Approval , the commissioning schedule of the project is **48 months** from the date of investment approval hence the assets are to be commissioned in the progressive manner upto Aug'2012. Out of the 9 nos. transmission lines and new/augmentation work at 13 nos. substation (as detailed at para-4 above), the assets covered under this petition are actual/anticipated to be commissioned as follows:

SI No	Name of Asset	DOCO	Remark
01	400kV D/C Lucknow(New)-Lucknow(old) line with associated bays at both end	01.03.2012	Covered under petition no. 187/2011
02	765 kV S/C Ballia-Lucknow line alongwith associated bays at both ends	01.03.2012	
03	765/400 kV, 1500 MVA ICT I at Ballia S/S alongwith associated bays	01.03.2012	
04	765/400 kV, 1500 MVA ICT I at Lucknow S/S alongwith associated bays	01.03.2012	
05	Associated bays at Biharshariff and Sasaram end (for Biharshariff- Sasaram 400 KV quad T/L under Supplementary transmission system for DVC Maithon Right Bank project)	01.01.2012, 01.02.2012, 01.03.2012, 01.04.2012	
06	125 MVAR Bus Reactor at Lucknow(Existing) 400/220 kV S/S	01.10.2011	Covered under petition no. 68/TT/2012
07	765/400 kV, 1500 MVA ICT II at Lucknow S/S alongwith associated bays	01.03.2012	
08	765/400 kV, 1500 MVA ICT I at Fatehpur S/S alongwith associated bays	01.04.2012	
09	765/400 kV, 1500 MVA ICT II at Ballia S/S alongwith associated bays	01.03.2012	
10	765 kV Sasaram Fatehpur S/C TL bays at Fatehpur S/S	01.04.2012	
11	LILO of 400 kV Allahabad Mainpuri TL alongwith associated bays at Fatehpur	01.08.2012	
12	765/400 kV, 1500 MVA ICT II at Fatehpur S/S alongwith associated bays	01.04.2012	
13	125 MVAR Bus Reactor at Ballia	01.11.2011	
14	400kV Maithon Bays for Maithon – Mejia T/L	01.12.2011	
15	1 <sup>st</sup> 125 MVAR bus reactor at Fatehpur alongwith associated bays	01.01.2012	
16	2 <sup>nd</sup> 125 MVAR bus reactor at Fatehpur alongwith associated bays	01.01.2012	
17	125 MVAR Bus Reactor-II at Ballia S/S	01.02.2012	
18	1500 MVA ICT-1 at Agra alongwith associated bays	01.09.2012	
19	1500 MVA ICT-2 at Agra alongwith associated bays	01.09.2012	
20	765/400 kV, 1500 MVA ICT I at Gaya S/S alongwith associated bays	01.06.2012	Covered under petition no. 87/TT/2012
21	765/400 kV, 1500 MVA ICT II at Gaya S/S	01.04.2012	

	alongwith associated bays		
22	765/400 kV, 1500 MVA ICT III at Gaya S/S alongwith associated bays	01.04.2012	
23	765kV S/C Gaya-Balia T/L alongwith associated bays at both ends.	01.02.2012, 01.03.2012	
24	765kV S/C Gaya-Sasaram T/L alongwith associated bays at Gaya S/S	01.04.2012	
25	400kV D/C Quad Maithon -Gaya T/L & associated bays at both ends.	Interim arrangement commissioned w.e.f. 1.02.2013	
26	765kV , 3X80 MVAR Bus Reactor I alongwith associated bays at Gaya S/s	01.06.2012	
27	765kV , 3X80 MVAR Bus Reactor II alongwith associated bays at Gaya S/s	01.04.2012	
28	400kV , 1X125 MVAR Bus Reactor I alongwith associated bays at Gaya S/s	01.03.2012	
29	400kV , 1X125 MVAR Bus Reactor II alongwith associated bays at Gaya S/s	01.02.2012	
30	Associated line bays for 765 kV S/C Fatehpur Agra TL at Fatehpur and Agra S/S	01.06.2012	Covered under petition 61/TT/2012
31	765 KV, 240(3x80) MVAR Bus Reactor-II alongwith associated bays at 765/400 KV Ballia S/S	01.04.2012	Covered under petition 207/TT/2012
32	765 KV 330 MVAR (3 x 110) Bus Reactor alongwith associated bays at 765/400/220 KV Fatehpur S/S	01.04.2012	
33	765 KV 3 x 80 MVAR Bus Reactor at Lucknow alongwith associated bays	01.06.2012	
34	400 KV 125 MVAR Bus Reactor-III alongwith associated bays at 765/400 KV Agra (Augmentation) S/S	01.06.2012	
35	400 KV 125 MVAR Bus Reactor-II alongwith associated bays at 765/400 KV Agra (Augmentation) S/S	01.06.2012	
36	400 KV 125 MVAR Bus Reactor-III at Ballia S/S alongwith associated bays (Augmentation of 400 KV to 765 KV)	01.06.2012	
37	400kV D/C(Quad) LILO of Barh-Balia Line at Patna alongwith associated bays at Patna S/s	01.12.2012	Covered under petition 101/TT/2012
38	765/415 KV, 3x500 MVA ICT I Ranchi alongwith associated bays at 765KV Ranchi S/s	Not yet commissioned	
39	Combined Assets of (i); (ii) & (iii) (i) 400 kV D/C (Quad) Ranchi(New) - Ranchi(Old) - I T/L and associated 400 kV line bays at Ranchi(New) S/s & Ranchi(Old) S/s (ii) 400 kV D/C (Quad) Ranchi(New) - Ranchi(Old) - I T/L and associated 400 kV line bays at Ranchi(New) S/s & Ranchi(Old) S/s (iii) 765/415 KV, 3x500 MVA ICT II at	Not yet commissioned	



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	Ranchi alongwith associated bays at 765KV Ranchi S/s		
40	765/415kV , 3X500 MVA ICT at Sasaram with associated bays	01.03.2013	
42	125 MVAR Bus Reactor alongwith associated bays at Lucknow S/s	01.03.2012	38/TT/2013
41	240 MVAR Bus Reactor at Agra	01.01.2013	109/TT/2013
43	765 kV , 240 MVAR Switchable Line Reactor under Bus Reactor at Ballia S/s.	01.10.2012	Covered under petition No.
44	765 kV Line bays at Sasaram S/s (for 765kV Sasaram-Fatehpur TL under SASAN Project)	01.03.2013	32/TT/2013
45	765kV 240MVAR Switchable Line Reactor at Bilaspur at Bilaspur	1.11.2012	Covered under Petition No.120/TT/2013
46	Asset : Sipat-LILO point (at Dharamjaygarh) portion of 765kV S/C Ranchi-Sipat Line	01.01.2014 (Anticipated)	Covered under instant petition

That details of asset covered in the instant petition in Western Region is as below:

S.No	Details of assets as per Petition being filed	Scheduled DOCO/ Delay in months	Anticipated DOCO
1.	Asset I : Sipat-LILO point (at Dharamjaygarh) portion of 765kV S/C Ranchi-Sipat Line	01.08.2012/ 17 months	01.01.2014

**Reasons for Delay:**

**The reason of delay is mainly due to Forest Clearance.**

The Transmission Line is passing through the various forest stretches under Chhattisgarh state, which requires approval from MOEF & other Govt. authorities. As a process, on finalization of route of Transmission line, an Environmental Assessment is carried out with Forest officials that certify that the final route selected involves the bare minimum use of forests. Subsequently forest proposal is submitted for approval of concerned Authorities at State & Central level based on the type & area of forest involved.

**Forest clearance in Chhattisgarh:**

On completion of environmental assessment, the application for forest clearance, for Chhattisgarh portion was submitted for total area of 302.367 Hectare (line length 47.245kms). The first stage approval was accorded on 28.01.2013 by MOEF, New Delhi stipulating various conditions mandating deposit of the requisite amounts including undertakings for compliance of guidelines. Accordingly payments were deposited by Petitioner and on complying with all the terms & conditions & on submission of undertakings as stipulated in stage-I approval, the 2nd stage & final approval was issued on 08.08.2013 by MOEF, New Delhi. On second stage approval, the cost of tree cutting deposited to DFO, Korba and Final approval was given by CCF (Land Management), Raipur towards diversion of Forest Land in Nov'2013, after this tree cutting allowed and construction activities started in forest areas and which is anticipated to to be completed by Dec'13( Ant. DOCO: 01.01.2014)



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From the above it is evident that in spite of Petitioner's efforts for obtaining forest clearances in time, the entire process of forest clearances was completed in November'2013 which is beyond the control of Petitioner and therefore Honorable commission may kindly Condon the delay and allowed full tariff as claimed by Petitioner.

The above assets were planned to evacuate power from various generation projects of DVC. DVC has indicated that its Mejia-B (1000MW), Koderma(1000MW), Durgapur (1000MW)and Maithon-RB(1000MW) generation projects (Total=4000 MW) are scheduled to be commissioned progressively in coming years. At the time of planning of the transmission system, the schedule of commissioning of these various generation projects of DVC was indicated progressively from Dec 2009 to Dec-2010. The proposed beneficiaries of these projects and the power supply scenario of ER, NR and WR suggest that power from these projects are to be transferred to power deficit regions like NR and WR.

The comprehensive transmission system was evolved and discussed in various Standing Committee / Regional Power Committee meetings of NR, WR and ER. The summary record of discussions held during 22<sup>nd</sup> meeting of the Standing Committee on Power System Planning of Northern Region on 12<sup>th</sup> March' 2007, wherein the transmission system from the new generation capacity planned by DVC for supply of power to NR constituents was discussed in detail is attached hereto as **Encl.- 3, ( page .....**). Hence, the entire transmission system requirement has been covered under three separate schemes (i.e. three various investment approval).

The petition for other assets covered under other investment approval are filed/being filed separately. The current petition pertains to only one of those three investment approval. Further, it is submitted the balance assets under subject mentioned scheme are under different stages of completion.

5. As per CERC's letter No.C-7/189(204)/2009-CERC dated 28.03.2012 attached hereto as **Encl.-4**(page.....to.....), the element covered under the current petition has not been clubbed with the other assets under the project.
6. The details of apportioned approved FR cost, cost as on DOCO and estimated additional capitalization projected to be incurred of the asset covered in this petition is summarized below:

The details of apportioned approved FR cost, cost as on DOCO and estimated additional capitalization projected to be incurred of the asset covered in this petition is summarized below:

(Rs.in Lakh)

Name of the asset	Apportione d Approved Cost	Actual Cost incurred as on actual DOCO)	Projected Additional Capitalizatio n in 2013-14	Projected Additional Capitalizatio n in 2014-15	TOTAL Estimated completion Cost
Sipat-LILO point (at Dharamjay garh) portion of 765kV S/C Ranchi-Sipat Line	15699.79	16419.10	449.64	220.37	17089.11



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The reasons for item wise cost variation between approved cost (FR) and actual cost as on DOCO are explained in detail in Form-5B .That details of apportioned approved cost and total estimated completion cost has been given at Form-5D. That Tariff may be allowed on capital cost as claimed in Petition.

7. That the application for determination of tariff is filed in line with provision 5 (2) of tariff Regulation 2009 applicable for 2009-14 period. That the capital cost incurred/ projected to be incurred upto DOCO and projected to be incurred during 2013-14 & 2014-15 duly certified by auditors in auditor certificates are enclosed herewith as **Encl-5 (page....to....)**. That admissibility of additional Capitalisation may be considered as per provision 9(1) of tariff Regulation'2009.
8. The details of underlying assumptions for additional capitalization 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	Sub station	2.25	Balance & retention payment
	Transmission Line	445.13	
	PLCC	1.96	
	<b>Subtotal</b>	<b>449.64</b>	
01.04.2014 to 31.03.2015	Building & other civil works	28.97	Balance & retention payment
	Transmission Line	191.40	
	<b>Subtotal</b>	<b>230.37</b>	

#### 9. TRANSMISSION TARIFF :

- 9.1. That as per regulation 13 (3) and regulation 14 of the CERC (Terms and Conditions of Tariff) Regulations, 2009, the tariff for transmission of electricity on ISTS shall comprise transmission charge for recovery of annual fixed cost consisting of (a) Return on Equity, (b) Interest on Loan, (c) Depreciation, (d) Interest on Working Capital and (e) Operation and maintenance expenses. The tariff for block 2009-2014 has been worked out as per Appendix-I of the tariff regulations for period 2009-14
- 9.2. The tariff from actual DOCO to 31.03.2014 (**Encl.-6, page ....to .....**) is summarized below :

( Rs in Lakhs )

Asset	2010-11	2011-12	2012-13	2013-14
Sipat-LILO point (at Dharamjaygarh) portion of 765kV S/C Ranchi-Sipat Line	-	-	-	730.31

- 9.3. That, it is submitted in the Tariff indicated at 9.2 above, the ROE has been calculated @ 17.481 % based on the rate notified by the Hon'ble Commission as per illustration under regulation 15 (4) (i) of the CERC (Terms and Conditions of Tariff) Regulations, 2009. It is further submitted that the above rate of 17.481% is based on the MAT rate of 11.33 % being applicable for the year 2008-09.



That further in line with the amendment dated 21.06.2011 to Regulation 15 of the Principal Tariff Regulation dated 19.01.2009, the petitioner shall be allowed to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 ( as amended from time to time) of the respective financial year directly without making any application before the Commission. Further, Annual Fixed charges with respect to Tax rates applicable shall be trued up in accordance with Regulation 6 of the Principal Regulations.

9.4. **Service Tax:** \_

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 9.2 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 in case the transmission charges is withdrawn from the negative list at any time.

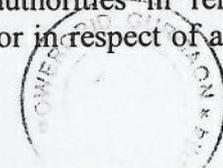
9.5. That Interest on Loan has been calculated on the basis of rate prevailing as on 01.04.2009. The change in Interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from / with the beneficiaries as was being followed during the tariff block 2004-09.

9.6. The transmission charges at para-9.2 above is inclusive of O&M expenses for the project derived based on the norms for O&M expenditure as specified under regulation 19(g) of the tariff regulations for block 2009-14. It is the understanding of the petitioner that these norms for O&M expenditure been arrived by the Hon'ble Commission after considering (i) normalized actual O&M expenses of the petitioner on its various projects in various regions during the year 2003-04, 2004-05, 2005-06, 2006-07, 2007-08, (ii) the base norms so arrived is escalated at 5.72% per annum to arrive at norms for years of tariff period 2009-14, (iii) and also wage hike of 50% on account of pay revision of the employees of Public Sector Undertakings. It is submitted that the wage revision of the employees of the petitioner company has already been done. The petitioner reserve the right to approach the Commission for additional manpower cost on account of wage revision (if, any) during the tariff block 2009-14 for claiming in the tariff.

9.7. Petitioner submits that the Licence fee has been a new component of cost to the Transmission licence 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), Regulation, 2012-issued vide date 31.12.2012, para 13 "Addition of New Regulation to the Principal Regulations 42A. (1) (b)."

9.8. The Transmission Charges and other related Charges indicated at Para- 9.2 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



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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.

**10. Sharing of Transmission Charges**

The billing collection and disbursement of Transmission Charges shall be governed by provision of CERC (sharing of interstate Transmission Charges and Losses) Regulations, 2010 and the Removal of difficulties orders issued thereafter.

11. In the circumstances mentioned above it will be just and proper that the transmission tariff for the assets covered under this petition be allowed to be charged from the Respondents on the basis set out in para-10 above. **The Petitioner submits that the Encl.-1 to Encl.-6 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 -9 above. The billing shall be done from the actual date of commercial operation.
- 2) Approve the additional capitalisation from DOCO to 31.03.2014 & 2014-15.
- 3) Delay in implementation of the project may be condoned.
- 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 ( as amended from time to time) of the respective financial year directly without making any application before the Commission.
- 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and publishing of notices in newspapers in terms of Regulation 42 CERC (Terms and Conditions of Tariff) Regulations, 2009, and other expenditure ( if any) in relation to the filing of petition.
- 6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2009-14 period, if any, from the respondent.
- 7) Allow the Petitioner to bill and recover Service tax on Transmission Charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list at any time in future.
- 8) Allow the petitioner to bill and recover Licensee fee separately from the respondents as per CERC (Terms and Conditions on Tariff) (Third Amendment), Regulations,



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2012 issued vide date 31.12.2012, para 13 "Addition of New Regulation to the Principal Regulations 42A. (1) (b)."

- 9) Allow provisional tariff in accordance with clause (3) of Regulation 5 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (First and Second Amendment).

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

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



**REPRESENTED BY S.S.RAJU  
DY. GENERAL MANAGER (COMMERCIAL)**

**GURGAON  
DATED: 12.11.2013**



पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड  
POWER GRID CORPORATION OF INDIA LIMITED

Corporate Office: Plot No. 2, Sector-29, Gurgaon-122 001 (Haryana)  
Tel: 0122-2655000 Fax: 0122-2655003

चक्र संख्या/Ref. Number

C/CF7 DVC and Mathura KB project

August 29, 2008

**SUB: INVESTMENT APPROVAL FOR 765KV SCHEME FOR 765KV POOLING STATIONS AND NETWORK FOR NR (COMMON FOR SASAN DURGAPUR + IMPORT BY WR FROM ER AND FROM NER/SOWA VIA ER) AND COMMON SCHEME FOR NETWORK VIA ER AND NER/SOWA + IMPORT BY WR FROM ER AND FROM NER/SOWA VIA ER.**

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 Office Memorandum No. 203/2006-GM, GL-92 dated 1<sup>st</sup> May, 2008 and Office Memorandum No. DEPTT/207-FM dated 22<sup>nd</sup> July, 1997 (modified subsequently through Office Memorandum No. 1872/192003-GM, GL-84 dated 5<sup>th</sup> August, 2005), have accorded investment approval for "Common scheme for 765KV pooling stations and network for NR (Common for Sasan DURGAPUR + Import by WR from ER and from NER/SOWA via ER) and Common scheme for network for NR (Common for NER/SOWA + Import by WR from ER and from NER/SOWA via ER)", in its 212<sup>th</sup> meeting held on August 06, 2008, as per the details given below:

- 1. Scope of project**  
Scope of works to be carried out under the scheme is attached at Annexure-1.
- 2. Project Cost & Funding**  
The estimated cost of the project based on 1<sup>st</sup> Quarter 2008 price level works out to Rs. 7076.35 Crores (including IDC of Rs. 100 Crores). The abstract cost estimate is enclosed at Annexure-1. Project is proposed to be funded through domestic borrowings and internal resources of POWERGRID with a Debt: Equity ratio of 70:30.
- 3. Implementation Schedule**  
The commissioning schedule of the project is 48 months progressively from the date of investment approval.

This is Issued in pursuance of the minutes of 212<sup>th</sup> meeting of Board of Directors of POWERGRID held on August 06, 2008.

*(Signature)*  
(Sohil Agrawal)  
Addl. Gen. Mgr. (CP)

पंजीकृत कार्यालय: प्लॉट नं. 2, सेक्टर 29, गुरुगॉन-122 001 (हरियाणा) | Registered Office: Plot No. 2, Sector-29, Gurgaon-122 001 (Haryana) | Tel: 0122-2655000 Fax: 0122-2655003

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(HARYANA)



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Annexure-I

Common scheme for 765kV pooling stations and network for NR (Common for Sasaram, UMPF, NDC, Madhupur, Koderma, Madhepuri, Bokaro, Singhbhum, Dhanbad) + Import by NR from ER and from NER/SR/WR via ER and Common scheme for network for WR (Common for NDC, Patna, Gaya, Madhepuri, Madhubani, Begusar + Raghunathpur/Bhagalpur + Import by WR from ER and from NER/SR/WR via ER)

**SCOPE OF WORKS**

Scope of work covered under this project broadly includes construction of following transmission lines and sub-stations:

**Transmission lines**

- 1) Madhupur - Gaya 400kV quad D/C line - 235 Km
- 2) Gaya - Sasaram 765kV S/C line - 116 Km
- 3) Gaya - Ballia 765kV S/C line - 235.10 Km
- 4) Ballia - Lucknow 765kV S/C line - 338 Km
- 5) Ranchi-WR Pooling Station 765kV S/C line - 372 Km
- 6) Lucknow 765/400kV new sub-station - Lucknow 400/220kV existing sub-station 400 KV quad D/C line - 40 Km
- 7) Ranchi 765/400kV new sub-station - Ranchi 400/220kV existing sub-station 400 KV quad D/C line - 110 Km
- 8) LILC of both circuits of Allahabad - Madhupur 400kV D/C line at Fatehpur 765/400kV sub-station of POWERGRID - 32 Km
- 9) LILC of Barh-Balla 400kV quad D/C line at Patna - 25 Km

**Sub-stations**

1. Augmentation of Madhupur 400/220kV S/S
    - > 2 nos of 400kV line bays (for terminating Madhupur-Gaya D/C line)
    - > 2 nos of 400kV line bays (for terminating Meja-Madhupur D/C line)
  2. New 765/400kV sub-station at Gaya
    - > 2x 1500 MVA, 765/400 kV transformer along with associated bays
    - > 2 nos of 765kV line bays (for Gaya-Sasaram & Gaya-Balla 765kV lines)
    - > 4 nos of 400kV line bays (for Madhupur-Gaya line & Koderma-Gaya line)
  3. New 765/400kV sub-station at Sasaram
    - > 2x 1500 MVA, 765/400 kV transformer along with associated bays
    - > 2 nos of 765kV line bays (for Gaya-Sasaram 765kV S/C & Sasaram-Fatehpur 765kV S/C)
    - > 2 nos. of 400 kV bays (for Biharsharif - Sasaram 400 KV quad D/C line)
- \*NOTE: New 765/400kV sub-station at Sasaram is to be accommodated in the premises of existing Sasaram sub-station.*
4. Augmentation of Biharsharif 400/220kV S/S
    - > 2 nos. of 400 kV bays (for Biharsharif - Sasaram 400 KV quad D/C line)
  5. New 765/400kV sub-station at Fatehpur
    - > 2x 1500 MVA, 765/400 kV transformer along with associated bays

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- > 2 nos of 765KV line bays (for Sasaram-Fatehpur & Fatehpur-Agra 765KV lines)
  - > 4 nos of 400KV line bays (for LFCO of Allahabad-Mathura 400KV D/c line)
6. Augmentation of 400 KV Agra sub-station to 765KV
- > 2x1600 MVA, 765/400 KV transformer & 2 nos of associated bays
  - > 1 nos of 765KV line bay (for Fatehpur-Agra 765KV line)
7. Augmentation of 400KV Bansi sub-station to 765KV
- > 2x1600 MVA, 765/400 KV transformer & 2 nos of associated bays
  - > 2 nos of 765KV line bays (for Gaya-Bansi & Bansi-Lucknow 765KV lines)
8. New 765KV Lucknow sub-station
- > 2x1600 MVA, 765/400 KV transformer & 2 nos of associated bays
  - > 1 nos of 765KV line bay (for Lucknow-Bansi 765KV line)
  - > 2 nos 400 KV line bays for Lucknow 765KV new sub-station - Lucknow 400/220KV existing sub-station 400KV quad D/c line)
9. Augmentation of existing Lucknow 400/220KV Sta
- > 2 nos 400 KV bays (for Lucknow 765/400KV new sub-station - Lucknow 400/220KV existing sub-station 400KV quad D/c line)
10. New 400/220KV, 765/400KV sub-station at Ranchi
- > 1 nos of 765KV line bays (for Ranchi-WB Pooling 765KV S/C line)
  - > 4 nos 400 KV bays for Ranchi 400/220KV new sub-station - Ranchi-400/220KV existing sub-station 400KV quad 2x200KV line)
11. Augmentation of Ranchi 400/220KV Sta
- > 8 nos 400 KV bays (4 nos for Ranchi TPS/200KV new sub-station - Ranchi 400/220KV existing sub-station 400KV quad 2x200KV line and 2 nos for Ranchi-Ranchipur TPS-Ranchi line)
12. 765/400KV WB Pooling sub-station
- > 1 nos of 765 KV line bays (for Ranchi - WB Pooling 765 KV S/C line)
13. Augmentation of Patna 400/220KV sub-station
- > 4 nos of 400KV line bay (for LFCO of Bansi-Bansi 400KV Quad line)

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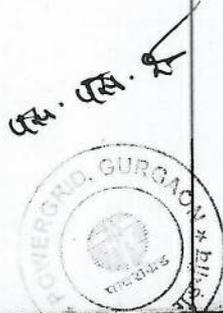
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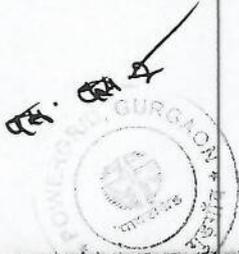
Transmission schemes for			ANNEX-1	
Evacuation and Transmission of Power from				
NTPC generation project at North Karanpura (1980MW)				
DVC/TATA JV generation project at Malihon Right Bank (1000MW)				
DVC generation projects at Bokaro Extn (500MW), Kodarma (1000MW), and Mejla Extn (1000MW)				
DVC generation projects at Raghunathpur (1000MW) and Durgapur (1000MW)				
Pooling stations and transmission system for Import of Power by NR				
Pooling stations and transmission system for Import of Power by WR				
SCHEME	Scheme / Transmission works	Target Year/ Matching with	Beneficiaries	Proposed to be executed by
1	Evacuation System for North Karanpura (1980 MW)	2011-13		Private Sector through SPV of REC
1	North Karanpura - Gaya 400kV Quad D/C line	NkpU1	Beneficiaries of NKP	
2	North Karanpura - Ranchi 400kV Quad D/C line	NkpU1	Beneficiaries of NKP	
3	Sipat/Korba (pooling) - Sonri 765kV S/C line	NkpU2	WR	
4	Lucknow - Bareilly 765kV S/C line	NkpU3	NR	
5	Bareilly - Meerut 765kV S/C line	NkpU3	NR	
6	Agra - Gurgaon (ITP) - Gurgaon (PG) 400kV quad D/C line	Earliest	NR	
7	Gurgaon 400/220kV GIS substation 400/220kV transformers: 2 x 315 MVA 400kV line bays: 4 nos of which 2 nos to be with 50 MVAR switchable reactors for Agra lines 220kV line bays: 4 nos 400kV: 1 1/2 breaker scheme; 220kV double bus scheme	Earliest	NR	
2	Evacuation System for Malihon RB (1000 MW), Bokaro Extn. (500MW), Kodarma (1000MW), and Mejla Extn. (1000MW)			Private Sector through SPV of PFC
	Common Transmission System for Import of power by NR	2009-10		
	✓ Biharsharif - Sasaram (PG 765kV s/s) 400kV quad D/C line	At the earliest and ahead of the first unit of any of the Malihon RB, Bokaro, or Mejla Extn.	NR	
	✓ Sasaram-Fatehpur (PG 765kV s/s) 765kV S/C line		NR	
	✓ Fatehpur (PG 765kV s/s) - Agra 765kV S/C line		NR	
	4 → Fatehpur (PG 765kV s/s) - Fatehpur (ITP 400kV s/s) 400kV quad D/C line (if 765kV PGCL s/s & 400kV ITP s/s are contiguous, then this would be through extended bus)		NR	
	6 LILO of Singrauli - Kanpur 400kV line at Fatehpur (400kV D/C LILO line)		NR	
	8 LILO of both circuits of Fatehpur - Kanpur 220 kV lines at Fatehpur (220kV 2 x D/C LILO lines)		NR	
	7 Fatehpur 400/220kV substation 400/220kV transformers: 2 x 315 MVA 400kV line bays: 2 nos of which one to be with 50 MVAR switchable reactors for Singrauli line 220kV line bays: 4 nos 400kV: 1 1/2 breaker scheme; 220kV double main & transfer bus		NR	

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SCHEME	Scheme / Transmission works	Target Year/ Matching with	Beneficiaries	Proposed to be executed by
	Specific System for Maithon RB	2009-10		
1	Maithon RB-Maithon PG 400kV D/C line	MRB-U1	MaithonRB	
2	Maithon RB - Ranchi 400kV D/C line	MRB-U2	MaithonRB	
	Specific System for Bokaro Extn.	2009-10		
1	Bokaro-Biharsharif (routed via Kodarma) 400kV D/C line, twin moose from Bokaro upto Kodarma and quad moose from Kodarma to Biharsharif (with LILO at Kodarma, this would become two line - (1) Bokaro Extn. - Kodarma 400kV D/C and (2) Kodarma-Biharsharif 400kV quad D/C)	Bokaro Extn.	DVC	
	Specific System for Kodarma	2009-10		
1	Kodarma - Gaya 400kV quad D/C line	Kod-U1	DVC	
	Specific System for Mejia Extn	2009-10		
1	LILO of one ckt of Maithon-Jamshedpur 400kV line at Mejia (400kV D/C Lilo line)	M.Ex-U1	DVC	
2	Mejia-Maithon PG 400kV D/C line	M.Ex-U2	DVC	
3	Evacuation System for Ragunathpur(1000 MW) & Durgapur(1000MW)	2010-11	DVC	DVC
1	LILO of one ckt of Durgapur(PG)-Jamshedpur 400kV line at Durgapur (400kV D/C Lilo line)	Durgp-U1		
2	LILO of one ckt of Maithon(PG)-Ranchi 400kV line at Ragunathpur (400kV D/C Lilo line)	Raghu-U1		
3	Durgapur(Gen)-Ragunathpur 400kV D/C line	U2 of Durgp or Raghu		
4	Ragunathpur-Ranchi 400kV quad D/C line	U2 of Durgp or Raghu		
4	Common scheme for 765kV pooling stations and network for Northern Region (common for Sasan UMPP + NKP + Malon/Kodarma/Mejia/Bokaro + Ragunathpur/Durgapur + Import by NR from ER and from NER/SRAWR via ER)	Earliest	NR	PGCIL
1	Seires capacitor at Ballia end for 40% compensation on Barh-Ballia 400kV quad D/C line			
2	Seires capacitor at Biharsharif end for 40% compensation on Biharsharif-Ballia 400kV quad D/C			
3	LILO of both circuits of Allahabad - Mainpuri 400kV D/C line at Fatehpur (PG 765kV s/s) (400kV 2 x D/C LILO lines)			
4	Gaya - Sasaram 765kV S/C line			
5	Sasaram PG 765kV s/s) - Sasaram (400kV s/s)			
6	Maithon PG - Gaya 400kV quad D/C line			
7	Gaya-Ballia 765kV S/C			
8	Ballia-Lucknow 765kV S/C			
9	2x400kV D/C LILO lines for connecting to Lucknow 765kV substation, the LILO would of both circuits of one of the Lucknow-Bareilly or Gorakhpur-Lucknow or Ballia-Lucknow 400kV D/C lines which ever is close to location of Lucknow 765kV substation			
10	2x400kV D/C LILO lines for connecting to Bareilly 765kV substation, the LILO would of both circuits of one of the Lucknow-Bareilly or Bareilly-Meerut/Mandola 400kV D/C lines which ever is close to location of Bareilly 765kV substation			
11	Fatehpur 765kV substation : 1x1500 MVA, 765/400kV transformers with bays (2nd transformer in Sasan scheme) 1x330MVAR 765kV bus reactors with bay (2nd bus reactor in Sasan scheme) 4 nos 400kV line bays - for LILO lines connecting to Allahabad-Mainpuri 400kV D/C line 2x63MVAR 400kV bus reactors with bays			



-23-



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SCHEME	Scheme / Transmission works	Target Year/ Matching with	Beneficiaries	Proposed to be executed by
12	Gaya 765kV substation: 1 nos 765kV line bay without reactor for Gaya-Sasaram 765kV S/C line 1 nos 765kV line bay with 240MVAR switchable line reactor for Gaya-Balia 765kV S/C lines 2x240MVAR 765kV bus reactors with bays 2x1500 MVA, 765/400kV transformers with bays 2 nos 400kV line bays each with 50MVAR switchable line reactors for Maithon PG - Gaya 400kV quad D/C line 2x125MVAR 400kV bus reactors with bays 2x315MVA 400/220kV transformers with bays 4 nos 220kV line bays for 220kV L/L/O lines L/L/O of both circuits of Bodhgaya-Dehri 220kV D/C line of Gaya			
13	Sasaram 765kV substation: 1 nos 765kV line bay without reactor for Gaya-Sasaram 765kV S/C line 1x1500 MVA, 765/400kV transformers with bays (2nd transformer in Sasaram scheme) 1x330MVAR 765kV bus reactors with bay (2nd bus reactor in Sasaram scheme) 2x125MVAR 400kV bus reactors with bays 2 nos 400kV line bays for Sasaram (765kV) - Sasaram (400kV) 400kV quad D/C line			
14	Sasaram 400kV substation: 2 nos 400kV line bays for Sasaram (765kV) - Sasaram (400kV) 400kV quad D/C line			
15	Agra 765kV substation: 1x1500 MVA, 765/400kV transformers with bays (2nd transformer in Sasaram scheme) 1x240MVAR 765kV bus reactors with bay (2nd bus reactor in Sasaram scheme) 2x330MVAR 400kV bus reactors with bays			
16	Maithon (PG) 400kV substation extension: 2 nos 400kV line bays each with 50MVAR switchable for Maithon PG - Gaya 400kV quad D/C line			
17	Balia 765kV substation (by extension of Balia 400kV substation): 1 nos 765kV line bay with 240MVAR switchable line reactor for Gaya-Balia 765kV S/C line 1 nos 765kV line bay with 240MVAR switchable line reactor for Balia-Lucknow 765kV S/C line 2x240MVAR 765kV bus reactors with bays 2x1500 MVA, 765/400kV transformers with bays 2x125MVAR 400kV bus reactors with bays			
18	Lucknow 765kV substation: 1 nos 765kV line bay with 240MVAR switchable line reactor for Balia-Lucknow 765kV S/C line 1x240MVAR 765kV bus reactors with bays 2x1500 MVA, 765/400kV transformers with bays 2x330MVAR 400kV bus reactors with bays 4 nos 400kV line bays for 2x D/C 400kV L/L/O lines on the 400kV D/C line close to Lucknow 765kV s/s			
19	Barail 765kV substation: 1x240MVAR 765kV bus reactors with bays 2x1500 MVA, 765/400kV transformers with bays 2x330MVAR 400kV bus reactors with bays 4 nos 400kV line bays for 2x D/C 400kV L/L/O lines on the 400kV D/C line close to Barail 765kV s/s			

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-24-

SCHEME	Scheme / Transmission works	Target Year/ Matching with:	Beneficiaries	Proposed to be executed by
5	Common scheme for pooling stations and network for Western Region (common for + NKP + Maion/Kodarma/Mejla/Bokaro + Rajunathpur/Durgapur + Import by WR from ER and (from NER/SUNR via ER)	Earliest	WR	PGCIL
1	Ranchi-Sipat/Korba(pooling) 765KV 2xS/C with 40% series compensation at Ranchi end (to be firmed up after further studies and WR meeting)			
2	Sipat/Korba(pooling) - Sipat 765KV S/C			
3	400KV connecting/feeding line to Sipat/Korba(pooling) station (to be finalised in WR meeting)			
4	Ranchi 765KV substation : 2x1500 MVA, 765/400KV transformers with bays 2x330MVAR 765KV bus reactors with bay 2 nos 765KV line bays each with 330MVAR switchable line reactor for Ranchi-Sipat/Korba(pooling) 765KV 2xS/C lines 2x125MVAR 400KV bus reactors with bays			
5	Sipat/Korba(pooling) 765KV substation : 1x1500 MVA, 765/400KV transformers with bays (second transformer in Korba-4 scheme) 2x330MVAR 765KV bus reactors with bays 2 nos 765KV line bays each with 330MVAR switchable line reactor for Ranchi-Sipat/Korba(pooling) 765KV 2xS/C lines 1 nos 765KV line bay without reactor for Sipat/Korba(pooling)-Sipat 765KV S/C line			
6	NR strengthening - 765KV system for NCR and around	Earliest	NR	PGCIL
1	Agra-Mundka 765KV S/C			
2	Agra-Meerut 765KV S/C			
3	Mundka-Meerut 765KV S/C			
4	Mundka-Moga 765KV S/C			
5	Agra 765KV substation extension : 1 nos 765KV line bay without reactor for Agra-Mundka 765KV S/C line 1 nos 765KV line bay without reactor for Agra-Meerut 765KV S/C line 1x240MVAR 765KV bus reactors with bay			
6	Meerut 765KV substation extension : 1 nos 765KV line bay with 240MVAR switchable line reactor for Agra-Meerut 765KV S/C line 1 nos 765KV line bay without reactor for Mundka-Meerut 765KV S/C line 1x240MVAR 765KV bus reactors with bay (this would be 2nd, 1st one in Tehri-1 scheme)			
7	Mundka 765KV substation : 1 nos 765KV line bay with 240MVAR switchable line reactor for Agra-Mundka 765KV S/C line 1 nos 765KV line bay without reactor for Mundka-Meerut 765KV S/C line 1 nos 765KV line bay with 240MVAR switchable line reactor for Mundka-Moga 765KV S/C line 1x240MVAR 765KV bus reactors with bay 2x1500 MVA, 765/400KV transformers with bays 2x330MVAR 400KV bus reactors with bays			
8	Moga 765KV substation : 1 nos 765KV line bay with 240MVAR switchable line reactor for Mundka-Moga 765KV S/C line 1x240MVAR 765KV bus reactors with bay 2x1500 MVA, 765/400KV transformers with bays 2x330MVAR 400KV bus reactors with bays			

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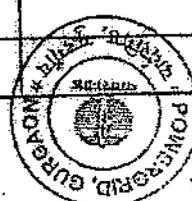
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- 25 -

25

SCHEME	Scheme / Transmission works	Target Year/ Matching with	Beneficiaries	Proposed to be executed by
	<b>PGCIL scheme for Substation Extension works at PGCIL substation corresponding to REC, PFC and DVC schemes</b>			PGCIL
1	Evacuation System for North Karanpura (1990 MW) Scope of works for North Karanpura Transmission ITP's scheme			
1	Gaya 400kV : 2 line bays for North Karanpura - Gaya 400kV Quad D/C line	matching with line	Beneficiaries of NKP	
2	Ranchi 400kV : 2 line bays for North Karanpura - Ranchi 400kV Quad D/C line		Beneficiaries of NKP	
3	SipatKorba(pooling) 765kV : 1 line bay with 330MVAR fixed line reactor for SipatKorba (pooling) - Sooni 765kV S/C line		NR	
4	Sooni 765kV : 1 line bay with 240MVAR fixed line reactor for SipatKorba (pooling) - Sooni 765kV S/C		NR	
5	Lucknow 765kV : 1 line bay without reactor for Lucknow - Bareilly 765kV S/C line		NR	
6	Bareilly 765kV : 1 line bay with 240MVAR fixed line reactor one for Lucknow - Bareilly 765kV S/C line and 1 line bay without reactor for Bareilly-Meerut 765kV line		NR	
7	Meerut 765kV : 1 line bay with 240MVAR fixed line reactor for Bareilly - Meerut 765kV S/C line		NR	
8	Agra 400kV : 2 line bays each with 50MVAR switchable line reactors for Agra - Gurgaon(ITP) 400kV quad D/C line		NR	
9	Gurgaon(PG) 400kV : 2 line bays for Gurgaon(ITP) - Gurgaon (PG) 400kV quad D/C line		NR	
2	Evacuation System for Malithon RB (1000 MW), Bokaro Extn. (500MW), Kodama (1000MW), and Mejia Extn. (1000MW) including common system			
1	Biharsahar 400kV : 2 line bays without reactors for Biharsahar - Sasaram 400kV quad D/C line	matching with line	NR	
2	Biharsahar 400kV : 2 line bays each with 63 MVAR switchable line reactors for Bokaro/Kodama-Biharsahar 400kV quad D/C line		NR	
3	Sasaram 765kV s/s : 2 nos 400kV line bays each with 63 MVAR switchable line reactors for Biharsahar - Sasaram(PG 765kV s/s) 400kV quad D/C line		NR	
4	Sasaram 765kV : 1 line bay with 330MVAR switchable line reactor for Sasaram-Fatehpur(PG 765kV s/s) 765kV S/C line		NR	
6	Fatehpur 765kV : 1 line bay with 330MVAR fixed line reactor for Sasaram-Fatehpur(PG 765kV s/s) 765kV S/C line		NR	
8	Fatehpur 765kV : 1 line bay with 330MVAR switchable line reactor for Fatehpur - Agra 765kV S/C line		NR	
7	Agra 765kV : 1 line bay with 240MVAR fixed line reactor for Fatehpur(PG 765kV s/s) - Agra 765kV S/C line		NR	
8	Fatehpur(PG) 400kV : 2 line bays for Fatehpur(PG 765kV s/s) - Fatehpur (ITP 400kV s/s) 400kV quad D/C line or updation of 400kV bus to Fatehpur (ITP) s/s in case the two s/s are contiguous		NR	
9	Malithon PG 400kV : 4 line bays - two for Malithon RB-Malithon PG 400kV D/C line and two for Mejia-Malithon 400kV D/C line		MalithonRB	
10	Ranchi 400kV : 2 line bays for Malithon RB - Ranchi 400kV D/C line		MalithonRB	
11	Gaya 400kV : 2 line bays for Kodama - Gaya 400kV quad D/C line		DVC	
3	Evacuation System for Rajnandhapur(1000 MW) & Gurgapur(1000MW)	2010-11	DVC	
1	Ranchi 400kV : 2 line bays each with 50MVAR switchable line reactors for Rajnandhapur-Ranchi 400kV quad D/C line	matching with line		



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26 -

SCHEME	Scheme / Transmission works	Target Year/ Matching with	Beneficiaries	Proposed to be executed by
<b>Generation switchyard provisions to be provided by the Generators</b>				
1	North Karanpura Generation Switchyard			
1	400KV line bays : 4 nos. of which 2 nos (Gaya lines) with 50MVAR switchable line reactors			
2	400KV bus reactor of 2x50 MVAR			
2	Talcher-II Generation Switchyard Extension for Talcher Augmentation scheme			
1	400KV line bays : 4 nos. of which 2 nos (Rourkela lines) with 50MVAR and 2 nos (Berhampur lines) with 63MVAR switchable line reactors			
3	Sipat Generation Switchyard Extension for Sipat/Korba(pooling) - Sipat 765KV line			
1	765KV line bay : 1 nos			
4	Mathon Right Bank Generation Switchyard			
1	400KV line bays : 4 nos. of which 2 nos (Ranchi lines) with 50MVAR switchable line reactors			
2	400KV bus reactor of 2x50 MVAR			
6	Bokaro Extn. Generation Switchyard			
1	400KV line bays : 2 nos			
8	Kodarma Generation Switchyard			
1	L.L.O of both circuits of Bokaro-Biharsharif 400KV D/C line at Kodarma (400KV 2x2 D/C L.L.O from Guntur) so as to provide Kodarma-Bokaro Extn 400KV D/C and Kodarma-Biharsharif 400KV Quad D/C lines			
2	400KV line bays : 6 nos			
3	400KV bus reactor of 2x50 MVAR			
7	Mejla Extn. Generation Switchyard			
1	400KV line bays : 4 nos			
8	Durgapur Generation Switchyard			
1	400KV line bays : 4 nos			
9	Ragunathpur Generation Switchyard Extn.			
1	400KV line bays : 4 nos of which 2 nos for Ranchi line with 50MVAR switchable line reactors			
2	400KV bus reactor of 50 MVAR			

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- 27 -



# POWER MAP OF EASTERN REGION



## The Project



### LEGEND

EXISTING

765KV  
POWERGRID

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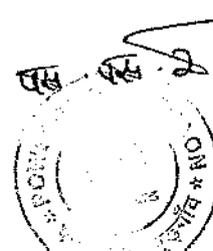


**Summary record of discussions held during 22<sup>nd</sup> meeting of the Standing Committee on Power System Planning of Northern Region on 12<sup>th</sup> March 2007 at Udaipur.**

List of participants is at Annex.

Member (PS), CEA welcomed the participants and thanked RVPNL for hosting the meeting. Thereafter the agenda items were taken up

- 1.7 **Confirmation of the Minutes of the 21<sup>st</sup> meeting of the Standing Committee held on 03.11.06 at New Delhi.**
- 1.1 CE (SP&PA), CEA stated that Minutes of the 21<sup>st</sup> meeting of the Standing Committee were circulated vide CEA letter no. 1/9/2006-SP&PA/740-55 dated 21.11.06. Comments had been received from PGCIL and RVPNL.
- 1.2 AGM, PGCIL stated that in the meeting it was decided to have 400kV Meerut - Kaithal D/c line with quad bundle conductor while the minutes issued by CEA did not mention the quad. The meeting noted that this was an inadvertent omission and the proposed amendment was agreed.
- 1.3 Director, RVPNL stated that while discussing the transmission system for power evacuation from Sasan and Mundra Ultra Mega Projects, RVPNL and PSEB had suggested that another transmission corridor through Gujarat - Rajasthan-Punjab may be studied, as this would strengthen the western part of Northern Region and help in reducing loading in the east-west corridor of the Northern Region. The matter was also discussed, but the recording did not reflect the full discussions.
- 1.4 After discussions the following amendments to the Minutes of the 21<sup>st</sup> meeting were agreed:-
  - (i) In Item (7) Transmission system for power evacuation from Sasan and Mundra Ultra Mega Projects, the work under **NR Strengthening Scheme XI required with Loharinagpala HEP or Sasan UMTP or Mundra UMTP whichever is earliest** may be read as  
400 kV Meerut - Kaithal D/C line with quad bundle conductor



of the order of 50 to 100 MW. As such, the feasibility of the proposal was not justified during Sasan-Mundra time frame. The proposal would however be reviewed at an appropriate time. In regard to proposal of RVPNL for locating the 400kV S/S at Sikar instead of Reengus(or Alwar), Member (PS), CEA stated that the proposed substation was for delivery into the RVPN system and as such the modification suggested by RVPNL that is to have the substation at Sikar, could be agreed. However RVPNL should ensure appropriate take off from Sikar.

2.3 After discussions it was agreed that the 400kV substation on the 400kV Jaipur (PG) - Suratgarh D/c line would be located at Sikar instead of Reengus (or Alwar). Accordingly, the transmission system for Sasan and Mundra in Northern Region would stand revised as per following:-

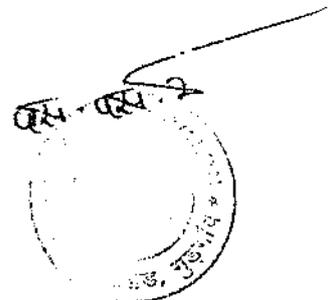
- (i) Agra - Sikar (instead of Agra - Reengus (or Alwar)) 400 kV D/C quad
- (ii) New 400/220 kV 2x315 MVA substation at Sikar (instead of Reengus (or Alwar)) with 220 kV D/C line interconnecting to 220kV S/S
- (iii) Sikar - Jaipur (PG) (instead of Reengus (or Alwar)- Jaipur PG)) 400kV D/C
- (iv) Sikar - Ratangarh (instead of Reengus (or Alwar) - Ratangarh) 400 kV D/C

The Members concurred to the above modification.

3. **Transmission system from the new generation capacity planned by DVC for supply of power to Delhi, Punjab and Haryana including review of transmission system associated with North Karanpura MPP**

3.1 CE (SP&PA), CEA stated that DVC had undertaken generation addition programme which included generation at Koderma TPS. (2x500 MW), Bokaro Extension (1x500 MW), Mejia Extension (2x500 MW), Durgapur (2x500 MW) and Raghunathpur TPS(2x500 MW). Out of the above 3600 MW and 500 MW would be exported to Northern and Western Region respectively. Besides this, Maithon Right Bank generation of 2x500 MW was also being taken up which was expected by 2010, from which 400 MW of power was to be supplied to Delhi. All the generation above projects were on fast track. DVC had informed that Mejia TPS Extension would be expected by mid of 2010 and other projects like Kodarma TPS, Bokaro TPS ext., Raghunathpur and Durgapur were also planned by 11<sup>th</sup> plan. DVC had signed long-term PPAs with Delhi, Punjab, Haryana for 2500 MW, 700 MW and 200 MW respectively. The other generation projects in Eastern region which were likely to yield benefit during 11<sup>th</sup> /early 12<sup>th</sup>

plan time frame were Barh TPS and North Karanpura TPS of NTPC and generation projects in West Bengal. Of all the projects, North Karanpura TPS which was earlier scheduled to be the first and for which transmission system had been evolved and agreed earlier, was re-scheduled towards the end of XI plan/early XII plan. The transmission system for North Karanpura TPS was evolved earlier and discussed in the 18<sup>th</sup> Northern Region Standing Committee meeting. That transmission system was required to be reviewed. The review had become necessary because as per the revised programme of generation capacity addition, the generations of North Karanpura TPS was envisaged in the 11<sup>th</sup> plan timeframe of early 12<sup>th</sup> plan time frame while the DVC projects were scheduled ahead of North Karanpura. As the transmission corridor for power from the Projects in Eastern Region to Northern Region would be the same for North Karanpura as well as new generation capacity planned in DVC, there was a need to review the evacuation system. He thereafter presented the revised studies and explained the alternatives/proposal as circulated in the agenda. The presentation highlighted creation of 765kV pooling stations at Sasaram and Gaya for the Northern Region and at Ranchi for the Western Region. For the Northern Region, the overall transmission system from Gaya at 765 kV would be through three number of 765 kV lines, two on the Sasaram-Fatehpur-Agra corridor and one through the Balia-Lucknow-Bareilly-Meerut corridor. Gaya would be connected to Sasaram as well as Balia via 765 kV lines whereas Sasaram and Balia both would receive power from east at 400kV also. The studies had also shown the requirement of 765 kV ring for NCR connecting Agra, Mundka(Delhi) and Meerut 765kV substations in a triangle and 765 kV line to Moga from Mundka. Punjab would receive its share of 700 MW from DVC through the 765 kV Mundka-Moga line and Haryana would absorb its share of 200 MW from DVC through displacement. Establishment of the required 765 kV substations, common transmission network for all the proposed generation projects and generation specific transmission schemes were identified and proposed to be taken-up through various transmission schemes to be executed by PGCIL, Private Sector in Transmission, Generators (or their transmission agency) and DVC, as detailed in Appendix-1.



- 3.2 Member (PS), CEA stated that the Government of India had constituted an Empowered Committee to identify the transmission schemes for execution by the private sector through competitive tariff based bidding. The list of schemes proposed to be implemented by the private sector identified by the Empowered Committee included the transmission schemes for evacuation system for North Karanpura, Maithon RB, Kodarma and Mejia Extn. As the evacuation system for Bokaro Extn was integrated with evacuation system for Kodarma, this had also been included in the list.
- 3.3 After discussions, the Committee concurred to all the transmission schemes as listed in Appendix-1.
- 3.4 Regarding sharing of the transmission charges, the Committee noted the proposal that transmission system from the generation projects up to the pooling stations was proposed to be shared by all the beneficiaries of the generation project (or projects) and transmission system beyond the pooling points for NR and WR was proposed to be shared by the beneficiaries of the respective region. It was decided that the proposal would be referred to RPC for approval.
- 3.5 The committee also observed that there could be need for shifting some elements between the schemes depending on initial progress in the process of implementation of schemes through private sector and the finally emerging schedule of generation projects and required time frame of execution of the transmission projects and it was agreed that if any such changes were required, CEA would decide the same in consultation with PGCIL and also take-up with the Empowered Committee and Ministry of Power for the needful. It was also decided that provision of reactors as proposed in the above agreed schemes would be reviewed by PGCIL before firming up the projects.
4. **Evacuation system for Jhajjar TPS (1500 MW) and Badarpur-II TPS (2x500 MW)**
- 4.1 CE (SP&PA), CEA stated that Jhajjar TPS of 1500 MW located west of Delhi near Jhajjar in Haryana and Badarpur TPS Extension of 2x500 MW were proposed to be constructed by NTPC. Beneficiaries of the power from Jhajjar were Delhi and Haryana in the ratio of 50:50 and the beneficiary for Badarpur Extension was Delhi. Considering the power requirement in Delhi for the ensuing Commonwealth Games, both these generation projects were being programmed



Encl-4

**CENTRAL ELECTRICITY REGULATORY COMMISSION**  
3<sup>rd</sup> & 4<sup>th</sup> Floor, Chanderlok Building, Janpath, New Delhi 110 001  
(Tele No. 23353303 FAX No. 23753923)

*En. Unit  
From next onwards  
petitions shall be  
filed as per this  
letter. 31/3/12*

No. C-7/189(204)/2009-CERC

Dated: 28<sup>th</sup> March, 2012

To,

Executive Director (Comml.)  
Powergrid Corporation of India Ltd.,  
"Saudamini" Plot No. 2  
Sector-29,  
Gurgaon-122 001

*GMC (Amend-I)  
MS: 890412  
10/4/12  
10/4/12  
10/4/12*

**Sub: Filing of Petitions for Tariff determination during the period 2009-14**

**Ref. No:- Your Letter dated 5.9.2011 and 2.2.2012**

Sir,

In response to your letters under reference, I am to state that the Commission after considering the difficulties experienced in filing of the Tariff Petitions, has decided the following procedures in partial modification of the procedure conveyed to you vide Commission's letter No. C-7/189(204)/2009-CERC dated 23.10.2009.

2. The Tariff Petitions may be filed Asset-wise in respect of all assets for which tariff petitions have not been filed on the date of issue of this letter. All elements commissioned at the time of the completion of the project or commissioned till the end of tariff period of 2009-14, whichever is earlier, shall be clubbed at the time of truing up of expenditure for the period 2009-14. Accordingly, petitions for clubbing of the assets shall be filed at the time of truing up.

3. Further action for filing of the petitions may be taken accordingly.

Yours faithfully

*[Signature]*  
28/3/12  
(Rajiv Bansal)  
Secretary

पावर ग्रिड / POWER GRID  
गुड़गाँव / Gurgaon  
04 APR 2012  
कार्यपालक निदेशक (वाणिज्य)

*MS: 890412*  
*[Circular Stamp]*

# K. G. Goyal & Associates

## COST ACCOUNTANTS

Delhi Office :  
4A, Pocket 2  
Mix Housing,  
New Kondli, Mayur Vihar-III  
New Delhi - 110096  
[goyaldelhi@yahoo.co.in](mailto:goyaldelhi@yahoo.co.in)

Jaipur Office :  
289, Mahaveer Nagar-II  
Maharani Farms  
Durgapura  
JAIPUR - 302018  
Mobile : 9829373503  
[rajeshgoyaljaipur@yahoo.co.in](mailto:rajeshgoyaljaipur@yahoo.co.in)

### CERTIFICATE OF CAPITAL COST

**Project Name:** Common Scheme for 765 Kv Pooling Stations & Network For NR ( Common for SasarUMPP+Maithon/Koderma/Meija/Bokaro/Raghunathpur/Durgapur+Inport by NR from ER and NER/SR/WR Via ER) and Common Scheme for Network for WR (common For NKP+ Maithon/ Koderma/ Meija/ Bokaro +Raghunathpur/ Durgapur+ from ER & from NER/SR/WR via ER

**Name of Element** Sipat-LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranch-Sipat TL along with associated bays at Sipat end.

**Date of Commercial Operation:** 01.01.2014 (Anticipated)

(RS./ LAKHS)

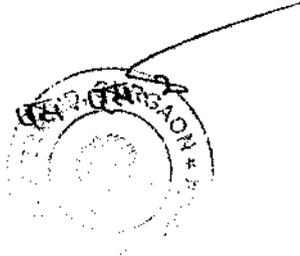
PARTICULARS	Expenditure upto 31.03.2013	Expenditure from 01.04.2013 to 30.09.2013	Estimated Expenditure from 01.10.2013 to 31.12.2013 (DOCO)	Estimated Expenditure From 01.01.2014 to 31.03.2014	Estimated Expenditure From 01.04.2014 to 31.03.2015	Total Expenditure
LAND (FREEHOLD)	-	-	-	-	-	-
BUILDING, CIVIL WORKS & COLONY	82.89	14.93	4.83	-	28.97	131.62
TRANSMISSION LINE	14,935.90	593.26	562.95	445.13	191.40	16,728.64
SUB-STATION	149.05	28.44	-	2.55	-	180.02
PLCC	38.75	8.12	-	1.96	-	48.83
	<b>15,206.57</b>	<b>644.75</b>	<b>567.78</b>	<b>449.64</b>	<b>220.37</b>	<b>17,089.11</b>

**Initial Spares included in Above - Transmission Line** 134.49  
**- Sub-Station**

This is to certify that the above summary has been prepared on the basis of the information drawn from the Audited Statement of Accounts of Power Grid Corporation of India Ltd., Western Region, Nagpur up to 31-03-2013. The expenditure from 01-04-2013 to 30-09-2013 have been verified from the books of accounts of the project. Balance expenditure is based on the estimates as certified by the Management.

Place : NAGPUR  
Date : 26/10/13

K. G. GOYAL & ASSOCIATES



9/10-5/13  
(Rajesh Goyal)  
FRN: 00002  
P-108/11

# K. G. Goyal & Associates

## COST ACCOUNTANTS

**Delhi Office :**  
 4A, Pocket 2  
 Mix Housing,  
 New Kondli, Mayur Vihar-III  
 New Delhi - 110096  
[goyaldelhi@yahoo.co.in](mailto:goyaldelhi@yahoo.co.in)

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 289, Mahaveer Nagar-II  
 Maharani Farms  
 Durgapura  
 JAIPUR - 302018  
 Mobile : 9829373503  
[rajeshgoyallaipur@yahoo.co.in](mailto:rajeshgoyallaipur@yahoo.co.in)

### CERTIFICATE OF CAPITAL COST

**Project Name:** Common Scheme for 765 Kv Pooling Stations & Network For NR ( Common for SasanUMPP+Maithon/Koderma/Meija/Bokaro/Raghnathpur/Durgapur+Import by NR from ER and NER/SR/WR Via ER) and Common Scheme for Network for WR (common For NKP+ Maithon/ Koderma/ Meija/ Bokaro +Raghnathpur/ Durgapur+ from ER & from NER/SR/WR via ER

**Name of Element** Sipat-LILO Point (at Dharamjaigarh) portion of 765KV S/C Ranch-Sipat TL along with associated bays at Sipat end.

**Date of Commercial Operation:** 01.01.2014 (Anticipated)

PARTICULARS	(RS./ LAKHS)			
	CAPITAL COST (DOCO)	IOC	IEDC	TOTAL
Expenditure Upto 31.03.2013	12,665.92	2,221.32	319.34	15,206.57
Expenditure from 01.04.2013 to 30.09.2013	212.49	397.45	34.81	644.75
Estimated Expenditure from 01.10.2013 to 31.12.2013 (DOCO)	351.65	198.73	17.40	567.78
Estimated Expenditure From 01.01.2014 to 31.03.2014	449.64	-	-	449.64
Estimated Expenditure From 01.04.2014 to 31.03.2015	220.37	-	-	220.37
	<b>13,900.07</b>	<b>2,817.49</b>	<b>371.55</b>	<b>17,089.11</b>

\*-

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, Nagpur up to 31-03-2013 . The expenditure from 01-04-2013 to 30-09-2013 have been verified from the books of accounts of the project. Balance expenditure is based on the estimates as certified by the Management.

Place : NAGPUR  
 Date : 26/10/13

For K. G. GOYAL & ASSOCIATES



71-579  
 (Rajesh Goyal)  
 Partner  
 N-10034



Summary Sheet

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**  
 Name of Region: **WESTERN REGION**  
 Name of the Project: **Common scheme for 765 kV Pooling Stations and Network for NR**  
 Name of the Transmission Element: **Sipat-LILO Point (at Dharamjayagarb) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-2014**

Sl.No.	Particulars	Form No.	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014(Pro Rata)	(Rs in Lacs)
1	2	3	4	5	6	7	8	9	
1	Depreciation	FORM-12	0.00						219.33
2	Interest on Loan	FORM-13A	0.00						262.38
3	Return on Equity	FORM-01A	0.00						218.21
4	Interest On Working Capital	FORM-13B	0.00						16.49
5	O & M Expenses		0.00						13.90
6	Total		0.00						730.31

*[Signature]*  
Petitioner



Encl-6

Calculation Of Return On Equity

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**  
 Name of Region: **WESTERN REGION**  
 Name of the Project: **Common scheme for 765 kV Pooling Stations and Network for NR**  
 Name of the Transmission Element: **Sipat-LILO Point (at Dharamjayagarb) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-2014**

Particulars	(Rs in Laacs)						
	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	
1	2	3	4	5	6	7	
Equity as DOCO							4,925.73
Notional Equity for Add Cap							134.89
Total Equity							5,060.62
Return on Equity @ 17.481%							218.21

*[Signature]*  
Petitioner



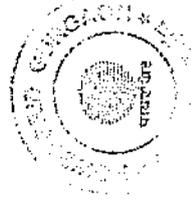
Details of Transmission Lines And Substations

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**  
 Name of Region: **WESTERN REGION**  
 Name of the Project: **Common scheme for 765 kV Pooling Stations and Network for NR**  
 Name of the Transmission Element: **Sipat-LILO Point (at Dharamjaygarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-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	If No, petition No.
1	765 kV T/L from Sipat(Bilaspur PS)-Ranchi (upto LILO in point of Dharamjaygarh)	AC	S/C	4	765	82.865	01-JAN-2014	Yes	
Substations									
Sl.No.	Name of Sub-Station	Type of Substation Conventional /GIS/ HVDC Terminal/ HVDC Back to Back	Voltage level kV	No. of Transformers / Reactors/ SVC etc (with Capacity)	No. of Bays	Date of Commercial operation	Covered in the present petition	If No, petition No.	
					765 KV 400 KV 220 KV 132 KV & below		Yes/No		

O&M expenses for bays are not being claimed here as the same have been already been claimed under Pet No: (20/TT/2013

*[Signature]*  
Petitioner



Normative Parameters considered For tariff calculations

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

POWERGRID CORPORATION OF INDIA LTD.

WESTERN REGION

Common scheme for 765 kV Pooling Stations and Network for NR

Sipat-LILO Point (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant.  
:DCO :01-JAN-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	%								
Tax Rate	%								
Target Availability	%								
Normative O&M per Km.	Rs. lacs								
Normative O&M per bay	Rs. lacs								
Spares for WC as % of O&M	%								
Receivables in Months for WC	months								
Prime lending Rate of SBI as on 01-APR-2009	%								
<b>Norms for O&amp;M expenditure for Transmission System</b>									
		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)		0.517	0.568	0.600	0.635	0.671			
Single Circuit (Twin & Triple Conductor)		0.358	0.378	0.400	0.423	0.447			
Single Circuit (Single Conductor)		0.179	0.189	0.200	0.212	0.224			
Double Circuit (Bundled conductor with four or more sub-conductors)		0.940	0.994	1.051	1.111	1.174			
Double Circuit (Twin & Triple Conductor)		0.627	0.663	0.701	0.741	0.783			
Double Circuit (Single Conductor)		0.269	0.284	0.301	0.318	0.336			
Norms for HVDC Stations									
HVDC Back-to-back stations (Rs lakh per 500 MW)		443.00	468.00	495.00	523.00	553.00			
Rihand-Dadri HVDC bipole scheme (Rs Lakh)		1450.00	1533.00	1621.00	1713.00	1811.00			
Talcher-Kolar HVDC bipole scheme (Rs Lakh)		1699.00	1796.00	1899.00	2008.00	2122.00			

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

<b>Name of the Transmission Licensee :</b>	POWER GRID CORPORATION OF INDIA	
<b>Name of Region:</b>	WESTERN REGION	
<b>Name of the Project :</b>	Common Scheme for 765 kV Pooling Stations and Network for NR	
<b>Name of Element:</b>	Sipat-LILO Point portion of 765KV S/C Ranch-Sipat TL along with associated bays at Sipat end	
<b>Capital Cost Estimates</b>		
Board of Director/ Agency approving the Capital cost estimates:	Board of Directors	
Date of approval of the Capital cost estimates:	29th Aug 2008	
	<b>Present Day Cost</b>	<b>Completed Cost</b>
Price level of approved estimates	As of 1st Qtr. Of the year 2008	As on Scheduled COD of the System
Foreign Exchange rate considered for the Capital cost estimates		
<b>Capital Cost excluding IDC &amp; FC</b>		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)	5812.53	6858.78
<b>Capital cost excluding IDC &amp; FC (Rs. Lakh)</b>	<b>5812.53</b>	<b>6858.78</b>
<b>IDC &amp; FC</b>		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)	14094.80	16631.86
<b>Total IDC &amp; FC (Rs. Lakh)</b>	<b>14094.80</b>	<b>16631.86</b>
Rate of taxes & duties considered		
<b>Capital cost Including IDC &amp; FC</b>		
Foreign Component, if any (In Million US \$ or the relevant Currency)		
Domestic Component (Rs. Lakh)		
<b>Total Capital cost Including IDC &amp; FC (Rs. Lakh)</b>	<b>15699.79</b>	<b>18525.75</b>
<b>Schedule of Commissioning</b>		
(Scheduled DOCO elementwise)		
COD of Unit-1/Block-1	1-Sep-12	1-Jan-14 (anticipated)
COD of Unit-1/Block-2		
COD of Unit-1/Block-3		
COD of Unit-1/Block-4		

**Note:**

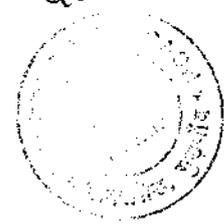
1. Copy of approval letter should be enclosed.
2. Details of Capital cost are to be furnished as per FORM-5B or 5C as applicable.
3. Details of IDC & Financing Charges are to be furnished as per FORM-16.

PETITIONER

Element wise Break-up of Project Cost for Transmission System  
Name of the Transmission Licensee: Power Grid Corporation of India Ltd.  
Name of Region: Western Region-1  
DOCO: 01.01.2014

(As in table)

Sl.No.	Break Down	As per Original Estimate	As on COD (Anticipated) (H.01.2014)	Liabilities / Provision	Variation	Reasons for Variation
1	2	3	4	5	6=(3-4-5)	7
A	<b>TRANSMISSION LINE</b>	765kV S/c Raichik-Sipat Line(81.864kca)				
1.0	Preliminary works					
1.1	Design & Engineering	0	0.00	0.00	0.00	
1.2	Preliminary investigation, Right of way, forest clearance, PTCC, general civil works, compensation etc.	1347.96	1291.53	50.49	5.94	The variation in this head is mainly due to variation in the amount of Crop/Tree Compensation w.r.t. FR. The amount towards Crop/Tree Compensation got modified based on the assessment by Revenue Authorities including Estimated compensation for balance works.
1.3	Total Preliminary works	1347.96	1291.53	50.49	5.94	
2.0	Transmission Lines material					
2.1	Towers Steel	4457.30	5130.82	55.11	-728.63	Tower weight got increased primarily due to change in Type of Towers as per site condition in order to route the line avoiding forest areas, minimising ROW constraints and considering various crossings & available line corridor etc. However, the higher positive side variation in cost is mainly due to rates received in competitive bidding
2.2	Conductor	3624.56	3539.02	9.92	85.02	
2.3	Earth Wire	67.85	85.43	0.92	-18.50	
2.4	Insulators	1094.06	735.75	14.51	323.79	
2.5	Hardware Fittings	646.51	469.63	5.04	171.84	
2.6	Conductor & Earthwire accessories	162.17	149.37	1.60	11.19	variation in cost is mainly due to rates received in competitive bidding.
2.7	Spare	0.00	0.00	0.00	0.00	
2.8	Erection, Stringing & Civil works including foundation	1303.91	1612.88	478.94	-787.91	
2.9	Total Transmission Lines material	11356.75	11713.90	556.05	-943.19	
3.0	Taxes and Duties					
3.1	Custom Duty	0.00	6.00	0.00	0.00	
3.2	Other Taxes & Duties	0.00	0.00	0.00	0.00	
	Total Taxes & Duties	0.00	0.00	0.00	0.00	
	Total -Transmission lines	12704.71	13005.43	636.54	-937.25	
B.	<b>SUBSTATIONS</b>					
4.0	Preliminary works & land					
4.1	Design & Engineering	0.00	0.00	0.00	0.00	
4.2	Land	0.00	0.00	0.00	0.00	
4.3	Site preparation	0.00	0.00	20.00	-20.00	as per actual
	Total Preliminary works & land	0.00	0.00	20.00	-20.00	
5.0	Civil Works					
5.1	Control Room & Office Building including HVAC	0.00	0.00	0.00	0.00	
5.2	Township & Colony	58.78	0.00	0.00	58.78	
5.3	Roads and Drainage	0.00	0.00	0.00	0.00	
5.4	Foundation for structures	0.00	54.61	8.37	-61.37	variation in cost is mainly due to rates received in competitive bidding
5.5	Misc. civil works	0.00	0.00	0.00	0.00	
	Total Civil Works	58.78	54.61	8.37	-4.79	
6.0	Substation Equipments					
6.1	Switchgear (CT,PT, Circuit Breaker, Isolator etc)	183.89	110.44	2.12	71.33	
6.2	Transformers	0.00	0.00	0.00	0.00	
6.3	Compensating Equipment (Reactor, SVCs etc)	0.00	0.00	0.00	0.00	
6.4	Control, Relay & Protection Panel	75.95	22.67	6.44	52.88	
6.5	PLCC	71.65	36.91	1.95	32.78	
6.6	HVDC package	0.00	0.00	0.00	0.00	variation in cost is mainly due to rates received in competitive bidding.
6.7	Bus Bars/ conductors/insulators	0.00	0.00	0.00	0.00	
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	0.00	0.00	0.00	0.00	
6.12	Auxiliary System	0.00	0.00	0.00	0.00	
	Total Substation Equipments	331.52	170.02	4.51	156.99	
7.0	Sparez (incl. in capx. cost)					
8.0	Taxes and Duties					
8.1	Custom Duty	45.12	0.00	0.00	45.12	
8.2	Other Taxes & Duties	0.00	0.00	0.00	0.00	
8.3	Total Taxes & Duties	45.12	0.00	0.00	45.12	
	Total (Sub-station)	435.42	214.62	33.48	177.32	
9.0	Construction and pre-commissioning expenses					
9.1	Site supervision & site admin etc.	0.00	0.00	0.00	0.00	
9.2	Tools and Plants	0.00	0.00	0.00	0.00	
9.3	construction insurance	0.00	0.00	0.00	0.00	
	Total Construction and pre-commissioning expenses	0.00	0.00	0.00	0.00	
10.0	Overheads					
10.1	Establishment	954.66	371.55	0.00	583.11	
10.2	Audit & Accounts	0.00	0.00	0.00	0.00	
10.3	Contingency	0.00	0.00	0.00	0.00	
	Total Overheads	954.66	371.55	0.00	583.11	as per actual
11.0	Project cost without IDC, FC, FERV & Hedging cost	14094.80	13601.60	670.01	-174.82	
12.0	Total Cost (Plant & Equipment)					
12.1	Interest During Construction (IDC)	1604.99	2817.49	0.00	-1212.50	as per actual
12.2	Financing Charges (FC)	0.00	0.00	0.00	0.00	
12.3	Foreign Exchange Rate Variation (FERV)	0.00	0.00	0.00	0.00	
12.4	Hedging Cost	0.00	0.00	0.00	0.00	
13.0	Project cost including IDC, FC, FERV & Hedging cost	15699.79	16419.10	670.01	-1389.33	



Break-up of Construction / Supply / Service packages

Part-III  
Form 5C

Name of the Transmission Licensee : PowerGrid Corporation of India Ltd.

Name of the Region : WR

Name of the project : Common Scheme for 765 kV Pooling Stations and Network for NR, Import by NR from ER and Common scheme for network for WR and Import by WR from ER and from NERSRWR via ER

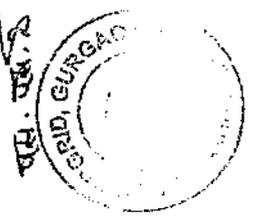
Name of the Transmission Element : Sipat-LILO Point portion of 765KV SIC Ranch-Sipat TL along with associated bays at Sipat end.

anticipated DOCO : 01.01.2014

**YEAR WISE BALANCE EXPENDITURE**

SL	Package / Scope of works	LOA NO / Date	Start date of work	No of bids received	Balance anticipated Expenditure including PV, Taxes & duties	FROM 01.01.2014 TO 31.03.2014	FROM 01.04.2014 TO 31.03.2015	Expenditure excluding Taxes & Duties as on COD	Taxes & duties and IEDC	IDC, FC, FERV & Hedging cost	Sub-total
1	Crop & Tree Compensation				50,49,018	50,49,018					
2	Railway Line Crossing				-	-					
3	Forest - NPV + CA				-	-					
4	765KV S/C Ranchi- WR Pooling station (Sipat) Transmission Line (SUPPLY)	C-47205-L095A-3/P-171/CA-II/2638 dated	10.09.2008	6	18,63,099	18,63,099					
5	765KV S/C Ranchi- WR Pooling station (Sipat) Transmission Line (ERECTION)	C-47205-L095A-3/P-171/CA-II/2639 dated	10.09.2008	6	5,22,98,423	3,66,08,896	1,56,89,527				
6	120KN & 210KN Insulator Package-D3	C-33006-L179-1/NOA/2438 Dt 19.02.2008	19.02.2008		34,50,843		34,50,843				
7	Supply of Conductor - Package C5	C-33006-L175-1/NOA/2446 Dt 20.02.2008	20.02.2008		9,92,293		9,92,293				
8	Bay Extension at Sipat (Bilaspur)- Supply Portion	C-33901-S019A-3/LOA-I/2983 dated 06.03.2009	06.03.2009	3	1,95,563		1,95,563				
9					2,04,228		2,04,228				
10	Bay Extension at Sipat (Bilaspur)- Erection Portion	C-33901-S019A-3/LOA-II/2984 dated 06.03.2009	06.03.2009	3	8,96,794		8,96,794				
					51,205		51,205				
11	Infrastructure - Misc Civil works	ESTIMATED			20,00,000		20,00,000				
	<b>GRAND TOTAL</b>				6,70,01,466	4,49,64,302	2,20,37,164				

(Amount in Rs)



**PART-III  
Form 5D**

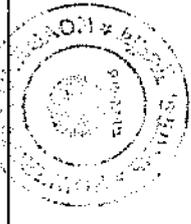
**DETAILS OF ELEMENTWISE COST**

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

POWER GRID CORPORATION OF INDIA LTD.  
WESTERN  
Common Scheme for 765 kV Pooling Stations and Network for NR

S.NO.	Name of line	AppORTIONED approved Cost (Rs Cr)	Completed Cost (Rs Cr)	Covered in the present petition	
				yes/no	if no, petition no.
1	Sipat-LILO Point of 765 kV S/C Ranchi -Sipat line along with associated bays at sipat end	156.99	170.89	yes	

CGCL  
Petitioner



Financial package upto COD

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.  
 Name of Region: WESTERN REGION  
 Name of the Project: Common scheme for 765 kV Pooling Stations and Network for NR  
 Name of the Transmission Element: Sipat-LILO POint (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-2014  
 Project Cost as on COD/31.03.2009: 16419.10 (Rs. in Lakhs)  
 Date of Commercial Operation of the Transmission element: (a/w) 01-JAN-2014

(Rs in Lacs)

Transmission Lines					
	Financial Package as apportioned/ Approved		Financial Package as on COD		As Admitted on COD
	Currency and Amount		Currency and Amount		Currency and Amount
Loans					
Loans - Domestic	INR	10989.85	INR	11493.37	
Loans - Foreign					
<b>Total Loans</b>		<b>10989.85</b>		<b>11493.37</b>	
Equity					
Foreign					
Domestic	INR	4709.94	INR	4925.73	
Notional				0.00	
<b>Total Equity</b>		<b>4709.94</b>		<b>4925.73</b>	
Debt Equity Ratio		70.00:30.00		70.00:30.00	
<b>Total Cost</b>		<b>15699.79</b>		<b>16419.10</b>	
	<b>Debt</b>	<b>Equity</b>	<b>Total</b>		
Add Cap For 2013-2014			449.64		
Add Cap For 2013-2014	<b>Actual</b>	<b>Normative</b>			
Debt		314.75			
Equity		134.89			
<b>Total</b>		<b>449.64</b>			
<b>Total Capital Cost with ADDCAP upto 01.04.2014</b>			<b>16868.74</b>		



Statement of Additional Capitalisation after COD

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

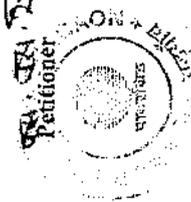
Common scheme for 765 kV Pooling Stations and Network for NR

Name of the Transmission Element:

Sipat-LILO POint (at Dharamjayagarh) portion of 765KV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant.  
:DOCO :01-JAN-2014

COD: 01-JAN-2014

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
			4	5	6	7
1.	2013-2014	TR LINE	445.13	Balance & Retention payments	9(1)	
		SUB STATION	2.55	Balance & Retention payments	9(1)	
		PLCC	1.96	Balance & Retention payments	9(1)	
	<b>Total</b>		449.64			
2.	2014-2015	BUILDING	28.97	Balance & Retention payments	9(1)	
		TR LINE	191.40	Balance & Retention payments	9(1)	
	<b>Total</b>		220.37			



Statement of Capital Cost

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

Common scheme for 765 kV Pooling Stations and Network for NR

Name of the Transmission Element:

Sipat-JILO Point (at Dharamjayagarth) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-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-JAN-2014- 31-Mar-2014
A	a) Opening Gross Block Amount as per books					164.19
	b) Amount of capital liabilities in A(a) above					
	c) Amount of IDC, FC, FERV & Hedging cost included in A(a) above					28.17
	d) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in A(a) a					3.72
B	a) Addition in Gross Block Amount during the period					4.5
	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					168.69
	b) Amount of capital liabilities in C(a) above					
	c) Amount of IDC, FC, FERV & Hedging cost included in C(a) above					28.17
	d) Amount of IEDC (excluding IDC, FC, FERV & Hedging cost) included in C(a) a					3.72



Financing of Additional Capitalisation

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

Common scheme for 765 kV Pooling Stations and Network for NR

Name of the Transmission Element:

Sipat-LILO Point (at Dharamjayagharh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01--JAN-2014

Financial Year (Starting from COD)	From COD to 31-Mar-2014	Projected/Actual					Admitted						
		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/Equipmen t	449.64												
Financing Details													
Loan-1													
Loan-2													
Loan-3 and so on													
Total Loan	314.75												
Equity	134.89												
Internal Resources													
Others													
Total	449.64												

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Calculation of Depreciation Rate

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

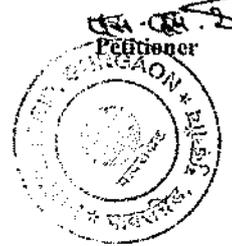
Name of the Project:

Common scheme for 765 kV Pooling Stations and Network for NR

Name of the Transmission Element:

Sipat-LILO POINT (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-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
<b>2013-2014</b>						
1	FREEHOLD LAND	0.00	0.00	0.00	0.00%	0.00
2	BUILDING	102.65	0.00	102.65	3.34%	0.86
3	TR LINE	16092.11	445.13	16537.24	5.28%	215.35
4	SUB STATION	177.47	2.55	180.02	5.28%	2.36
5	PLCC	46.87	1.96	48.83	6.33%	-0.76
6	LEASEHOLD LAND	0.00	0.00	0.00	3.34%	0.00
	<b>Total</b>	<b>16419.10</b>	<b>449.64</b>	<b>16868.74</b>		<b>219.33</b>
<b>Weighted Average Rate of Depreciation (%)</b>						<b>1.32</b>
<b>Elapsed Life</b>						<b>0</b>



Statement of Depreciation

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

Common scheme for 765 kV Pooling Stations and Network for NR

Name of the Transmission Element:

Sipat-LILO Point (at Dharamjayagarb) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-2014

Financial Year	(Rs in Lacs)													
	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														216.36
Depreciation on Additional Capitalisation														
Amount of Additional Capitalisation														449.64
Depreciation Amount														2.97
Details of FERV														
Amount of FERV on which depreciation charged														
Depreciation Amount														
Depreciation Recovered during the year														219.33
Advance against Depreciation recovered during the year														
Depreciation and Advance against Depreciation recovered during the year														219.33
Cumulative Depreciation And Advance against Depreciation recovered upto the year														219.33



Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**  
 Name of Region: **WESTERN REGION**  
 Name of the Project: **Common scheme for 765 kV Pooling Stations and Network for NR**  
 Name of the Transmission Element: **Sipat-LILO POint (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-2014**

(Rs in Laacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
<b>BONDS XXIX</b>						
Gross Loan Opening						70.00
Cumulative Repayments of Loans upto Previous Year						5.83
Net Loans Opening						64.17
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						5.83
Net Loan Closing						58.33
Average Net Loan						61.25
Rate of Interest on Loan		0%	0%	0%	0%	9.2%
Interest on Loan						5.64
<b>BONDS XXX</b>						
Gross Loan Opening						860.00
Cumulative Repayments of Loans upto Previous Year						71.67
Net Loans Opening						788.33
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						788.33
Average Net Loan						788.33
Rate of Interest on Loan		0%	0%	0%	0%	8.8%
Interest on Loan						69.37
<b>BOND XXXI</b>						
Gross Loan Opening						1230.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						1230.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						102.50
Net Loan Closing						1127.50
Average Net Loan						1178.75
Rate of Interest on Loan		0%	0%	0%	0%	8.9%
Interest on Loan						104.91
<b>BONDS XXXIII</b>						
Gross Loan Opening						1800.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						1800.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						1800.00
Average Net Loan						1800.00
Rate of Interest on Loan		0%	0%	0%	0%	8.64%
Interest on Loan						155.52
<b>BONDS XXXII</b>						
Gross Loan Opening						25.00



Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**  
 Name of Region: **WESTERN REGION**  
 Name of the Project: **Common scheme for 765 kV Pooling Stations and Network for NR**  
 Name of the Transmission Element: **Sipat-LILO Point (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-2014**

(Rs in Laacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						25.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						2.08
Net Loan Closing						22.92
Average Net Loan						23.96
Rate of Interest on Loan		0%	0%	0%	0%	8.84%
Interest on Loan						2.12
<b>BOND-XXXIV</b>						
Gross Loan Opening						1965.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						1965.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						1965.00
Average Net Loan						1965.00
Rate of Interest on Loan		0%	0%	0%	0%	8.84%
Interest on Loan						173.71
<b>BOND XXXV</b>						
Gross Loan Opening						880.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						880.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						880.00
Average Net Loan						880.00
Rate of Interest on Loan		0%	0%	0%	0%	9.64%
Interest on Loan						84.83
<b>BOND XXXVI</b>						
Gross Loan Opening						795.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						795.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						795.00
Average Net Loan						795.00
Rate of Interest on Loan		0%	0%	0%	0%	9.35%
Interest on Loan						74.33
<b>BOND XXXVII</b>						
Gross Loan Opening						75.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						75.00

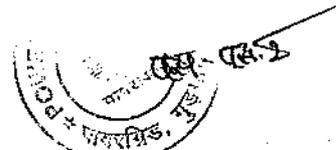


Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**  
 Name of Region: **WESTERN REGION**  
 Name of the Project: **Common scheme for 765 kV Pooling Stations and Network for NR**  
 Name of the Transmission Element: **Sipat-LILO POint (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						75.00
Average Net Loan						75.00
Rate of Interest on Loan		0%	0%	0%	0%	9.25%
Interest on Loan						6.94
<b>BOND XXXIX</b>						
Gross Loan Opening						5.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						5.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						5.00
Average Net Loan						5.00
Rate of Interest on Loan		0%	0%	0%	0%	9.4%
Interest on Loan						0.47
<b>SBI (21.03.2012)</b>						
Gross Loan Opening						300.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						300.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						300.00
Average Net Loan						300.00
Rate of Interest on Loan		0%	0%	0%	0%	10.05%
Interest on Loan						30.15
<b>BOND XL</b>						
Gross Loan Opening						1380.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						1380.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						1380.00
Average Net Loan						1380.00
Rate of Interest on Loan		0%	0%	0%	0%	9.3%
Interest on Loan						128.34
<b>BOND - XLI</b>						
Gross Loan Opening						1260.00
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						1260.00
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						1260.00



Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**  
 Name of Region: **WESTERN REGION**  
 Name of the Project: **Common scheme for 765 kV Pooling Stations and Network for NR**  
 Name of the Transmission Element: **Sipat-LILO POint (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-2014**

(Rs in Lacs)

Particulars	Existing 2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Average Net Loan						1260.00
Rate of Interest on Loan		0%	0%	0%	0%	8.85%
Interest on Loan						111.51
<b>Proposed Loan 2013-14 (10.05%)</b>						
Gross Loan Opening						848.37
Cumulative Repayments of Loans upto Previous Year						
Net Loans Opening						848.37
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						
Net Loan Closing						848.37
Average Net Loan						848.37
Rate of Interest on Loan		0%	0%	0%	0%	10.05%
Interest on Loan						85.26
<b>Total</b>						
Gross Loan Opening						11493.37
Cumulative Repayments of Loans upto Previous Year						77.50
Net Loans Opening						11415.87
Add : Drawal(s) during the year						
Less : Repayments(s) of Loans during the year						110.42
Net Loan Closing						11305.45
Average Net Loan						11360.66
Interest on Loan						1033.09
Weighted Average Rate of Interest on Loans						9.0936%



B-

Calculation of Interest on Normative Loan

Name of the Transmission Licensee: POWERGRID CORPORATION OF INDIA LTD.  
 Name of Region: WESTERN REGION  
 Name of the Project: Common scheme for 765 kV Pooling Stations and Network for NR  
 Name of the Transmission Element: Sipat-LILO POint (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-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						11,493.37
Cumulative repayment of Normative Loan upto previous year						
Net Normative loan - Opening						11,493.37
Increase/Decrease due to ACE during the Year						314.75
Repayments of Normative Loan during the year						219.33
Net Normative loan - Closing						11,588.79
Average Normative Loan						11,541.08
Weighted average Rate of Interest on actual Loans						9.0936%
Interest on Normative loan						262.38



Calculation of Interest on Working Capital

Name of the Transmission Licensee:

POWERGRID CORPORATION OF INDIA LTD.

Name of Region:

WESTERN REGION

Name of the Project:

Common scheme for 765 kV Pooling Stations and Network for NR

Name of the Transmission Element:

Sipat-LILO POint (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-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						4.63
2	Maintenance Spares						8.34
3	Receivables						486.87
4	Total Working Capital						499.84
5	Rate of Interest						13.20
6	Interest on Working Capital						16.49

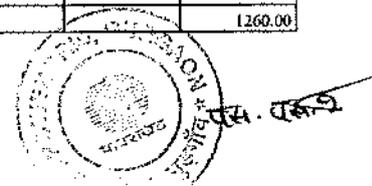


Draw Down Schedule for Calculation of IDC & Financing Charges

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**  
 Name of Region: **WESTERN REGION**  
 Name of the Project: **Common scheme for 765 kV Pooling Stations and Network for NR**  
 Name of the Transmission Element: **Sipat-LILO Point (at Dharamjayagarh) portion of 765kV S/C Ranchi-Sipat TE along with associated bays at Sipat end. Ant. :DOCO :01-JAN-2014**

(Rs in Laacs)

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
<b>1.</b>	<b>Loans</b>									
<b>1.1</b>	<b>Foreign Loans</b>									
<b>1.2</b>	<b>Indian Loans</b>									
<b>1.2.1</b>	<b>BONDS XXIX</b>									
	Draw Down Amount									70.00
	IDC									
	Financing Charges									
<b>1.2.2</b>	<b>BONDS XXX</b>									
	Draw Down Amount									860.00
	IDC									
	Financing Charges									
<b>1.2.3</b>	<b>BOND XXXI</b>									
	Draw Down Amount									1230.00
	IDC									
	Financing Charges									
<b>1.2.4</b>	<b>BONDS XXXIII</b>									
	Draw Down Amount									1800.00
	IDC									
	Financing Charges									
<b>1.2.5</b>	<b>BONDS XXXII</b>									
	Draw Down Amount									25.00
	IDC									
	Financing Charges									
<b>1.2.6</b>	<b>BOND-XXXIV</b>									
	Draw Down Amount									1965.00
	IDC									
	Financing Charges									
<b>1.2.7</b>	<b>BOND XXXV</b>									
	Draw Down Amount									880.00
	IDC									
	Financing Charges									
<b>1.2.8</b>	<b>BOND XXXVI</b>									
	Draw Down Amount									795.00
	IDC									
	Financing Charges									
<b>1.2.9</b>	<b>BOND XXXVII</b>									
	Draw Down Amount									75.00
	IDC									
	Financing Charges									
<b>1.2.10</b>	<b>BOND XXXIX</b>									
	Draw Down Amount									5.00
	IDC									
	Financing Charges									
<b>1.2.11</b>	<b>SBI (21.03.2012)</b>									
	Draw Down Amount									300.00
	IDC									
	Financing Charges									
<b>1.2.12</b>	<b>BOND XL</b>									
	Draw Down Amount									1380.00
	IDC									
	Financing Charges									
<b>1.2.13</b>	<b>BOND - XLI</b>									
	Draw Down Amount									1260.00



Draw Down Schedule for Calculation of IDC & Financing Charges

Name of the Transmission Licensee: **POWERGRID CORPORATION OF INDIA LTD.**  
 Name of Region: **WESTERN REGION**  
 Name of the Project: **Common scheme for 765 kV Pooling Stations and Network for NR**  
 Name of the Transmission Element: **Sipat-LILO Point (at Dharanjayagarh) portion of 765kV S/C Ranchi-Sipat TL along with associated bays at Sipat end. Ant. :DOCO :01-JAN-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
	IDC									
	Financing Charges									
1.2.14	Proposed Loan 2013-14 (10.05%)									
	Draw Down Amount									848.37
	IDC									
	Financing Charges									
	Total Indian Loans									
	Draw Down Amount									11493.37
	IDC									0.00
	Financing Charges									0.00
	Total of Loans Drawn									
	Draw Down Amount									11493.37
	IDC									2817.49
	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.

18.12.14  
Petitioner

# Power Grid Corporation of India Ltd



**Schedule 05A - Secured loans(Contd.)** (Rupees in Crore)

Description	As at 31st March, 2010	As at 31st March, 2009
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**BONDS XXIX SERIES**

9.20% Taxable, Secured, Redeemable, Non-Convertible, Non-Cumulative Bonds of Rs. 1.50 crore each consisting of 12 STRPP's of Rs. 12.50 lakh each redeemable at par in 12(twelve) equal annual installments w.e.f 12.03.2013

Secured by way of Registered Bond Trust Deed ranking pari passu on immovable property situated at Mouje Ambhethi Taluka Kaparada in district Valsad Gujarat and floating charge on the assets of the company.

\* Included under Unsecured Loans in previous year due to non completion of legal formalities

**BONDS XXX SERIES**

8.80% Taxable, Secured, Redeemable, Non-Convertible, Non-Cumulative Bonds of Rs. 1.50 crore each consisting of 12 STRPP's of Rs. 12.50 lakh each redeemable at par in 12(twelve) equal annual installments w.e.f 29.09.2013

Secured by way of Registered Bond Trust Deed ranking pari passu on immovable property situated at Mouje Ambhethi Taluka Kaparada in district Valsad Gujarat and floating charge on the assets of the company

**BONDS XXXI SERIES**

8.90% Taxable, Secured, Redeemable, Non-Convertible, Non-Cumulative Bonds of Rs. 1.50 crore each consisting of 12 STRPP's of Rs. 12.50 lakh each redeemable at par in 12(twelve) equal annual installments w.e.f 25.02.2014

Secured by way of Registered Bond Trust Deed ranking pari passu on immovable property situated at Mouje Ambhethi Taluka Kaparada in district Valsad Gujarat and floating charge on the assets of the company.

**BONDS XXXII SERIES**

8.84% Taxable, Secured, Redeemable, Non-Convertible, Non-Cumulative Bonds of Rs. 1.50 crore each consisting of 12 STRPP's of Rs. 12.50 lakh each redeemable at par in 12(twelve) equal annual installments w.e.f 29.03.2014

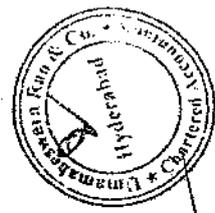
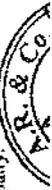
Secured by way of Registered Bond Trust Deed ranking pari passu on immovable property situated at Mouje Ambhethi Taluka Kaparada in district Valsad Gujarat and floating charge on the assets of the company.

1297.50

2332.50

2047.50

1035.00



13112.07



Ref.: NSE/LIST/ 142567-Y

July 19, 2010

The Manager (Finance)  
Power Grid Corporation Limited  
Saudamini,  
Plot No.2, Sector – 29,  
Gurgaon(Haryana) – 122 001.

Kind Attn. : Mr. K.C. Pant

Dear Sir,

**Sub: Listing of Secured Redeemable, Non-Convertible, Non Cumulative,  
Redeemable, Taxable Bonds (Series – XXXIII) 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, Redeemable, Taxable Bonds (Series-XXXIII), issued by you.

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 19, 2010 and all members have been suitably informed as per details given in Annexure I.

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

  
Hari K  
Vice President





**Annexure I**  
**Power Grid Corporation of India Limited**  
**Details of Securities**

Sr. No.	Issue Description	Security Type	Security	Issue	Allotment amount (In lakhs)	Maturity date
1	POWER GRID CORP 8.64% 2014 (S-XXXIII, STRPP-A)	PT	PGC14	8.64%	24000	8-Jul-2014
2	POWER GRID CORP 8.64% 2015 (S-XXXIII, STRPP-B)	PT	PGC15	8.64%	24000	8-Jul-2015
3	POWER GRID CORP 8.64% 2016 (S-XXXIII, STRPP-C)	PT	PGC16	8.64%	24000	8-Jul-2016
4	POWER GRID CORP 8.64% 2017 (S-XXXIII, STRPP-D)	PT	PGC17	8.64%	24000	8-Jul-2017
5	POWER GRID CORP 8.64% 2018 (S-XXXIII, STRPP-E)	PT	PGC18	8.64%	24000	8-Jul-2018
6	POWER GRID CORP 8.64% 2019 (S-XXXIII, STRPP-F)	PT	PGC19	8.64%	24000	8-Jul-2019
7	POWER GRID CORP 8.64% 2020 (S-XXXIII, STRPP-G)	PT	PGC20	8.64%	24000	8-Jul-2020
8	POWER GRID CORP 8.64% 2021 (S-XXXIII, STRPP-H)	PT	PGC21	8.64%	24000	8-Jul-2021
9	POWER GRID CORP 8.64% 2022 (S-XXXIII, STRPP-I)	PT	PGC22	8.64%	24000	8-Jul-2022
10	POWER GRID CORP 8.64% 2023 (S-XXXIII, STRPP-J)	PT	PGC23	8.64%	24000	8-Jul-2023
11	POWER GRID CORP 8.64% 2024 (S-XXXIII, STRPP-K)	PT	PGC24	8.64%	24000	8-Jul-2024
12	POWER GRID CORP 8.64% 2025 (S-XXXIII, STRPP-L)	PT	PGC25	8.64%	24000	8-Jul-2025





Ref.: NSE/LIST/163951-H

March 29, 2012

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

Kind Attn. : Mr. K.C. Pant

Dear Sir,

**Sub: Listing of Secured, Redeemable, Non-Convertible, Non Cumulative, Redeemable, Taxable Bonds (Series-XXXVIII) 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, redeemable, taxable Bonds (Series-XXXVIII).

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 March 29, 2012 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 9.25% 2027 (S-XXXVIII)	PT	PGC27	9.25%	85500	09-Mar-2027

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

  
Johnson Joseph  
Chief Manager





Ref.: NSE/LIST/166892-S

April 26, 2012

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

Kind Attn. : Mr. K.C. Pant

Dear Sir,

**Sub: Listing of Secured, Redeemable, Non-Convertible, Non Cumulative, Redeemable, Taxable Bonds (Series-XXXIX) 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, redeemable, taxable Bonds (Series-XXXIX).

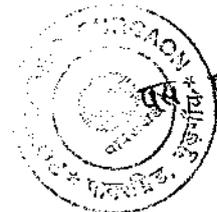
In this connection, we are pleased to inform you that the securities as specified in the application are duly listed on the WDM segment with effect from April 26, 2012 and all members have been suitably informed as per details given below:

Sr. No	Security Description	Sec Type	Security	Issue	Issue Size (Rs. in lakhs)	Maturity Date
1	POWER GRID CORP 9.40% 2027 (S-XXXIX)	PT	PGC27	9.40%	180000	29-Mar-2027

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 faithfully,  
For National Stock Exchange of India Limited

Johnson Joseph  
Chief Manager



62



**NATIONAL STOCK EXCHANGE  
OF INDIA LIMITED**

**NIFTY 50**  
Stock of the nation

Ref.: NSE/LIST/ 151475-T

November 15, 2010

The Manager (Finance)  
Power Grid Corporation Limited  
Saudamini.  
Plot No.2, Sector - 29,  
Gurgaon(Haryana) - 122 001. •

Kind Attn. :-Mr. K.C. Pant

Dear Sir,

**Sub: Listing of Secured Redeemable, Non-Convertible, Non Cumulative,  
Redeemable, Taxable Bonds (Series - XXXIV) 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, Redeemable, Taxable Bonds (Series-XXXIV), issued by you.

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 November 15, 2010 and all members have been suitably informed as per details given in Annexure I.

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

Johnson Joseph  
Chief Manager





**Annexure I**  
**Power Grid Corporation of India Limited**  
**Details of Securities**

Sr. No.	Issue Description	Security Type	Security	Issue	Allotment amount (In lakhs)	Maturity date
1	POWER GRID CORP 8.84% 2014 (S-XXXIV, STRPP-A)	PT	PGC14A	8.84%	29062.5	21-Oct-2014
2	POWER GRID CORP 8.84% 2015 (S-XXXIV, STRPP-B)	PT	PGC15A	8.84%	29062.5	21-Oct-2015
3	POWER GRID CORP 8.84% 2016 (S-XXXIV, STRPP-C)	PT	PGC16A	8.84%	29062.5	21-Oct-2016
4	POWER GRID CORP 8.84% 2017 (S-XXXIV, STRPP-D)	PT	PGC17A	8.84%	29062.5	21-Oct-2017
5	POWER GRID CORP 8.84% 2018 (S-XXXIV, STRPP-E)	PT	PGC18A	8.84%	29062.5	21-Oct-2018
6	POWER GRID CORP 8.84% 2019 (S-XXXIV, STRPP-F)	PT	PGC19A	8.84%	29062.5	21-Oct-2019
7	POWER GRID CORP 8.84% 2020 (S-XXXIV, STRPP-G)	PT	PGC20A	8.84%	29062.5	21-Oct-2020
8	POWER GRID CORP 8.84% 2021 (S-XXXIV, STRPP-H)	PT	PGC21A	8.84%	29062.5	21-Oct-2021
9	POWER GRID CORP 8.84% 2022 (S-XXXIV, STRPP-I)	PT	PGC22A	8.84%	29062.5	21-Oct-2022
10	POWER GRID CORP 8.84% 2023 (S-XXXIV, STRPP-J)	PT	PGC23A	8.84%	29062.5	21-Oct-2023
11	POWER GRID CORP 8.84% 2024 (S-XXXIV, STRPP-K)	PT	PGC24A	8.84%	29062.5	21-Oct-2024
12	POWER GRID CORP 8.84% 2025 (S-XXXIV, STRPP-L)	PT	PGC25A	8.84%	29062.5	21-Oct-2025





Ref.: NSE/LIST/ 167336-E

June 8, 2011

The Manager (Finance)  
Power Grid Corporation Limited  
Saudamini,  
Plot No.2, Sector – 29,  
Gurgaon (Haryana) - 122 001.

Kind Attn. : Mr. K.C. Pant

Dear Sir,

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

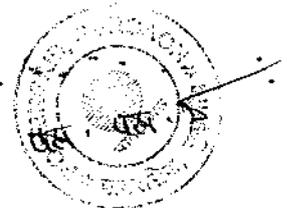
This has reference to your listing application for the listing of Secured Redeemable, Non-Convertible, Non Cumulative, Redeemable, Taxable Bonds (Series-XXXV), issued by you.

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 June 8, 2011 and all members have been suitably informed as per details given in Annexure I.

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

Johnson Joseph  
Chief Manager



65



**Annexure I**  
**Power Grid Corporation of India Limited**  
**Details of Securities**

Sr. No.	Issue Description	Security Type	Security	Issue	Allotment amount (In lakhs)	Maturity date
1	POWER GRID CORP 9.64% 2015 (S-XXXV, STRPP-A)	PT	PGC15	9.64%	16312.5	31-May-2015
2	POWER GRID CORP 9.64% 2016 (S-XXXV, STRPP-B)	PT	PGC16	9.64%	16312.5	31-May-2016
3	POWER GRID CORP 9.64% 2017 (S-XXXV, STRPP-C)	PT	PGC17	9.64%	16312.5	31-May-2017
4	POWER GRID CORP 9.64% 2018 (S-XXXV, STRPP-D)	PT	PGC18	9.64%	16312.5	31-May-2018
5	POWER GRID CORP 9.64% 2019 (S-XXXV, STRPP-E)	PT	PGC19	9.64%	16312.5	31-May-2019
6	POWER GRID CORP 9.64% 2020 (S-XXXV, STRPP-F)	PT	PGC20	9.64%	16312.5	31-May-2020
7	POWER GRID CORP 9.64% 2021 (S-XXXV, STRPP-G)	PT	PGC21	9.64%	16312.5	31-May-2021
8	POWER GRID CORP 9.64% 2022 (S-XXXV, STRPP-H)	PT	PGC22	9.64%	16312.5	31-May-2022
9	POWER GRID CORP 9.64% 2023 (S-XXXV, STRPP-I)	PT	PGC23	9.64%	16312.5	31-May-2023
10	POWER GRID CORP 9.64% 2024 (S-XXXV, STRPP-J)	PT	PGC24	9.64%	16312.5	31-May-2024
11	POWER GRID CORP 9.64% 2025 (S-XXXV, STRPP-K)	PT	PGC25	9.64%	16312.5	31-May-2025
12	POWER GRID CORP 9.64% 2026 (S-XXXV, STRPP-L)	PT	PGC26	9.64%	16312.5	31-May-2026

3-





NATIONAL STOCK EXCHANGE  
OF INDIA LIMITED

NIFTY 50  
Stock of the nation

Ref.: NSE/LIST/ 144388-L

September 12, 2011

The Manager (Finance)  
Power Grid Corporation Limited  
Saudamini,  
Plot No.2, Sector - 29,  
Gurgaon(Haryana) - 122 001.

Kind Attn. : Mr. K.C. Pant

Dear Sir,

**Sub: Listing of Secured Redeemable, Non-Convertible, Non Cumulative,  
Redeemable, Taxable Bonds (Series - XXXVI) 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, Redeemable, Taxable Bonds (Series-XXXVI), issued by you.

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 September 12, 2011 and all members have been suitably informed as per details given in Annexure I.

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

*Pam*  
Nagesh Pai  
Manager

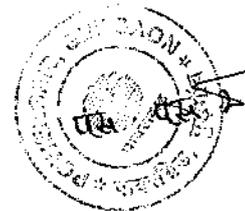


67



**Annexure I**  
**Power Grid Corporation of India Limited**  
**Details of Securities**

Sr. No.	Issue Description	Security Type	Security	Issue	Allotment amount (In lakhs)	Maturity date
1	POWER GRID CORP 9.35% 2016 (S-XXXVI, STRPP-A)	PT	PGC16	9.35%	20600	29-Aug-2016
2	POWER GRID CORP 9.35% 2017 (S-XXXVI, STRPP-B)	PT	PGC17	9.35%	20600	29-Aug-2017
3	POWER GRID CORP 9.35% 2018 (S-XXXVI, STRPP-C)	PT	PGC18	9.35%	20600	29-Aug-2018
4	POWER GRID CORP 9.35% 2019 (S-XXXVI, STRPP-D)	PT	PGC19	9.35%	20600	29-Aug-2019
5	POWER GRID CORP 9.35% 2020 (S-XXXVI, STRPP-E)	PT	PGC20	9.35%	20600	29-Aug-2020
6	POWER GRID CORP 9.35% 2021 (S-XXXVI, STRPP-F)	PT	PGC21	9.35%	20600	29-Aug-2021
7	POWER GRID CORP 9.35% 2022 (S-XXXVI, STRPP-G)	PT	PGC22	9.35%	20600	29-Aug-2022
8	POWER GRID CORP 9.35% 2023 (S-XXXVI, STRPP-H)	PT	PGC23	9.35%	20600	29-Aug-2023
9	POWER GRID CORP 9.35% 2024 (S-XXXVI, STRPP-I)	PT	PGC24	9.35%	20600	29-Aug-2024
10	POWER GRID CORP 9.35% 2025 (S-XXXVI, STRPP-J)	PT	PGC25	9.35%	20600	29-Aug-2025
11	POWER GRID CORP 9.35% 2026 (S-XXXVI, STRPP-K)	PT	PGC26	9.35%	20600	29-Aug-2026
12	POWER GRID CORP 9.35% 2027 (S-XXXVI, STRPP-L)	PT	PGC27	9.35%	20600	29-Aug-2027
13	POWER GRID CORP 9.35% 2028 (S-XXXVI, STRPP-M)	PT	PGC28	9.35%	20600	29-Aug-2028
14	POWER GRID CORP 9.35% 2029 (S-XXXVI, STRPP-N)	PT	PGC29	9.35%	20600	29-Aug-2029
15	POWER GRID CORP 9.35% 2030 (S-XXXVI, STRPP-O)	PT	PGC30	9.35%	20600	29-Aug-2030





**NATIONAL STOCK EXCHANGE  
OF INDIA LIMITED**

**NIFTY 50**  
Stock of the nation

Ref.: NSE/LIST/155559-V

January 4, 2012

The Manager (Finance)  
Power Grid Corporation Limited  
Saudamini,  
Plot No.2, Sector - 29,  
Gurgaon(Haryana) - 122 001.

Kind Attn. : Mr. K.C. Pant

Dear Sir,

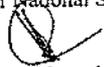
**Sub: Listing of Secured Redeemable, Non-Convertible, Non Cumulative,  
Redeemable, Taxable Bonds (Series-XXXVII) issued by Power Grid  
Corporation of India Limited**

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

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 January 4, 2012 and all members have been suitably informed as per details given in Annexure I.

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

  
Johnson Joseph  
Chief Manager

*pan*

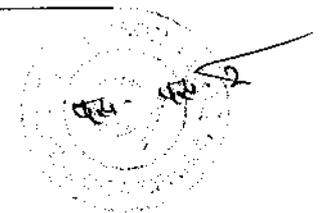




**Annexure I**  
**Power Grid Corporation of India Limited**  
**Details of Securities**

Sr. No.	Issue Description	Security Type	Security	Issue	Allotment amount (In lakhs)	Maturity date
1	POWER GRID CORP 9.25% 2015 (S-XXXVII, STRPP-A)	PT	PGC15B	9.25%	16625	26-Dec-2015
2	POWER GRID CORP 9.25% 2016 (S-XXXVII, STRPP-B)	PT	PGC16B	9.25%	16625	26-Dec-2016
3	POWER GRID CORP 9.25% 2017 (S-XXXVII, STRPP-C)	PT	PGC17B	9.25%	16625	26-Dec-2017
4	POWER GRID CORP 9.25% 2018 (S-XXXVII, STRPP-D)	PT	PGC18B	9.25%	16625	26-Dec-2018
5	POWER GRID CORP 9.25% 2019 (S-XXXVII, STRPP-E)	PT	PGC19B	9.25%	16625	26-Dec-2019
6	POWER GRID CORP 9.25% 2020 (S-XXXVII, STRPP-F)	PT	PGC20B	9.25%	16625	26-Dec-2020
7	POWER GRID CORP 9.25% 2021 (S-XXXVII, STRPP-G)	PT	PGC21B	9.25%	16625	26-Dec-2021
8	POWER GRID CORP 9.25% 2022 (S-XXXVII, STRPP-H)	PT	PGC22A	9.25%	16625	26-Dec-2022
9	POWER GRID CORP 9.25% 2023 (S-XXXVII, STRPP-I)	PT	PGC23	9.25%	16625	26-Dec-2023
10	POWER GRID CORP 9.25% 2024 (S-XXXVII, STRPP-J)	PT	PGC24	9.25%	16625	26-Dec-2024
11	POWER GRID CORP 9.25% 2025 (S-XXXVII, STRPP-K)	PT	PGC25	9.25%	16625	26-Dec-2025
12	POWER GRID CORP 9.25% 2026 (S-XXXVII, STRPP-L)	PT	PGC26	9.25%	16625	26-Dec-2026

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**Annexure I**  
**Power Grid Corporation of India Limited**  
**Details of Securities**

Sr. No.	Issue Description	Security Type	Security	Issue	Allotment amount (In lakhs)	Maturity date
1	POWER GRID CORP 9.25% 2015 (S-XXXVII, STRPP-A)	PT	PGC15B	9.25%	16625	26-Dec-2015
2	POWER GRID CORP 9.25% 2016 (S-XXXVII, STRPP-B)	PT	PGC16B	9.25%	16625	26-Dec-2016
3	POWER GRID CORP 9.25% 2017 (S-XXXVII, STRPP-C)	PT	PGC17B	9.25%	16625	26-Dec-2017
4	POWER GRID CORP 9.25% 2018 (S-XXXVII, STRPP-D)	PT	PGC18B	9.25%	16625	26-Dec-2018
5	POWER GRID CORP 9.25% 2019 (S-XXXVII, STRPP-E)	PT	PGC19B	9.25%	16625	26-Dec-2019
6	POWER GRID CORP 9.25% 2020 (S-XXXVII, STRPP-F)	PT	PGC20B	9.25%	16625	26-Dec-2020
7	POWER GRID CORP 9.25% 2021 (S-XXXVII, STRPP-G)	PT	PGC21B	9.25%	16625	26-Dec-2021
8	POWER GRID CORP 9.25% 2022 (S-XXXVII, STRPP-H)	PT	PGC22A	9.25%	16625	26-Dec-2022
9	POWER GRID CORP 9.25% 2023 (S-XXXVII, STRPP-I)	PT	PGC23	9.25%	16625	26-Dec-2023
10	POWER GRID CORP 9.25% 2024 (S-XXXVII, STRPP-J)	PT	PGC24	9.25%	16625	26-Dec-2024
11	POWER GRID CORP 9.25% 2025 (S-XXXVII, STRPP-K)	PT	PGC25	9.25%	16625	26-Dec-2025
12	POWER GRID CORP 9.25% 2026 (S-XXXVII, STRPP-L)	PT	PGC26	9.25%	16625	26-Dec-2026



Ref. :II/CA/COM/67304/2012

October 23, 2012

Ms. Divya Tandon  
 Company Secretary  
 Power Grid Corporation of India Limited  
 4th Floor, Power Grid Building  
 Plot No. 2, Sector 29,  
 Near ISSCO chowk  
 Gurgaon - 122 001

Madam,

**Sub. : Allotment**

As per the corporate action(s) executed by your R&T Agent/Registry Division viz; MCS Limited, Delhi, Bonds were credited/debited to the account(s) in the NSDL system, details of which are given below :

ISIN	ISIN Description	D/C	Records	QTY	Execution Date
INE752E07KB4	POWER GRID CORPORATION OF STRPP-A 8.85 LOA 19OT16 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KC2	POWER GRID CORPORATION OF STRPP-B 8.85 LOA 19OT17 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KD0	POWER GRID CORPORATION OF STRPP-C 8.85 LOA 19OT18 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KE8	POWER GRID CORPORATION OF STRPP-D 8.85 LOA 19OT19 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KF5	POWER GRID CORPORATION OF STRPP-E 8.85 LOA 19OT20 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KG3	POWER GRID CORPORATION OF STRPP-F 8.85 LOA 19OT21 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KH1	POWER GRID CORPORATION OF STRPP-G 8.85 LOA 19OT22 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KI9	POWER GRID CORPORATION OF STRPP-H 8.85 LOA 19OT23 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KJ7	POWER GRID CORPORATION OF STRPP-I 8.85 LOA 19OT24 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KK5	POWER GRID CORPORATION OF STRPP-J 8.85 LOA 19OT25 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KL3	POWER GRID CORPORATION OF STRPP-K 8.85 LOA 19OT26 FVRS12.5LAC	CREDIT	24	1835	22/10/2012
INE752E07KM1	POWER GRID CORPORATION OF STRPP-L 8.85 LOA 19OT27 FVRS12.5LAC	CREDIT	24	1835	22/10/2012

72


**National Securities Depository Ltd.**

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भारतीय स्टेट बैंक  
State Bank of India

नगरपालिका लेखा समूह शाखा, जवाहर व्यापार भवन,  
11वा व 12 वा तल, 1, टेलस्टोय मार्ग, नई दिल्ली - 110001  
Corporate Accounts Group Branch Jawahar Vyapar Bhawan,  
11th & 12th Floor, 1, Telstoy Marg, New Delhi-110001

Tel: 23352615, 23354595, 23354541 (AMT-I); 23353022 (AGM & COO); 23791043, 23359506 (A & A); 23352995 (CS); 23352969 (IB);  
Fax: 23351191 (Sect.); 23352795 (CS); 23353029 (B).

TO WHOMSOEVER IT MAY CONCERN

This is to certify that SBI BASE RATE (BR) on 01.04.2013 was 9.70% p.a.

Dy. General Manager & RM (AMT-I)  
15.04.2013



INDEX

CHECK LIST  
PART-III

Name of the Company Power Grid Corporation of India Ltd  
 Name of the Project Common Scheme for 765 kV Pooling Stations and Network for NR  
 Name of the Transmission Element Sipat-LILO Point (at Dharamjagarh) portion of 765KV S/C Ranch-Sipat TL along with associated bays at Sipat end

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

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 -

