#### **BEFORE**

# THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### **PETITION FOR**

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999, CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations' 2014 for determination of

(i)

(ii) Transmission tariff for 2014-19 tariff block

for Combined elements of i.) Additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and ii.) 400 kV Hiryur sub-station, including 315 MVA auto transformer & LILO of Davangere-Hoody 400 kV D/C line at Hiryur with associated bays under System Strengthening Scheme-II in Southern Region

PETITION NO.:

TARIFF BLOCK: 2014 - 2019

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

#### IN THE MATTER OF

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999, CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations' 2014 for determination of

- (i) Truing up Transmission tariff for 2009-14 tariff block and
- (ii) Transmission tariff for 2014-19 tariff block

for Combined elements of i.) Additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and ii) 400 kV Hiryur sub-station, including 315 MVA auto transformer & LILO of Davangere-Hoody 400 kV D/C line at Hiryur with associated bays under System Strengthening Scheme-II in Southern Region.

#### Power Grid Corporation of India Ltd.

--- PETITIONER

Registered office: B-9, Qutab Institutional Area,

Katwaria Sarai, New Delhi. 110 016.

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

Karnataka Power Transmission Corporation Ltd.

---- RESPONDENTS

Cauvery Bhavan, Bangalore - 560 009

Represented by its Chairman And Others

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Filed by Power Grid Corporation of India Ltd. Represented by

Gurgaon

Dated: .....1.7-/..06.2014

Dy. General Manager (Commercial)

## BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

LITTION NO.	PETITION	NO.:	
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#### IN THE MATTER OF

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for Combined elements of i.) Additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and ii) 400 kV Hiryur sub-station, including 315 MVA auto transformer & LILO of Davangere-Hoody 400 kV D/C line at Hiryur with associated bays under System Strengthening Scheme-II in Southern Region.

#### Power Grid Corporation of India Ltd.

--- PETITIONER

Registered office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi. 110 016. Corporate Centre: 'SAUDAMINI', Plot No-2, Sector-29, Gurgaon-122 001 (Haryana).

Karnataka Power Transmission Corporation Ltd. Cauvery Bhavan, Bangalore – 560 009 Represented by its Chairman And Others ---- RESPONDENTS

To
The Secretary
Central Electricity Regulatory Commission
New Delhi 110001

Sir

The application lied under Regulation so of CERC (Conduct of Business) Regulation, 1999, and Regulation -6 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for determination of

- (i) Truing up Transmission tariff for 2009-14 tariff block and
- (ii) Transmission tariff for 2014-19 tariff block

may please be registered.

Filed by Power Grid Corporation of India Ltd.

Represented by

Gurgaon

Dated: ..4:7.4..06.2014

Dy. General Manager (Commercial)

- 4 Tamil Nadu Generation and Distribution Corporation Ltd (Formerly Tamilnadu Electricity Board -TNEB) NPKRR Maaligai, 800, Anna Salai Chennai – 600 002 Represented by its Chairman
- 5 Electricity Department Govt of Pondicherry, Pondicherry - 605001 Represented by its Chief Secretary
- 6 Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL) APEPDCL, P&T Colony, Seethmmadhara, VISHAKHAPATNAM Andhra Pradesh, Represented by its Managing Director
- 7 Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL) Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, TIRUPATI-517 501, Chittoor District, Andhra Pradesh Represented by Its Managing Director
- 8 Central Power Distribution Company of Andhra
  Pradesh limited (APCPDCL)
  Corporate Office, Mint Compound.
  HYDERABAD notrogo
  Andhra Pradesh
  Represented by its Managing Director
- 9 Northern Power Distribution Company of Andhra Pradesh Limited (APNPDCL) Opp. NIT Petrol Pump Chaitanyapuri, Kazipet, WARANGAL – 506 004 Andhra Pradesh Represented by Its Managing Director
- 10 Bangalore Electricity Supply Company Ltd., (BESCOM), Corporate Office, K.R.Circle BANGALORE – 560 001 Karanataka Represented by Its Managing Director



- 11 Gulbarga Electricity Supply Company Ltd., (GESCOM) Station Main Road, GULBURGA Karnataka Represented by Its Managing Director
- 12 Hubli Electricity Supply Company Ltd., (HESCOM) Navanagar, PB Road HUBLI, Karnataka Represented by Its Managing Director
- 13 MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle MANGALORE – 575 001 Karnataka Represented by Its Managing Director
- 14 Chamundeswari Electricity Supply Corporation
  Ltd., (CESC)
  # 927,L J Avenue
  Ground Floor, New Kantharaj Urs Road
  Saraswatipuram, MYSORE 570 009
  KARNATAKA
  Represented by Its Managing Director
- 15 Electricity Department
  Government of Goa
  Vidyuti Bhawan, Panaji
  Goa 403001
  Represented by Chief Engineer ( Electrical)

PETITIONER
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY

GURGAON DATED:-. ;7;06.2014

Dy. General Manager (Commercial)





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BEFORE

НЕ СЕИТВАL ELECTRICITY REGULATORY COMMISSION

NEM DECHI

PETITION NO.: .....

**40 ABTTAM BHT NI** 

30: No. 1662

2014 for determination of Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations' Approval under regulation-86 of CERC (Conduct of Business) Regulations 1999 CERC (Terms and

Transmission tanff for 2014-19 tariff block Truing up. It answer the Tot 2009-14 tariff, block and

Scheme-II in Southern Region. Davangere-Hoody 400 kV D/C line at Hiryur with associated bays under System Strengthening 400 kV D/C line and ii) 400 kV Hiryur sub-station, including 315 MVA auto transformer & LILO of for Combined elements of it.) Additional bays at Kolar and Hosur for second circuit of Kotar-Hosur

--- PETITIONER

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).

RESPONDENTS

Karnataka Power Transmission Corporation Ltd.

Cauvery Bhavan, Bangalore - 560 009

Represented by its Chairman

And Others

Affidavit verifying the Petition

Shakeshart SIO Sh A m. Janes Working as Dy. General Manager (Congrectal) in the Power Grid

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:-

- That I am the Dy. General Manager (Commercial) of Power Grid Corporation of India Ltd., the representative of the Petitioner in the above matter, and am duly authorised to make this affidavit.
- 2. That the enclosed tariff Petition is being filed for determination of Truing up Transmission tariff for 2009-14 tariff block and determination of tariff for 2014-19 tariff block for Combined elements of i) additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and ii) 400 kV Hiryur sub-station, including 315 MVA auto transformer & LILO of Davangere-Hoody 400 kV D/C line at Hiryur with associated bays under System Strengthening Scheme-II in Southern Region.
- 3. That no other tariff Petition except this Petition has been filed directly or indirectly for approval of tariff for Combined elements of i) additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and ii) 400 kV Hiryur sub-station, including 315 MVA auto transformer & LILO of Davangere-Hoody 400 kV D/C line at Hiriyur with associated bays under System Strengthening Scheme-II in Southern.
- That the statements made in the tariff Petition herein are based on petitioner company's official records maintained in the ordinary course of business and I believe them to be true and correct.
- 5. The documents attached with the petition are legible copies and duly attested by me

(DEPONENT)

#### VERIEICATION



(DEPONENT)



GURGAON (HARYANA)

### BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### IN THE MATTER OF

Approval under regulation-86 of CERC (Conduct of Business) Regulations'1999, CERC (Terms and Conditions of Tariff) Regulations, 2009 and CERC (Terms and Conditions of Tariff) Regulations' 2014 for determination of

- Truing up Transmission tariff for 2009-14 tariff block and
- Transmission tariff for 2014-19 tariff block (ii)

for Combined elements of i.) Additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and ii) 400 kV Hiryur sub-station, including 315 MVA auto transformer & LILO of Davangere-Hoody 400 kV D/C line at Hiryur with associated bays under System Strengthening Scheme-II in Southern Region.

#### Power Grid Corporation of India Ltd.

--- PETITIONER

Registered office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi. 110 016. Corporate Centre: 'SAUDAMINI', Plot No-2, Sector-29, Gurgaon-122 001 (Haryana).

Karnataka Power Transmission Corporation Ltd. Cauvery Bhavan, Bangalore - 560 009 Represented by its Chairman And Others

RESPONDENTS

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

#### MOST RESPECTFULLY SHOWETH

- 1.0 That, Hon'ble Commission have made Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and issued vide notification dated 21.02.2014. These regulations shall remain in force for a period of 5 years w.e.f. 01.04.2014, unless reviewed earlier or extended by the Hon'ble Commission.
- 2.0 The Petitioner herein, Power Grid Corporation of India Ltd. is a Government Company within the meaning of Companies Act, 1956. In exercise of powers under sub-section (1) of section 38(1) the Electricity Act 2003, the Government of India has declared the Petitioner herein as the Central Transmission Utility (CTU). The





petitioner being CTU is deemed to be a transmission licensee under section 14 of the Electricity Act' 2003.

- 3.0 That the petitioner has executed for Combined elements of i) additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and ii) 400 kV Hiryur sub-station, including 315 MVA auto transformer & LILO of Davangere-Hoody 400 kV D/C line at Hiryur with associated bays under System Strengthening Scheme-II in Southern Region and the same has been put under commercial operation from 01.02.2004.
- 4.0 That the final Transmission Tariff based on admitted capital cost of Rs 4596.06 Lakhs as on 01.04.2009 and as well as 31.03.2014 (in view of no add cap during 2009-14) for all the assets of the said transmission system covered under this petition for the tariff period 2009 2014 up to 31.03.2014 has been approved by the Hon'ble Commission vide its order dated 01.09.2010 in petition No.: 71/2010, a copy whereof is attached hereto as Encl.-1, page 16 to 3.2.
- 5.0 That the Petitioner is required to adjust the yearly impact of MAT as per regulation 6(5) of the 2<sup>nd</sup> amendment to the tariff Regulation 2009-14 period dated 21.06.2011 in the truing up petition for 2009-14 tariff block.

### Regulation 6(5) of the 2<sup>nd</sup> amendment to the tariff Regulation 2009-14: **Quote**

"Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations."

#### Unquote

The 2009-14 truing up exercise is to be done at the time of filing tariff potition for next block, i.e., 2014-19 period as per regulation 6(1) of Tariff Regulation 2009-14.

#### Regulation 6(1) of Tariff Regulation 2009-14:

#### Quote

"The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up."

#### Unquote

The MAT rate applicable to the petitioner for the various years as per the Finance Act of the relevant year and the revised grossed up ROE are as given below:



Year	MAT Rate	Grossed up ROE (Base rate/(1-t)
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610

In line with above Regulation the tariff for each year of the tariff period 2009-14 block w.r.t the actual tax rate applicable to the petitioner in line with provisions of the relevant Finance Acts has been trued up.

6.0 While filing Tariff petition for 2009-14 period the petitioner had prayed for allowing the floating rate of Interest on Ioan adjustments. As per Hon'ble Commission order dated 08.06.2011 in petition no. 238/2010, it has been stated that interest on Ioan was calculated on basis of prevailing rates as on 01.04.2010 and any change in the rates of interest subsequent to 01.04.2010 will be considered at the time of truing up. Accordingly in the instant petition, the truing up on account of impact due to change in MAT rate as well as floating rate of interest is being carried out.

#### 7.0 TRANSMISSION TARIFF

### 7.1 Tariff for 2009-14 period (MAT)

In line with the para 5 & 6 above the revised transmission tariff for 2009-14 block is worked out as follows:

Project		2009-10	2010 - 11	2011 -12	2012 - 13	2013 - 14
i) additional bays at Kolar and Hosur for second circuit of Kolar Hosur 400 kV D/C line	Cost approved	1142.92	1150.93	1160.44	1171.50	1185,65
and ii) 400 kV	AND DESCRIPTION OF THE PERSON NAMED IN COLUMN TWO	Dept. (Sept. 1977)	And wanted			The second second
Hiryur sub- station, including 315 MVA auto transformer & LILO of Davangere- Hoody 400 kV D/C line at Hiryur with bays.	based on truing up	1158.88	1176.02	1185.79	1196.84	1214.13

The tariff for block 2009-14 has been worked out as per Appendix-I, Part III of the tariff regulations for period 2009-14 and the Tariff Filing Formats along with the other relevant information and supporting documentation are attached hereto as Encl.- 2, page 5 to 6...

#### 7.2 Tariff for 2014-19 period

That as per regulation 6(1)(i), 20 (3) and regulation 21 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, 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 2014-19 has been worked out as per Annexure-I, Part 3 of the tariff regulations for period 2014-19 and the Tariff Filing Formats along with the other relevant information and supporting documentation (if any) are attached hereto as Encl.-3, page !!! to 2.

The capital cost admitted by CERC as on 31.03.2014 is Rs 4596.06 lakhs and same has been considered for computation of tariff for 2014 -19 period.

The tariff from 01.04.2014 to 31.03.2019 is summarized below:

Period	Annual Fixed Cost (Rs. Lakh)#
2014 - 2015	1150.55
2015 - 2016	1151.48
2016 - 2017	1041.69
2017 - 2018	1052.1
2018 - 2019	1062.28

# - While calculating Annual fixed O&M charges, rates as specified in the Tariff Regulation 2014 have been considered. However, the petitioner is approaching the Hon'ble Commission through review petition for revision in the O&M rates. Thus the Annual Fixed Cost is subject to the outcome of the said review petition.

- 7.3 The asset will complete 12 Yrs on 61.02.2016 and thus depreciation during 2015-17, 2017-18 and 2015-19 has been half-marked based on the remaining depreciation value to be recovered in the balance useful life as per clause 27 of the CERC Tariff regulations 2014. The details have been computed and are provided in Form- 10 A.
- 7.4 That, it is submitted that the petitioner being liable to pay income tax at MAT rate, the ROE has been calculated @ 19.610 % after grossing up the ROE with MAT rate of 20.96% based on the rate prescribed by the Hon'ble Commission as per illustration under regulation 25 (2) (i) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 during 2014-19 period. That as per clause 25 (3) of the above regulation, the grossed up rate of ROE at the end of every financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up rate on ROE after truing up shall be recovered or refunded to beneficiaries on year to year basis. It is further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of tax including



( a)

- interest received from IT authorities shall be recoverable /adjustable during / after completion of income tax assessment of the financial year.
- 7.5 That as provided in clause clause 39 of the Tariff Regulations 2009 and 49 of the Tariff Regulations 2014, the deferred tax liability before 01.04.2009 shall be recovered from the beneficiaries or the long term customers /DICs as and when the same gets materialized.
- 7.6 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 7.1 & 7.2 above, is exclusive of Service Tax and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner if at any time the transmission charges is withdrawn from the negative list. Further, any additional taxes are to be paid by the petitioner on account of demand from Govt / statutory authorities, the same may be allowed to be recovered from the beneficiaries.
- 7.7 In the tariff calculation for 2014-19 period Interest on Loan has been calculated on the basis of rate prevailing as on 01.04.2014. The change in Interest rate due to floating rate of interest applicable, if any, for the project needs to be claimed / adjusted over the tariff block of 05 years directly from / with the beneficiaries.
- 7.8 The transmission charges at para-7.2 above is inclusive of O&M expenses for the project derived based on the norms for O&M expenditure for Transmission System as specified under regulation 29 (3) (a) of the tariff regulations for block 2014-19. 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 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13. It is submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rates prescribed for the tariff block 2014-19. The scheme of wage revision applicable to CPSUs being binding on the petitioner, the petitioner reserves the right to approach the Hop be Commission for surface revision in the normal for capacity the Hop be Commission for surface revision in the normal for capacity the Hop be Commission for surface revision and the normal for capacity the impact of wage hike, if any, during 2014-19.
- 7.9 The application filing fee, expenses incurred on publication of Notices in News papers and License fee may be allowed to be recovered separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014. The fees and charges to be paid by the petitioner as ISTS licensee (deemed ISTS licensee) under CERC (Fees and Charges of RLDC and other matters) Regulations as amended from time to time shall also be recoverable from the DICs as provided under clause 52(2) (a).
- 7.10 The Transmission Charges and other related Charges indicated at para 7.1 & 7.2 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, RLDC fees and charges or any other kind of imposition (s) and/ or other surcharges etc. whatsoever imposed / charged by any Government (Central/State) and / or any other local bodies/authorities/regulatory authorities in relation to transmission of electricity, environmental protection, and/or

in respect of any of its installation associated with the Transmission System and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner on the respondents.

#### 8.0 Sharing of Transmission Charges

Tariff for Transmission of Electricity (Annual Fixed Cost) as per para 7.0 above shall be recovered on monthly basis in accordance with Regulation 43 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and shall be shared by the beneficiaries and long term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 dated 15.06.2010 and amendment to these Regulations issued vide order dated 30.11.2012 or as amended from to time.

However, the transmission charges for 2009-14 period upto 30.06.2011 shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with regulation 33 of CERC (Terms and Conditions of Tariff) Regulations, 2009.

9.0 In the circumstances mentioned above it will be just and proper that the transmission tariff for the assets covered under this petition be allowed to be charged from the Respondents on the basis set out in para-7.0 above. The Petitioner submits that the Encl.-1 to Encl.-3 may please be treated as integral part of this petition.

#### PRAYER

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

- Approve the revised Transmission Tariff for 2009-14 block and transmission tariff for 2014-19 block for the assets covered under this petition, as per para – 7 above.
- 2) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed. Charges on account of Reum 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 as provided under clause 25 of the Tariff regulations 2014.
- Allow the petitioner to recover the deferred tax liability before 01.04.2009 from the beneficiaries or the long term customers /DICs as and when the same gets materialized.
- Allow the Petitioner to approach Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike, if any, during period 2014-19.
- Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation

- 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure ( if any) in relation to the filing of petition.
- 6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.
- 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. Further, any taxes and duties including cess etc. imposed by any statutory/Govt/municipal authorities shall be allowed to be recovered from the beneficiaries

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

Ev-

Dy. General Manager (Commercial)

Gurgaon

### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No.71/2010

#### Coram:

- Shri V.S.Verma, Member
- Shri M.Deena Dayalan, Member

DATE OF HEARING: 22.6.2010

DATE OF ORDER: 1.9.2010

#### In the matter of

Approval of transmission tariff for combined elements of (i) additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and (ii) 400 kV Hiryur sub-station, including 315 MVA auto transformer and LILO of Devangere-Hoody 400 kV D/C line at Hiriyur with associated bays under system strengthening scheme-II in Southern Region for the period from 1.4.2009 to 31.3.2014.

#### And in the matter of

Power Grid Corporation of India Limited, Gurgaon

..Petitioner

Vs

- 1.Kerala State Electricity Board, Thiruvanathapuram
- 2.Tamil Nadu Electricity Board, Chennai
- 3. Electricity Department, Govt. of Pondicherry, Pondicherry
- 4.Electricty Department, Government of Goa, Panaji
- Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
- Northern Power Distribution Company of Andhra Pradesh Limited, Warangal
- Z.Egstern Power Distribution Company of Andhra Bradesh Limited Vishakhapatham
- Shall the Fower Distribution Company of Ancheo Frages Februard.
   Impart
- Central Power Distribution Company of Andhra Pradesh Limited, Hyderabad
- Karnataka Power Transmission Corporation Limited, Bangalore
- 11. Bangalore Electricity Supply Company Ltd., Bangalore
- 12. Gulbarga Electricity Supply Company Ltd. Gulburga
- Hubli Electricity Supply Company Ltd., Hubli
- MESCOM Corporate office, Mangalore
- Chamundeswari Electricity Supply Corporation Ltd., Mysore.

.Respondents

#### The following were present:

- Shri U.K.Tyagi, PGCIL
- 2. Shri M.M. Mondal, PGCIL

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\*CKHOPCHOKIN

Order in Pet No.71-2010

- 3. Shri R.Prasad, PGCIL
- Shri R.K.Gupta, PGCIL
- Shri V.Vamsi, PGCIL

#### ORDER

The petition has been filed for approval of tariff for combined elements of (i) additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and (ii) 400 kV Hiryur sub-station, including 315 MVA auto transformer and LILO of Devangere-Hoody 400 kV D/C line at Hiriyur with associated bays under system strengthening scheme-II (the transmission scheme) in Southern Region for the period 1.4.2009 to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 regulations"). The petitioner has further prayed for the reimbursement of expenditure from the beneficiaries towards publication of notices in newspapers and petition filling fee be approved. The petitioner has also prayed to be allowed to adjust impact on interest on loan due to floating rate of interest, to recover the service tax on transmission charges and reimbursement of licence fee separately from the respondents.

of the 2009 regulations for relaxation of regulations 15 (3) of the 2009 regulations so that grossing up the base rate shall be considering the tax rates viz. MAT, surcharge, any other cess, charges, levies etc as per the Finance Act, 2010 and allow consequential impact on tariff for 2009-14 period accordingly.





- 3. The investment approval for the transmission scheme was accorded by the Board of Directors of the petitioner company vide its letter dated 23.10.2001 at an estimated cost of Rs. 7761.00 lakh, including IDC of Rs. 722.00 lakh. The combined transmission assets were declared under commercial operation 1.9.2003 and 1.2.2004, respectively.
- 4. The annual transmission charges for the period from 1.4.2004 to 31.3.2009 were decided by the Commission in its order dated 1.9.2008 in Petition No. 63/2008 at a gross block of ₹ 586.22 lakh for additional bays at Kolar and Hosur for second circuit of Kolar-Hosur 400 kV D/C line and ₹ 4009.84 lakh for 400 kV Hiryur sub-station, including 315 MVA auto transformer and LILO of Devangere-Hoody 400 kV D/C line at Hiriyur as on 31.3.2009 and thereafter no additional capital expenditure is involved for the transmission asset.
- The petitioner has claimed the transmission charges as under:

₹ in lakh 2009-10 2011-12 2012-13 2013-14 2010-11 226.25 226.25 226.25 226:25 226.25 Depreciation 173.34 153.06 132.68 112.12 92.81 Inferest on Louri 228.92 228.92 228.92 228.92 Return on Equity. 37.93 38.05 45 04 Interest on Working Cop to 1150.93 1160.45 1171.49

6. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:

	[₹ in le							
	2009-10	2010-11	2011-12	2012-13	2013-14			
Maintenance Spares	71.61	75.72	80.05	84.62	89.46			
O & M expenses	39.79	42.06	44.47	47.01	49.70			
Receivables	190.49	191.82	193.41	195.25	197.61			
Total	301.89	309.60	317.93	326.88	336.77			
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%			
Interest	36.98	37.93	38.95	40.04	41.25			



....

- 7. Reply to the petition has been filed by Tamil Nadu Electricity Board (TNEB). No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003. TNEB in its reply has made following submission:
  - (i) To exercise prudence check to ascertain that the tariff to be awarded by combining the elements shall not result in higher tariff in the year to come than what would become due considering the elements individually;
  - (ii) As such there is no provision in the 2009 regulations for reimbursement on account of change in the rate of MAT/Corporate tax on a yearly basis. However, since a year in the present tariff period has already elapsed, the rates prevailing on the date of petition be considered in awarding tariff and further variations if any may be allowed to be settled along with truing up exercise at the end of the tariff period;
  - Under para 6.8 of the petition, the petitioner has prayed that the service tax payable by them be allowed to be recovered from the beneficiaries. The Government of India vide its notification dated 27.2.2010 have exempted transmission services from the purview of levy of service tax:
  - (iv) To negate the filing fee claim in line with the decision taken by the Commission vide its order dated 11.9.2008 in Petition No. 129/2005 (Suo motu);



- (v) To negate the request for revision of the normative o & M expenses considering the impact of wage revision, effective from 1.1.2007 as the regulations do not provide any revision under any circumstances. TNEB has also raised issues of the reimbursement of expenditure towards publishing notices and licence fee. The issues raised by the MPPTCL have been dealt with in the relevant paras of this order.
- The petitioner has filed its rejoinder vide affidavit dated 11.6.2010. In regard to first issue, the petitioner has submitted that calculation of tariff by combining the elements has been done in accordance with Commission's letter dated 23,10,2009 pertaining to procedure for combining of assets for the purpose of tariff for the period 2009-14. In regard to (ii) above, the petitioner has submitted that unless the revision in MAT rate is effected in computing the ROE, the cash flow would be adversely affected as tax would have to be paid at revised rate of MAT 15% @ in accordance with the Finance Act, 2009 whereas cash would be generated through ROE based on MATC 10%. Finance Act, 2010 has increased the MAT Rate to 18%, Revision at rate of pre-tax return on equity with the applicable MAT as per the Finance Act, 2009/2010 would save both the petitioner and the beneficiaries from an additional exercise and also avoid accumulation of arrears in respect of revision of ROE for all the tariff period 2009-14. In regard to service tax, the petitioner has submitted that in the Finance Act 2010, transmission service has been exempted from service tax. However, service tax implication, if any, for the period 2009-10 shall have to be shared by the beneficiaries. In regard

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to O & M the petitioner has submitted that per ckt km and per bay O & M rates considered are based on the 2004 regulations. The petitioner has submitted that the wage revision for the executive levels has already been done, however, for the non-executive levels, the wage revision shall be done shortly and he will approach before the Commission for additional manpower cost on account of wage revision during the period 2009-14.

#### **CAPITAL COST**

- 9. As per clause (2) of Regulation 7 of the 2009 regulations, the project cost admitted by the Commission for determination of tariff prior to 1.4.2009 shall form the basis for determination of tariff.
- 10. The petitioner has claimed the capital expenditure of ₹ 4596.06 lakh, which was admitted vide order dated 1.9.2008 in Petition No. 63/2008. The petitioner has not claimed any additional capitalization.
- Accordingly, gross block of ₹ 4596.06 lakh as on 31.3.2009 has been considered for the purpose of tariff.

#### DEBT EQUIT KAND

- 12. Clause (2) of Regulation 12 of the 2009 regulations inter alia provides that,-
  - "(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered."



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21

13. The petitioner has claimed tariff based on debt-equity ratio of 71.51:28.49 as considered by the Commission in its order dated 1.9.2008 ibid. The same debt-equity ratio has been considered for the purpose of tariff.

#### RETURN ON EQUITY

- Regulation 15 of the 2009 regulations provides that.-
  - "15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.
  - (2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation;

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**;

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be:

Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Raje of pre-ray return on equity = Save rate 7.11-1

Where I is the applicable tax rate in accordance with clause (3) of this regulation.

#### Illustration.-

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 11.33% including surcharge and cess:

Rate of return on equity = 15.50/ (1-0.1133) = 17.481%

(ii) In case of generating company or the transmission licensee paying normal corporate tax @ 33.99% including surcharge and cess:

Rate of return on equity = 15.50/ (1-0.3399) = 23.481%."

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- 15. The petitioner has computed return on equity on pre-tax basis on 11.33% MAT in accordance with tax rate applicable for the year 2008-09 and claimed return on equity of ₹ 228.92 lakh each year during the tariff period @ 17.481% against the equity base of ₹ 1309.52 lakh. This has been found to be in order. Accordingly, the petitioner shall be entitled to return on equity @ ₹ 228.92 lakh each year during the tariff period, as claimed.
- 16. The Commission vide its order dated 3.8.2010 in Petition No. 17/2010 has already taken a decision to amend the 2009 regulations. The relevant portion of the said order is extracted as under:

"We are of the view that this issue of 'grossing up the base rate with the normal tax rate for the year 2008-09' is generic in nature and therefore, it will be appropriate to make suitable provisions in the 2009 regulations to cater to any future changes in the tax rate. Accordingly, we direct the staff of the Commission to prepare and submit draft amendment to the 2009 regulations for allowing grossing up of base rate of return with the applicable tax rate as per the Finance Act for the relevant year and direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long term transmission customers on year to year basis. Any under/over recovery on account of direct settlement of tax liability shall be subject to the final adjustment at the time of true up exercise."

17. In view of our above order the prayer of the petitioner will be taken care of after amondment of the regulations.

#### INTEREST ON LOAN

- Regulation 16 of the 2009 regulations provides that,-
  - "16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.
  - (2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.





- (3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:
- (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed..
- (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.
- (8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
- (9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Gammiss and Conduct of Businessi. Regulations: 1999, as amended from time to time, including statutory connection and the public sections of the statutory.

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

- 19. In our calculation, the interest on loan has been worked out as detailed below:
  - (i) Details of net outstanding loan as on 31.3.2009, cumulative repayment up to 31.3.2009, rate of interest for Bonds, repayment

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- schedule for the loans, etc. have been taken from the order dated 1.9.2008 in Petition No. 63/2008 for working out weighted average rate of interest.
- (ii) Tariff has been worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the period 2009-14.
- (iii) Weighted average rate of interest on actual loan worked out as above has been applied on the average loan during the year to arrive at the interest on loan.
- 20. Based on the above, the year-wise details of interest worked out are given hereunder:

(₹ in lakh) 2009-10 2010-11 2012-13 2013-14 Up to 2011-12 Details of loan 31.3.2009 3286.54-3286.64 3286.54 3288.54 Gross Normalive Loan 1078.92 1305.17 1531.42 1757.67 Cumulative Repayment up to Previous Year 2207.62 1981.37 1755.12 1528.87 1302.62 Net Loan-Opening 0.00 Addition due to Additional Capitalisation Repayment during the year 1786 12 528.87 NEW CONFIGURACION Avetage assuran-Loon 92.81 Interest

 The detailed calculations in support of the weighted revised average rate of interest are contained in Annexure attached.

#### DEPRECIATION

22. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner, namely:

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- "17. (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.
- (2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

XXXX XXXX

- (3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

- (5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.
- (6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."
- 23. The deprecation has been worked out on the admitted capital expenditure of ₹ 4596.06 lakh as on 31.3.2009. Cumulative depreciation up to 31.3.2009 has been taken as per order dated 1.2.2008 in Petition Np.63/2008.
- 24. For the period 1.4.2009 to 31.3.2014 the depreciation works out to ₹ 226.25 lakh each year by applying rate of depreciation of 4.9227% as shown below:

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[₹in lakh]

Details of Depreciation		Up to	2009-10	2010-11	2011-12	2012-13	2013-14
		31.3.2009		-mounts com			0.0000000000000000000000000000000000000
As per order dated 1.9.2008		4596.06	4596.06	4596.06	4596.06	4596.06	4596.06
Addition during 2009-14 due to projected Additional Capitalisation			0.00	0.00	0.00	0.00	0.00
Gross block as on 31.3.2009			4596.06	4596.06	4596.06	4596.06	4596.06
Average gross block			4596.06	4596.06	4596.06	4596.06	4596.06
Rate of Depreciation			4.9227%	4.9227%	4.9227%	4.9227%	4.9227%
Depreciable Value	90%		4104.86	4104.86	4104.86	4104.86	4104.86
Elapsed Life			6	7	8	9	10
Balance Useful life of the asset			-			-	
Remaining Depreciable Value			3053.89	2827.64	2601.39	2375.14	2148.89
Depreciation	- 3		226.25	226.25	226.25	226.25	226.25

#### **OPERATION & MAINTENANCE EXPENSES**

25. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 400 kV D/C, Twin conductor, transmission line, 400 kV and 220 kV bays are prescribed for O & M expenses:

	Year							
	2009-10	2010-11	2011-12	2012-13	2013-14			
400 kV D/C transmission line (Twin conductor) (₹ in lakh /km)	0.627	0.663	0.701	0.741	0.783			
400 k V bays (₹ in lakh/ bay)	52.40	55.40	58.57	61.92	65.46			
220 kV bays (₹ in lakh/ bay)	36.68	38.78	41.00	43.34	45.82			

26. The petitioner has claimed O & M expenses for 0.946 Ckt.km and 10 bays, which has been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder.

( in lakh) Year 2011-12 2013-14 2009-10 2010-11 2012-13 Transmission lines (0.946 km) 0.59 0.63 0.660.70 0.74 O&M expenses for 10 bays 476.84 504.14 532.99 563.46 595.68

504.77

477.43

27. The petitioner has submitted that O & M expenditure for the year 2009-14 had been arrived at on the basis of normalized actual O & M expenses during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision

0

533.65

564.16

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596.42

Total

of the employees of public sector undertaking has also been considered while calculating the O & M charges for the tariff period 2009-14. The petitioner has further submitted that it reserves the right to approach the Commission for suitable revision in the norms for O & M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more then 50%. The petitioner has further submitted that O & M norms for the period 2009-14, the cost associated with license fees had not been captured and the licence fee be allowed to be recovered separately from the respondents. The petitioner has not made any claim towards wage hike and licence fee in the present petition, these issues shall be considered after making the application by the petitioner in this regard.

#### INTEREST ON WORKING CAPITAL

28. The components of the working capital and the interest thereon are discussed hereunder:

#### Receivables

As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months average billing calculated on larget availability evel. The petitioner has claimed the receivables on the basis. 2 through transmission charges claimed in the petition. In the fariff being allowed, receivables have been worked out on the basis 2 months' transmission charges.

#### (ii) Maintenance spares

Regulation 18(1)(C)(ii) of the 2009 regulations provides for maintenance spares @ 15% per annum of the O & M expenses from



1.4.2009. The value of maintenance spares works out to ₹ 71.61 lakh as on 1.4.2009.

#### (iii) O & M expenses

Regulation 18(1) (c) (iii) of the 2009 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of O&M expenses of the respective year as claimed in the petition. This has been considered in the working capital.

#### (iv) Rate of interest on working capital

As per Regulation 18(3) of the 2009 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwitistancing that the transmission licenses has not taken working capital later from any bulside agency. The positioner has endrined interest on working capital @ 12.25% based on SBI PLR as on 1.4.2009, which is in accordance with the 2009 regulations and has been allowed.

29. The necessary computations in support of interest on working capital are appended hereinbelow:

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(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	71.61	75.72	80.05	84.62	89.46
O & M expenses	39.79	42.06	44.47	47.01	49.70
Receivables	190.49	191.82	193.41	195.25	197.61
Total	301.89	309.60	317.92	326.89	336.77
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	36.98	37.93	38.95	40.04	41.25

#### **TRANSMISSION CHARGES**

30. The transmission charges being allowed for the transmission asset are summarised below:

(Fin lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	226.25	226.25	226.25	226.25	226.25
Interest on Loan	173.34	153.06	132.68	112.12	92.81
Return on Equity	228.92	228.92	228.92	228.92	228.92
Interest on Working Capital	36.98	37.93	38.95	40.04	41.25
O & M Expenses	477.43	504.77	533.65	564.16	596.42
Total	1142.92	1150.93	1160.44	1171.50	1185.65

#### Application fee and the publication expenses

- 31. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. In accordance with out decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fees from the beneficiaries.
- 32. Accordingly, expenses incurred by the petitioner on application filing fees and publication of notices in connection with the present petition shall be directly recovered from the beneficiaries on pro rata basis.
- 33. In addition to the transmission charges, the petitioner shall be entitled to other charges like income-tax, incentive, surcharge and other cess and taxes in accordance with the 2009 regulations.

Order in Pet No.71-2010

34. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 regulations.

35. This order disposes of Petition No. 71/2010.

-\b2 (A.S.VERMA) 938M3M -\bz (M.DEENA DAYALAN) SABMAM



#### Annexure

#### CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

	Details of Loan	2009-10	2010-11	2011-12	2012-13	₹ in Lakh 2013-14
1	Bond-IX	2009-10	2010-11	2011-12	2012-13	2013-14
	Gross loan opening	552.00	552.00	552.00	552.00	552.00
	Cumulative Repayment up to the date of commercial operation/previous year	331.20	386.40	441.60	496.80	552.00
	Net Loan-Opening	220.80	165.60	110.40	55.20	0.00
1	Additions during the year	0.00	0.00	0.00	0.00	0.00
Π	Repayment during the year	55.20	55.20	55.20	55.20	0.00
1	Net Loan-Closing	165.60	110.40	55.20	0.00	0.0
7	Average Loan	193.20	138.00	82.80	27.60	0.0
1	Rate of interest	12,25%	12.25%	12.25%	12.25%	12.259
Ī	Interest	23.67	16.91	10.14	3.38	0.0
	Rep Schedule		10 Annual I	nstalment from	n 31.7.2006	
1	Bond-XIII Option-I		-			
Ì	Gross loan opening	1500.00	1500.00	1500.00	1500.00	1500.0
	Cumulative Repayment up to the date of commercial operation/previous year	375.00	500.00	625.00	750.00	875.0
	Net Loan-Opening	1125.00	1000.00	875.00	750.00	625.0
	Additions during the year	0.00	0.00	0.00	0.00	0.0
	Repayment during the year	125.00	125.00	125.00	125.00	125.0
	Net Loan-Closing	1000.00	875.00	750.00	625.00	500.0
	Average Loan	1062.50	937.50	812.50	687.50	562.5
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63
	Interest	91.69	80.91	70.12	59.33	48.5
	Rep Schedule		12 Annual	Instalment from	m 23.2.2008	
ı	BOND XV				- I ken out	
	Gross loan opening Cumulative Repayment up to the date of commercial operation /previous year	905.00 150.83	905.00 226.25	905.00 301.67	905.00 377.08	905.0 452.5
	Net Loan-Opening	754.17	678.75	603.33	527.92	452.5
J.	Additions during the year	0.00	Programme and the second	Appropriate Control of the Control o	C. Committee of the Com	The second second second
ě	Repayment during the year.	75.42	ILLEN CONTRACTOR	75,42	1 King Street, Str. Street, Str. Str.	75/4
	Now 63/1 Glosing	678.75	463756	ACTUAL STATE OF THE STATE OF TH	462.80	
Ğ	Average Loan	716.46	641.04	And in column 2 is not record to	STORY, S. STANISH STORY, SANS	PRODUCTION OF THE PERSON NAMED IN
3	Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68
	Interest	47.86	42.82	37.78	32.75	27.7
-	Rep Schedule			Instalment fro	Acceptance of the contract of	2.7.
	Total Loan					
	Gross loan opening	2957.00	2957.00	2957.00	2957.00	2957.0
	Cumulative Repayment up to the date of commercial operation /previous year	857.03	1112.65		1623.88	1879.
	Net Loan-Opening	2099.97	1844.35	1588.73	1333.12	1077.5
	Additions during the year	0.00	0.00	and the second second second	The second second	
-	Repayment during the year	255.62	255.62			_
	Net Loan-Closing	1844.35	1588.73			A CONTRACTOR OF THE PARTY OF TH
	Average Loan	1972.16	1716.54	1460.93	Annual State of the last of th	977.2
	Rate of Interest	8.2762%	8.1928%	The second second second second		7.8024
-	Interest	163.22	140.63			_



19		graduated III com-				
		37 2 1 1 1 1		1,20		Form
j.		Summary Shee	et	11-		
Name of the Transmission Licensee: Power Grid	Corporation o	of India Limited	1 37			
Name of the Region: SOUTHERN REGION						
Name of the Project: SYSTEM STREGTHENING SE	HEME IIIN SC	OUTHERN REGION				
Name of the Transmission Element or Communic	iriion System	: Combined assets	of SRSS-II (Hiriyur	s/s ICT, LILO Dev-	Hoody, Bays at Ko	lar & Hosur)
Date of Commercial operation : 01-Feb-2004						Rs. in Lac
Particulars	2008109	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	0	226.25	226.25	226.25	226.25	226.25
Interest on Loan	0	173.35	153.06	132.68	112.12	92.82
Return on Equity	0	244.54	253.5	253.75	253.75	256.8
Int. on Working Capital	0	37.31	38.44	39.46	40.56	41.84
Op. and Maintenance	10	477.43	504.77	533.65	564.16	596.42
Total		1158.88	1176.02	1185.79	1196.84	1214.13
				41	-	
						(Petitioner)
						_



- 1.1

								Form 1/
		C	alculation of Ret	urn on Equity			38	
Name of the Transmission Licensee: Power Gri	d Corpo	ration o	of India Limited					
Name of the Region: SOUTHERN REGION								
Name of the Project: SYSTEM STREGTHENING	CHEMI	H IN S	OUTHERN REGIO	N				
Name of the Transmission Element or Commun	nication	System	: Combined asse	ts of SRSS-II (H	iriyur s/s IC1	, LILO Dev-H	oody, Bays at Kola	r & Hosur)
Date of Commercial operation: 01-Feb-2004								Rs. in Lac
Particulars	200	8-09	2009-10	2010	11	2011-12	2012-13	2013-14
Opening Equity		0	1309.52	1309	52	1309.52	1309.52	1309.5
Notional Equity on Add Cap		0	0		0	0	0	20
Total Equity	Hillian	0	1309.52	1309.	52	1309.52	1309.52	1309.5
Average Equity		0	1309.52	1309.	52	1309.52	1309.52	1309.52
Rate of Return on Equity (%)	118	0	18.674	19.3	58	19.377	19.377	19.61
Return on Equity		0	244.54	253	3.5	253.75	253.75	256.8
				- P				
19								
1								
		31					-0	(Petitioner)



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\$			For springs and Substations, Communication System									
					s and Subs	tations, Co	mmunicati	on System				
	the Petitioner: Power Grid Corporation of I	ndia Limited	經體		100.0							
	the Region: SOUTHERN REGION				2502							
	the Project: SYSTEM STREGTHENING SCHEN											
lame of t	the Transmission element or Communication	on system: Qb	ibined	asset	s of SRSS-II	(Hiriyur s/	s ICT, LILO	Dev-Hoody,	Bays at Kolar	& Hosur)		
ate of Co	ommercial Operation: 01-Feb-2004	115			70							
ransmiss	sion Lines:	138										
I.No.	Name of Line	Type ca	SVC o	r D/C	No. of Sub	Voltage	Line	Line	Date of			
	220022420042	Line			Conductor	level KV	Length	length	Commercial			
		AC/HVD			5		CKt. KM	10.18	operation	Covered in the present petition		
		0.888										
		148		Hi.		V1				Yes/No	If No, petition No.	
- 5	LILO OF DAVENGERE-HOODY AT HIRIYUR	AC	JOE.	Hill	2	400 KV	1.892	0.946	1-Feb-04	Y		
		1110	<b>的</b> 图 (2)	111	0.00			-				
ubstation	ns!	1190	1383	11.								
St. No.	e of Sub-st . Type of Substation	Voltage	No	of		No.	of Bays		Date of		+	
			2017年10日2月1日日	form		1	or early		Commercial			
		平面相	er	1498.5	200	11.			operation	Covered in the present petition		
		393	研り開催される	otrs/				132 KV &	operation.	4010,00	The present peanon	
		1 11 11 11	SVC	120000000000000000000000000000000000000	765 KV	400 KV	220 KV	below	1 1	Yes/No	If No, petition No.	
	HIRIYUR-Davangere I (Guttur I)	400				1			1-Feb-04	Y	in they person the	
	HIRIYUR-Davangere II (Guttur II)	400			100	1			-	Y		
	HIRIYUR-Hoody I (Neelmangala I)				111	1	1			Y	-	
	HIRIYUR-Hoody II (Neelmangala II)	400				1	-		The same of the sa	v		
	HIRIYUR-ICT I	400		140		1	+			y ·	+	
-	HIRIYUR-ICT I	220					1	1	-	Y		
	HIRIYUR-Hiriyur	220		111		1	1		-	v		
_	HIRIYUR-Chitradurga	220		100			1		-	y		
	HOSUR-0			100		2	-	1		Y		
	Total	3110	1 10	115		7	3	1	210001	_		
	100	1/4/6/00	17 MOS 1			,	3	-				
		3111		110				1250				
mmunic	cation	93188										
stem;		1 1 1 1 1 1	2.785	11		-	Fe		la			
SI. No.	Name of Communication System	Type			Technical P	articulars	Number /	length	Date of	2000		
		Commun	teation	1	65	16					n the present petition	
		System				1 2 3			operation	Yes/No	If No, petition No.	
	1	100		1		100						
20 1	4	1380	日間に	(the	A COLUMN	1	-	12/10/2				
		3,000		HILE.								





6 7	AL		2		Re	와 E	p a	ğ	T	P		D	Z	Z	Z	Z		$\neg$	
Po orgonia	Average Net Normative Loan	Cumulative depreciation (incl. of AAD)	Depreciation upto previous year	Depreciation during the year	Remaining Depreciable Value	Elapsed life of the asset (at the beginning of the year)	beginning of year)	Depreciable Value	or contrary	Particulars		Date of Commercial Operation: 01-Feb-2004	Name of the Transmission Element: Combined as	Name of the Project: SYSTEM STREGTHENING SCH	Name of the Region: SR-II	Name of the Transmission Licensee: Power Grid			
	##		100	-			STATE OF		1	210			ed asse	G SCH		Grid Co			400
						-440 2000		20110		2008-09			Softs	35 E 2		Boratio	Ica		- No. of the least
	100		1					-	-	9			SS-II (Hi	IN SOUTHERN REGION		tion of India Limited	Iculatio	1 1 1	
art a milke		1277.22	1050.97	226	3053.89		1	90,4014		2009-10			riyur s/	ERN RE		lia Limit	n of De		
	0	1.22	0.97	226.25	3.89	u	2	+,00	00	-10			s ICT, LI	GION		ted	preciat		
N	0	1503.47	1277.22	226.25	2827.64		13	**************************************	4104 00	2010-11			ILO Dev-Hoody,				Calculation of Depreciation Rate		
168	0	1729.72	1503.47	226.25	2601.39	7		00.4014	4104 00	2011-12			SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody, Bays at Kolar & Hosur)						
	0	1955.97	1729.72	226.25	2375.14	00	· t	00.4014	4104 06	2012-13			osur)		*			976	
Petitioner	0	2182.22	1955.97	226.25	2148.89	10	t	1204.00	20 000	2013-14	Rs. in Lacs							Form 11	

Form 228

Name of the Transmission Licensee: Power Grid Corporation of India Limited Calculation of Depreciation Rate

Name of the Region: 5R-II

Date of Commercial Operation: 01-Feb-2004

Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION

Name of the Transmission Element: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody, Bays at Kolar & Hosur)

8		ii	3	Š		Lapsed life	
Z6't					Depreciation	Weighted Average Rate of	
556.25		90.9624	90.3624	0	90'9651	Total	
0	\$E'E	0	0	0	0	LEASEHOLD LAND	9
27.8	££.3	ET.TEI	ET.TEI	0	ET.TEI	DTCC	S
185.64	82.2	91.62AE	91.92AE	0	3459.16	NOITAT2 BUZ	b
7.32	82.2	9.8EI	3.851	0	3.851	TR LINE	3
72.57	\$.E.	74.25.47	74.2S8	0	74.258	BUILDING	Z
0	0	T'SE	T'SE	0	I'SE	FREEHOLD LAND	τ
						2011-2012	
4			Constitution to			rapsed life	
Z6'V	201 24-25-21-25-21		Charles House		Depreciation	to etel-egenevA batralaW.	.,
50900		90 9657	96) 9658	u ' ·	190 9650	Jeive	Transaction of the
0	₽6.6	0	0	0'	0	LEASEHOLD LAND	9
27.8	6.33	ELLET	EL'LE1	0		bi cc	5
\$9.28I	82.2	91.9245	91.65#E	0	91'6S#E	NOITATE BUE	ε
ZE.T	2.28	9.851	138.6	0	9'8ET	TR LINE	
72.72	4.E.E	74.2S8	74.25.47	0	74,228	BUILDING	7
0	0	T'SE	T'SE	0	1.25	FREEHOLD LAND	I
	+					2010-2011	
9						Lapsed life	
Z6.4	_	1			Oepreciation	Weighted Average Rate of	
22.625	-	90'965\$	90.9624	0	90'965#	Total	
0	3.34	0	0	0	0	CEASEHOLD LAND	9
27.8	££.8	ET.TEI	ET.TEI	0	ET.TEI	DICC	5
182.64	87.2	91.62AE	91.62AE	0	91.624E	NOITATZ BUZ	9 5
ZE.7	82.2	3.851	9.8EI	0	138.6	TR LINE	3
72,72	3.34	74.25.47	7p.258	0	74.258	влігріме	7
0	0	T'SE	I.RE	0	I'SE	FREEHOLD LAND	Ţ
						2009-2010	
JunomA	Dep. Rate	Average Stors Block	Gross block at the end of the year	de Cab anting the rest	Gross block at the beginning of the year	Particulars	.on .lz
Rs. in Lacs							





	eted and	encyony.	Joold 22020	ac2 bbA	Jack 12022	anelianiese O	014 12
Rs. in Lacs	( ) ( ) ( ) ( ) ( )						
					-Feb-2004	Commercial Operation: 01	Date of
( & Hosur)	y, Bays at Kolar	Dev-Hood	iyur s/s iCT, LIL	ин) II-ssas I	it: Combined assets o	the Transmission Elemen	to amen
1 11 0	1-41			1111 11 3003		2 11	
			NOIOTU NUT	III I DOC NI II	- THE HEAD SCHEME.	nue ma re re analou ana	IO DILIBA
			еви вевіои	IHTUOS NI II	единемиме эснеме-	the Project: SYSTEM STR	
						the Region: SR-II	Name of
							Name of
			betimited	ibni to noite	e: Power Grid Corpor	the Region: SR-II	Name of
BZL.mioi			betimited		e: Power Grid Corpor	the Region: SR-II	Name of

Petitioner							
II						Lapsed life	
76°b	***	a brack to the server	SUBMINISTERNI		* Depreciation **	Weighted Average Rate o	
52 922	and the second	BO ORSU	90:9659	0	90'905V	- Isloid	
0	3.34	0	0	0	0	revzehord dynd	9
77.8	CC 9	EZ-261	£7.7£1	0	EC LET	- apid	5
185.64	82,2	91'6576	31.6248	0	3459.16	NOTIVISANS	
7.32	82.2	138.6	3.8££	0	9.851	TR LINE	
72.72	\$E.E	74,258	₹4,2 <u>5</u> ,47	0	74.258.47	BUILDING	2
0	0	I.RE	I'SE	0	I.2E	FREEHOLD LAND	I
U U 55		100				2013-2014	
6	-					rsbseq jile	
4.92	1				Depreciation	Weighted Average Rate o	
226.25		90.9624	90.9624	0	90'9657	Total	145
0	₽£.E	0	0	0	0	GNAJ GJOH32A3J	9
27.8	6.33	137.73	E7.7EI	0	ET.TEI	DICC	9
182.64	87.2	91.6248	91.62ÞE	0	91.624E	NOITAT2 8U2	t
7.32	82:5	9.8££	9:8EI	0	9.8£1	TR LINE	3
72.75	3.34	74.2S.47	Z# 578	0	74.258	BUILDING	7
0	0	I.2E	T'SE	0	1.25	FREEHOLD LAND	I
						2012-2013	
InnomA	Dep. Rate	Average Sross Block	Gross block at the end of the year	qsD bbA eht gninb nesy	Gross block at the beginning of the year	Particulars	on is
Rs. in Lacs							





Form 13
Calculation of Weighted Average Rate of Interest on Actual Loans
Name of the Transmission Licensee: Power Grid Corporation of India Limited
Name of the Region: SOUTHERN REGION
Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION

Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody

Date of Commercial Operation: 01-Feb-2004

neod no teanstr	0	90.87	88.89	69'65	TS'05	41.33
ate of Interest on Loan	0	£9.8	£9.8	£9.8	£6.8	E9.8
neo1 be Net Loan	0	ÞS'Þ06	21,867	7.169	82.282	98.874
et Closing Loan	0	851.33	16.447	64.8E8	70.SE2	425.65
ess: Repayment(s) of Loan during the year	0	106.42	Zp.801	106.42	106.42	106.42
dd: Drawl(s) during the year	0	0	0	0	0	0
et Loans Opening	0	27.726	851.33	16.447	64.858	70.SE2
umulative Repayments of Loans upto	0	219.25	425.67	60.552	12.858	744.93
nsoJ gningQ sson	0	1277	TTSI	1277	LLZT	1211
OND - XIII - Obtion - I-DOCO - 01-FEB-2004-	The Language	i linear man		Same Decision	San Carlo	Sania Salam
			Communication			de tratar de parte
neof no terest	0	3.52	TS'Z	TST	S'0	0
ate of Interest on Loan	0	12.25	22.21	22.25	12.25	12.25
neol felt Loan	0	7.85	S.05	£.51	I.p	0
et Closing Loan	0	24.6	16.4	Z.8	0	0
ses: Repayment(s) of Loan during the year	0	2.8	2.8	Z.8	Z.8	0
dd: Drawl(s) during the year	0	0	0	0	0	0
gningQO ansoJ te	0	8.28	24.6	p.81	2.8	0
umulative Repayments of Loans upto	0	49.2	4.72	9.29	8.67	28
neoJ gnineqO ssor	0	28	28	28	28	78
OND IX-DOCO - 01-2EP-2003-1						
terest on Loan	0	21.0Z	14.39	49.8	88.Z	0
neod no terest on Loan	0	SZ'ZT	12.25	ZZ.ZZ	12.25	12.25
neol teV loan	0	5'99T	2.711	2.07	23.5	0
neoJ gnizolD te	0	TOT	16	LV	0	0
ss: Repayment(s) of Loan during the year	0	Lt	Lt	Lt	LV	0
dd: Drawl(s) during the year	0	0	0	0	0	0
gninaqO ansol te	0	88I	ItI	16	Lt	0
mulative Repayments of Loans upto	0	282	339	948	£ZÞ	04 <b>t</b>
neoJ gninaqO ssor	0	074	074	0/4	044	04 <b>t</b>
OND IX-DOCO - 07-EEB-3004-1						
rticulars	60-800Z	0T-600Z	2010-11	ZU-TTOZ	2012-13	2013-14

(Petitioner)



Form 13

Calculation of Weighted Average Rate of Interest on Actual Loans

Name of the Transmission Licensee: Power Grid Corporation of India Limited

Name of the Region: SOUTHERN REGION

Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION

Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hirlyur s/s ICT, LILO Dev-Hoody

Date of Commercial Operation: 01-Feb-2004

neod no tearest	0	1.6	p1.8	81.7	£Z.8	75.27
ate of Interest on Loan	0	89.9	89.9	89.9	89.9	89.9
verage Net Loan	0	81.9EL	121.85	ZS.701	61.56	8.87
et Closing Loan	0	10.621	89.411	25.001	20.88	59'T.
ess: Repayment(s) of Loan during the year	0	14.33	14.33	14.33	14.33	14,3
dd: Drawl(s) during the year	0	0	0	0	0	)
et Loans Opening	0	143.34	10.621	89.411	25.001	20.98
nunjetive Repayments of Loans upto	0	99.82	66.54	SE.72	59.17	36.28
neoJ gning Osen	0	172	172	172	172	77.
OND XA-DOCO - 01-2Eb-2003-1		SE SEASON OF THE	CAMPACTURE.		NAME OF THE OWN	Care transcore
neo1 no 1299a	0	38.76	89.48	9:08	75.62	72.44
ate of interest on Loan	0	89.9	89.9	89.9	89'9	39'9
neol felt Loan	0	62.082	IZ.erz	ET'85b	20.79£	.6 SEE
et Closing Loan	0	ST.642	79.884	65.7 <u>S</u> A	15'998	EP.20E
ses: Repayment(s) of Loan during the year	0	80.13	80.13	80.13	80.£8	80°T9
dd: Drawl(s) during the year	0	0	0	0	0	0
et Loans Opening	0	£8.019	24.642	79.884	65.7SA	366,51
umulative Repayments of Loans upto	0	122.17	183.25	244.33	14.20E	5 <del>0</del> .99£
neoJ gnineqO ssor	0	733	733	733	EET	EEL
OND XV-DOCO - 01-FEB-2004-1						
terest on Loan	0	£9.££	12.03	10.43	28.8	7.22
ite of Interest on Loan	0	£9.8	£9.8	£9.8	£9.8	E9-8
verage Net Loan	0	96.72£	8E.9EI	120.8	102.22	₽9.£8
at Closing Loan	0	78.8pt	130.09	TSTIT	£6,56	74.35
ss: Repayment(s) of Loan during the year	0	18.58	85.8£	82.8I	85'8T	18.58
dd: Drawl(s) during the year	0	0	0	0	0	0
gaineqO ansoJ te	0	25.731	148.67	60.0££	ISTII	E6.S6
imulative Repayments of Loans upto	0	54.22	74.33	16,56	6p.111	130.07
neoJ gninaqO sso	0	223	223	223	223	553
OND - XIII - Obtion - I-DOCO - 01-2EP-2003-						

(Petitioner)

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Form 13

Calculation of Weighted Average Rate of Interest on Actual Loans
Name of the Transmission Licensee: Power Grid Corporation of India Limited
Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION
Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION
Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody
Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody
Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody
Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody
Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody
Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody
Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody

92.97	94.26	20.811	£9.041	163.22	0	nterest on Loan
62O8.7	8616.7	4080.8	8.1925	2975.8	0	Rate of Interest on Loan
££. TTE	1205.34	26.03₽£	95.9171	ZT'ZZ6T	0	Average Net Loan
21.778	ES.TTOI	1333.14	27.882£	1844.36	0	Net Closing Loan
14.00Z	19.225	19'557	19.225	19'557	0	Less: Repayment(s) of Loan during the year
0	0	0	0	0	0	Add: Drawl(s) during the year
£2.7701	1333.14	27.8821	1844.36	76.660S	0	Vet Loans Opening
74.678£	38.ES31	1368.25	1112.64	£0.728	0	Cumulative Repayments of Loans upto
Z927	Z56Z	Z96Z	<b>4567</b>	Z96Z	0	neoJ gninagO sson
					ľ	Aewung
MS: IN LACS			12	11 11 11 11 11 11		

(Petitioner)

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Form 13A **Calculation of Interest on Normative Loan** Name of the Transmission Licensee: Power Grid Corporation of India Limited Name of the Region: SOUTHERN REGION Name of the Project: SYSTEM STREGTHENING SCHEMEN IN SOUTHERN REGION Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody, Bays at Kolar & Hosur) Date of Commercial Operation: 01-Feb-2004 Rs. in Lacs 2009-10 2010-11 2012-13 2011-12 2013-14 **Particulars Gross Normative Loan Opening** Ö 3286.54 3286,54 3286.54 3286.54 3286.54 1078.92 1305,17 1983.92 **Cumulative Repayments of Normative Loans** 1531.42 1757.67 1981,37 0 2207.62 1755.12 1528.87 1302.62 **Net Normative Loans Opening** Increate/Decrease due to ACE during the year 0 226.25 226.25 226.25 226.25 Less: Repayment(s) of Normative Loan during **Net Closing Normative Loan** 1981.37 1755.12 1528.87 1302.62 1076.37 0 Average Net Normative Loan 2094.5 1868.25 1642 1415.75 8.1925 Rate of Interest on Loan 0 8.2762 8.0804 7.9198 173.35 153.06 132.68 112.12 Weighted average rate of interest on actual

(Petitioner)

226.25

1189.5

7.8029





10	BEL .	翻出.		100				
		61						Form 138
					orking Capital			
Name of the Transmission Licensee: Power Grid C	rpor	ation	of India Lin	ited		7.7.3.4		
Name of the Region: SOUTHERN REGION	4			12				
Name of the Project: SYSTEM STREGTHENING SCE								
Name of the Transmission Element: Combined as	ets of	SRS	S-II (Hiriyur s	/s ICT	, LILO Dev-Hoody,	Bays at Kolar & I	losur)	
Date of Commercial Operation: 01-Feb-2004				e unu-	- LUIS 07 - C		- 3 E	- es 191 l
	188	1411						Rs. in Lacs
Particulars	1008	<b>D9</b>	2009	10	2010-11	2011-12	2012-13	2013-14
Op. and Maintenance		0	39	.79	42.06	44.47	47.01	49.7
Maintenance Spares		0	71.	.61	75.72	80.05	84.62	89.46
Receivables		0	193	.15	196	197.63	199.47	202.36
Total working capital		0	304	.55	313.78	322.15	331.1	341.52
Rate of Interest		0	12	25	12.25	12.25	12.25	12.25
Interest on working capital		0	37,	31	38.44	39.46	40.56	41.84
				4	- T			
		Bi.						
				1				(B-sist
				diam'r.				(Petitioner)

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3.	1000					Form
		Summary	Sheet			12-
Name of the Transmission Licen	see: Power Grid Corpo atio	of India Limited			- To 188	
Name of the Region: SR-II						
Name of the Project: SYSTEM ST	TREGTHENING SCHEME ILIN	SOUTHERN REGION				
Name of the Transmission Elem	ent or Communication System	m: Combined assets o	of SRSS-II (Hiriyur s	/s ICT, LILO Dev-Hoody,	, Bays at Kolar & Hos	sur)
Date of Commercial operation :	01-Feb-2004					
						Rs. in Lacs
Particulars	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	226.25	226.25	. 226.25	113.09	113.1	113.08
Interest on Loan	92,83	74.91	57.02	43.41	33.48	22.75
Return on Equity	228,92	256.8	256.8	256.8	256.8	256.8
Int. on Working Capital	41.25	43.19	43.79	41.91	42.76	43.62
Op. and Maintenance	596.42	549.4	567.62	586.48	605.96	626.03
Total	1185.66	1150.55	1151.48	1041.69	1052.1	1062.28
	(1) (1)		-			
						(Petitioner)

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Name of the	Name of the Petitioner: Power Grid Corporation of India Limited Name of the Region: 5R-II	of India Limited									Form-2
Name of the	Name of the Transmission element or Communication system: Combine	ation system: Combined	and of Sixs	ell (Hirlyur s/s ICT, LIL	SS-II (Hirlyur s/s ICT, L\LO Dev-Hoody, Bays at Kolar & Hosur)	olar & Hosur)					
Date of Co	Date of Commercial Operation: 01-Feb-2004										
Transmission Lines:	on Lines:	Bri W									
SI,No.	Name of Line		Type of Unit AG ATION	\$/corp/c	No. of Sub- Conductors	Voltage level KV	Line Length CRL KM	Line length	Date of Commercial operation	Covered i	Covered in the present petition
	The state of the s		10000	3			2000	3600	Table of	CALTERI	to two, personner rec-
Substations	DIGO OF DAVENGERE-HOODY AT HIRIYOR	S		5			0.340	0.940	1-480-04	-	
SI No.	Name of Sub-station	Type of Substation	Î	el KV No. of Transformers / Reacotrs/ SVC etc.	mers	No. of Bays			Date of Commercial operation	Covered in	Covered in the present petition
					765 KV	400 KV	220 KV	132 KV & below	_	Yes/No	If No, petition No.
1	HIRPUR-Davangere I (Guttur I)		Ś			1			1-Feb-04	Y	
N	HIRIYUR-Davangere II (Guttur II)		É	\$ 11 E	-	1			1-Feb-04	*	
A Too	HIRIYUR-Hoody I (Neelmangala I)		2 8				T	T	1-Feb-04	* *	
5	HIRIYUR-ICT I		ā						1-Feb-04	Υ .	
9	HIRIYUR-ICT I	100	200				1		1-Feb-04	Y	
7	HIRIYUR-Hiriyur		200						1-Feb-04	Y	
0 80	HIRIYUR-Chitradurga		440			,	1	T	1-Feb-04	< <	
900	Total			# HE US:		7	60	П			
Communica	Communication System:										
S. No.	Name of Communication System		And different	df Communication System	Technical Particulars	2	Number / length	length	Date of Commercial operation	Covered in Yes/No	Covered in the present petition res/No lif No, petition No.
		74 35									(Petitioner)
-6	DO CHERTO OUT OF THE CRID. OUT OF THE CRID. OUT OF THE CRID.								*		9
-		1	445 (458)	ET.	•						

Name of the Petitioner :: Power Grid Corporation of India Limited

Name of the Region :: SR

Name of the Project :: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION

Name of the Transmission Element or Communication System :: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody, Bays at Kolar & Hosur)

Date of Commercial Operation: 01-Feb-2004

Particulars	Unit	Existing	2014-15	2015-16	2016-17	2017-18	2018-19
Base Rate of Return of Equity	%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Tax Rate	%	11.33%	11.33%	11.33%	11.33%	11.33%	1.1.33%
Effective tax rate	%	17.48%	17.48%	17.48%	17.48%	17.48%	17.48%
Target availability	*		2000				
Normative O&M per KM	Rs. Lakh		_				
Double Circuit (Bundle conductor with four sub-conductors)	Rs. Lakh	1.174	1.062	1.097	1.133	1.171	1.21
Double Circuit (Single Conductor)	Rs. Lakh	0.336	0.303	0.313	0.324	0.334	0.346
Double Circuit (Two and Three Conductor)	Rs. Lakh	0.783	0.707	0.731	0.755	0.78	0.806
Multicircuit with four or more conductors	Rs. Lakh		1.863	1.925	1.989	2.055	2.123
Multicircuit with two or three conductors	Rs. Lakh		1.24	1.282	1.324	1.368	1.413
Single Circuit (Bundled conductor with four sub-conductors)	Rs. Lakh	0.671	0.606	0.627	0.647	0.669	0.691
Single Circuit (Single Conductor)	Rs. Lakh	0.224	0.202	0.209	0.216	0.223	0.23
Single Circuit (Six conductor)	Rs. Lakh	0.671	0.707	0.731	0.755	0.78	0.806
Single Circuit (Twin and Three conductor)	Rs. Lakh	0.447	0.404	0.418	- 0.432	0.446	-0.461
Normative O&M per bay	1				-		
132KV Sub-station and below	Rs. Lakh	32.73	30.15	31.15	32.18	33.25	34.36
220KV Sub-station	Rs. Lakh	45.82	42.21	43.61	45.06	46.55	48.1
400 KV GIS Substation	Rs. Lakh		51.54	53.25	55.02	56.84	58.73
400KV Sub-station	Rs. Lakh	65.46	60.3	62.3	64.37	66.51	68.71
765KV Sub-station	Rs. Lakh	91.64	84.42	87.22	90.12	93.11	96.2
Balla-Bhiwadi HVDC Bipole Scheme	Rs. La/kh	1326.25	1537	1666	1805	1955	2119
HVDC Back-to Back Stations	Rs. Lakh	553	578	627	679	736	797
Rihand-Dadri HVDC Sipole Scheme	Rs. Lakh	1811	1511	1637	1774	1922	2082
Talcher-Kolar HVDC Bipole Scheme	Rs. Lakh	2122	1173	1271	1378	1493	1617
Spares for WC as % of O&M	%	15	15	15	15	15	15
Receivables in Months for WC	Months	2	2	- 2	2	2	
Bank Rate as on	%	13.2	13.2	13.2	13.2	13.2	13.7

(Petitioner)





I to I aged Form-4

Abstract of admitted parameters for the existing transmission assets/elements under project.

Name of the Petitioner::Power Grid Corporation of India Limited

Name of the Region::5R

Name of the Project:: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION

Name of the Transmission Element or Communication system:: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody, Bays at

Kolar & Hosur)

Initial Spares*		0				
Cumulative Repayment of Loan		0	2210.17	0		2210.13
Cumulative amount of Depreciation		0	2182.22	0		. 2182.23
Total		0	90'9654	0		0.EE28 (
Equity .		0				0.6192
Debt.		0	P9.38SE	0		7165
Debt-Equity Ratio				Server and the	National Section	er-colesion
lejo)		0	90'9651	0		00'9651
Notional Equity	et same	0		Colored to the Colore	the state of the s	1309 A
Notional Loan		0	the second secon	Control of the Contro	The second second	9786.64
Total		0	The state of the s			90'9650
LEASEHOLD LAND	in .	0	and the latest and th			)
PLCC		0				ET.TEI
NOITAT2 BU2		0	3459.16			3459.10
TR LINE		0	3.851			138.6
влігріме		0	<b>7</b> ⊅.2S8	0		74.258
EBEEHOID TVAD		0	T.ZE	0		I.RE
Apportioned approved Cost/Revised cost estimates, if any (with reference and date of approval)						
Particulars			Capital Expenditure admitted	Capital Expenditure admitted	Capital Expenditure edmitted	
Tariff order Date	1	1				1
Petition Number	1	1			-	1
0000	1	ī	7-E6P-04			1
	forward	1	LILO Dev-Hoody, Bays at Kolar & Hosuri			Expenditure battimbs
stazza ant to ameN	Balance brought		Combined assets of SRSS-11 (Hiriyur s/s ICT,			Total Capital

(Petitioner)





## Financial Package upto COD (Block Year- 2014-2019)

Name of the Transmission Licensee: Power Grid Corporation of India Limited

Name of the Region: SR-II

Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION

Name of the Transmission Element or Communication Element: Combined assets of SRSS-II (Hiriyur s/s ICT,

LILO Dev-Hoody, Bays at Kolar & Hosur)

Date of commercial Operation: 01-Feb-2004

Particulars	Finan	cial Package as	Financial	Package as on		Rs. In Lakhs	
		Approved	-	COD	As Admitted by COD		
	Curre	ncy and Amount	Currency	y and Amount	Currenc	cy and Amount	
Loans							
Loans-Domestic	INR		INR				
Loans-Foreign	-		INR	0			
Total Loans	INR		INR	0	INR	3286.64	
Equity							
Foreign							
Domestic	INR		INR	0			
Notional			_				
Total Equity	INR		INR	0	INR	1309.42	
Debt Equity Ratio							
Total Cost	INR		INR	0	INR	4596.06	
	Debt	Equity	Total			S. T. P. D. Charles and A. C.	
Total Gapital cost wit	h-Addcap			mozza, ma			



	Same of the same o							
							For	rm - 7/
		111	Ehani	gn of Add	itional Cap	italisation		
Name of the Petitioner: Power Gri Name of the Region: SR-II Name of the Project: SYSTEM STRE Name of the Transmission Element & Hosur)	GTHENING S	chi	(gidia	Limited IN SOUTH	ERN REGIO	)N	Hiriyur s/s ICT, LILO Dev-Hoody, Bays at	Kolar
Date of Commercial Operation: 01	-Feb-2004	Ш						
		39		0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Amount in	Lakh
Financial Year Amount Capitalised in Work/Equipment	2014-15	1200		tual/Proje 2016-17	2017-18	2018-19	Admitted	
Annual Capitalises in trong Equipment	103.735				1027/25			
Financing Details		11		BELL IV				-
Loan	0		3	0 0	0	0		
		11						
Total Loan	0	331	6 321 0 524	O C	0	0		
Equity	0	2.0		0 0	0	0		
		1		Media				
Total	226.25		226.2	113.09	113.1	113.08		
						-	15.44	
					- 1		(Petit	tioner
RIGHIO.							2	0.7

Notional Equity on Add Cap 1309.52 1309,52 ZS'60ET 1309.52 **1309.52** 1309.52 Opening Equity 8T-LT0Z Z016-17 9T-STOZ **ST-9TOZ** 2013-14 Particulars **61-8102** Rs. in Lacs Date of Commercial operation: 01-Feb-2004 Dev-Hoody, Bays at Kolar & Hosur) Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION Name of the Region: SR-II Name of the Transmission Licensee: Power Grid Corporation of India Limited Calculation of Return on Equity 8 m107

8.922

19.61

1309.52

**7309.52** 

26,822

184.71

ZS'60ET

1309.52

Return on Equity

Average Equity

Total Equity

Rate of Return on Equity (%)

8.922

19.61

**1309.52** 

ZS'60ET

(Petitioner)

19.61 8.952

ZS'60ET

1309.52

8.922

19.61

**T309,52** 

**T309'25** 

8.922

T9.61

**7309.52** 

0	Z4.901	ZÞ:90T	Zp.901	ZÞ'90T	85'8I	Less: Repayment(s) of Loan during the
0	0	0	0	0	0	Add: Drawl(s) during the year
E0.0-	9E.301	18.212	EZ.QIE	425.65	56.59	Net Loans Opening
	-					Previous Year
TZ77.03	19.0711	6T.490I	LL'156	SET'S8	130.07	Cumulative Repayments of Loans upto
1777	1277	LLZT	TZZI	LLZT	223	Gross Opening Loan
						Z004-I
						BOND - XIII - Option - I-DOCO - 01-FEB-
0	0	0	0	0	0	Interest on Loan
12.25	12,25	12.25	12.25	12.25	12.25	Rate of Interest on Loan
0	0	0	0	0	0	Average Net Loan
0	0	0	0	lo	0	ucos Sujsojo sem
						Jean A
0	0	-0	0	0	Ø	ress: gebakweut(s) of toan during the
0	0	0	0	0	0	Add: Drawi(s) during the year
0	0	0	0	0	0	Net Loans Opening
12		7 10 11			12 - 11	Previous Year
28	78	28	28	Z8	28	Cumulative Repayments of Loans upto
Z8	Z8	Z8	Z8	Z8	78	Gross Opening Loan
						BOND IX-DOCO - 0T-2Eb-5003-T
0	0	0	0	0	0	interest on Loan
12.25	12.25	12,25	12,25	12,25	12.25	Rate of Interest on Loan
0	0	0	0	0	0	Average Net Loan
0	0	0	0	0	0	Net Closing Loan
						year
0	0	0	0	0	0	Less: Repayment(s) of Loan during the
0	0	0	0	0	0	Add: Drawl(s) during the year
0	0	0	0	0	0	Vet Loans Opening
						Year Vear
074	047	470	044	044	Z8	Cumulative Repayments of Loans upto
074	074	047	047	074	28	Gross Opening Loan
						3OND IX-DOCO - 01-EEB-5004-1
2018-19	2017-18	71-910S	91-5102	2014-15	2013-14	saticulars
Rs. in Lacs						
un francie	indiana) ii	cene to era	cen naulau	os musicle		Oz-da-1-10 :noiseration Operation: 01-Feb-20
פ/פוכד ווו	ausiaiH) II.					Name of the Transmission Element or Con
		NC	HERN BEGIN	THOS MI (I.	NG SCHEME	Name of the Project: SYSTEM STREGTHEN
			D330007 000	III IO IIODO	odios eus	Vame of the Region: SR-II
		CURET INT		Contract to the Contract of th	The second second	Name of the Transmission Licensee: Powe
		anso I leut	PA no tears	tol to ste8	eseravA bat	Calculation of Weigh

Page 1 of 3

49.68

2E.47

372.44

319.23

Average Net Loan

Net Closing Loan

20.992

212.81

9.621

6E'90T

Z0.0-

Û

0

Vame of the Transmission Licensee: Power Grid Corporation of Interest on Actual Loans
Name of the Region: SR-II
Name of the Project: SYSTEM STREETHENING SCHEME. ILIN SOLITHERN PERION

Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION
Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LII

				The state of the s		
neoJ teM egeravA	38.8T	£2.68	5.02	78.2E	21,54	Z.T
Net Closing Loan	69.17	95,72	43.03	7.82	14.37	20.0
year	-				200000000000000000000000000000000000000	ACCOUNT 1831
Less: Repayment(s) of Loan during the	14.33	14.33	14.33	14.33	14.33	14.3
Add: Drawl(s) during the year	0	0	0	0	0	
Net Loans Opening	20.88	69.17	<b>9</b> £.72	£0.EÞ	7.8Z	14.3
Previous Year						
Cumulative Repayments of Loans upto	86.28	100.31	114.64	128.97	143.3	9°25T
Gross Opening Loan	172	172	172	772	172	17.
BOND XV-DOCO - 01-5EP-2003-1		1	-			
neod no terret	TS.2	9£.8£	14.28	Z.01	\$1.8	2.0°Z
Rate of interest on Loan	89.9	89.9	89.9	89.9	88.8	9.9
Average Net Loan	38.87	68.47Z	18.615	152.73	59'T6	30.5
ACT CLOSING LOAD	69'14	SE'90Z	183.27	61.551	11'19	0.0
je v jednosti i do je v jednosti i do je	10005					
art grind neod to (s) manyedañ sesa	26.01	80'19	80:19	80.19	80'19	0:19
Add: Drawl(s) during the year	0	0	0	0	0	The state of the s
Met Loans Opening	20.98	E4.20E	244.35	183.27	222.19	T.13
Yearious Year			137			
Cumulative Repayments of Loans upto	86.28	72.7SA	29.884	ET.642	18.019	8.178
neoJ gnineqO szona	172	733	733	733	EET	EL
30ND XA-DOCO - 01-FEB-2004-1						
nterest on Loan	SS.7	19.2	10.4	14.S	8.0	
tate of Interest on Loan	£8.8	£9.8	£9.8	£9.8	£8.8	9.8
Average Net Loan	₽9.E8	90.29	84.94	6.72	ZE.6	E0.0
let Closing Loan	26.47	LL'SS.	er.7E	19.81	£0.0	EO.0
169	See 1	T Sussession	Same 1	2202	lane.	
ess: Repayment(s) of Loan during the	82.81	82.81	82.8£	82,81	18.58	
dd: Drawl(s) during the year	0	0	0	0	0	)
Jet Loans Opening	£6.26	2£.4T	LL'SS	er.7£	18.61	E0.0
umulative Repayments of Loans upto revious Year	70.0E1	29.841	£5.73£	18.281	6E.40Z	722.97
neoJ gning Coan	223	223	223	223	223	223
1-2003-1						
1 500					4 22	- 30
OND - XIII - Option - I-DOCO - 01-SEP-						
	SS.T	32.14	96°ZZ	TT.EI	65't	0

Page 2 of 3

89.9

Rate of Interest on Loan

89.9

89.9

89.9

Vame of the Transmission Licensee: Power Grid Corporation of Interest on Actual Loans
Name of the Region: SR-II
Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION
Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION
Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION
Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LII
Date of Commercial Operation: 0.1-Feb-2004

S.2. 4.3.1

A.3.5

A.4.4

A.4

A.4.4

A.

(titioner)	d)					
25.5	22.95	87.82	9.44	ZÞ.09	92.97	nterest on Loan
79.9	7.8.T	29.7	₽L'L	87.7	8.7	Rate of Interest on Loan
67.7E	17.271	1,975	15'945	76'9LL	££.776	Average Net Loan
1.0	TS'SL	68.27S	£.97A	17.978	SI.TT8	Net Closing Loan
IP.ST	14.005	14.005	14.002	14.00Z	14.005	year year
0	0	0	0	0	0	Add: Drawl(s) during the year
84.27	68.272	£.974	17.973	<b>ST.778</b>	ES.TTOI	Vet Loans Opening
ZS:T88Z	11.1892	7.08pZ	6Z.08ZZ	88.670S	74.6781	Cumulative Repayments of Loans upto Previous Year
<b>ZS6Z</b>	<b>ZS6Z</b>	<b>4562</b>	<b>ZS6Z</b>	<b>4567</b>	LS6Z	neoJ gninaqO sson
						Arewwns
84.0	pp.I	p.2	3.35	TE'b	7S.2	nterest on Loan





is a mianti en una mas aunti un su	red Guaero As Diese belevers S	equal annual installments w.e.f 07-12-2005
au Karajan Santan (1966) (1966) (1966) (1966) (1966) (1966) (1966) (1966) (1966) (1966) (1966) (1966) (1966) (		51RPFs of Br 25 lakh each, redeemable at par in 12 (ewelve)
\$ <b>4,07</b>	00.692	a) 9.80% Taxable Secured Redeemable Mon-Cumulative Non-
		SZIBAS XI SENES
		Secured by way of Registered Bond Trust Deed ranking pari passu on immovable property situated at Moule Ambheti. Taluka Kaparada in District Valsad, Gujarat and mortgage & hypothecation of the assets of CIP-I, Farakka & Chamera Transmission System
		700£3001 €qual annual installments w. 21.06.2004
89'205	£2.44.22	convertible Bonds of Rs. 12 lakh each redeemable at par in 12
G7 LU3	1.6 444	10.90% Taxable , Secured, Redeemable, Mon-cumulative, Mon-
		SONDS X SERIES
		Secured by way of Registered Bond Trust Deed on immovable property situated at Mouje Ambhetl Taluka Kaparada in District Valsad Gujarat and mortgage & hypothecation of the assets of Transmission lines and Sub-stations of parts of UJTL system.
		10(ten) equal annual installments w.e.f. 22nd August, 2003
52.882	730.60	12.25% Taxable, Secured, Redeemable, Mon-cummulative, Mon-convertible Bonds of Rs. i.00,000/- each redeemable at par in
		Pomde ix selies
		Secured by floating charge over the Fixed Assets of the Corporation
00.41	00'7)	10.35% Taxable, Secured, Redeemable, Non-Cumulative, Mon-Convertible Bonds of Rs.1000/-each redeemable at par in 10 (Ten) equal annual installments w.e.f. 27th April, 2005
		Bomds aim sebies
		Secured by equitable mortgage of immovable properties & hypothecation of movable properties of Gandhar Stage-I Transmission System
00.04	30.05	13% Taxable. Secured, Rodeemable, Mon-cumulative, Mon- Convertible Bonds of Rs.1000/- each redeemable at par in 10 (ten) equal annual installments from 6th December. 2002
		BOMDS AI ZEKIEZ
•		Loans through bonds
22 18 26 32 24 32 25 24 800 2 42 31 2009 32 42 32 800 3 42 32 800 32 42 42 32 800 32 42 42 42 42 42 42 42 42 42 42 42 42 42		л <b>о</b> юстры С
(Виросс іл Стоге)		· · · · · · · · · · · · · · · · · · ·
. v ,		Schedule 05 A - Secured Loans

ANNUAL REPORT 2308-2009



Kanpur and Allahabad Sub-Station

Secured by way of Registered Bond Trust Deed ranking partpassu on immovable property situated at Mouje Ambheti. Taluka Kaparada in District Valsad, Gujarat and mortgage & hypothecation on assets of Anta, Auriya, Moga-Bhiwani, Chamera-Kishenpur, Sasaram-Allahabad, LiLO of Singravili-

(...httpoD) sasod betwee? - A 80 elubodos

		A Y N U A K P P O R F T D O C S J D C L S O C C F
		Secured by way of Registered Bond Trust Doed marking part passes on immovable property situated at Monite. Ambit and Islands in district Valsad, Guianat, and Botafrig charge on one asserts of the Company.
€C 9 ÷e		6/10% Taxable, Secured Redeemable, Non-Cumilistive, Non-Convertible Bonds of Rs. 1.5 crone each consisting of 12 (cvelve) crust of Rs. 1.2 50 Lakhs each redeconsisting as par in 12 (cvelve) crust of Rs. 1.2 50 Lakhs each redeconsisting to 12 (cvelve) crust of Rs. 1.2 50 Lakhs each redeconsisting on the second control of the seco
o para de como a transfera está se a como de consecuencia de la como de como de como de como de como de como d	and could be to the country of the c	22-423 At X 373 At 1
		Welvelle Bobook ting Alawell Jethy T. : sousies 5.4 ath
	A series of a series of the se	Anthred Laluka Kaparada in Characturitad Guinter and
		Secured by way of Referenced by history of Referenced by tenking part pare Drove of monoyable property situated at Moule
		40. 7.85% Taxable, Secured, Redentrale Mon-cumuritius, Mon-convertible Bonds of Rs 1.5 cross each consisting of 85 of 1.5 cross each convertible at part in 6 (six) as 25 lakh each, redeemable at part in 6 (six) equal annual installments w.e.f. 31.07.2003.
		Secured by why of Registered Sond Timer Deed making parti passes on immovable property situation as Moule Ambreti, Taluka Kaparada in District Valsad., Guistert and mortgage & hypothecation on assets of Kishenour. Mosa mortgage & Dulhasti, Contingency Transportation System.
<b>00</b> 10 (3) H	02.709	a) 8.63% Taxable Secured, Redeemable, Mon-Cumulative, Mon- Convertible Bonds of Rs 1.5 ereits each consisting of Rs. 12.50 lakh each, redeemable at partie 11. STRPPs of Rs. 12.50 lakh each, redeemable at partie 11. (twelve) equal annual interpress w.e.f. 31.07.2006.
		SELAESTITA SCALOS
		Secured by way of Registered Schol Trust Deed marking part-passed on immovable property situated at Mouje Ambhati Taluka Kaparada in District Valsad. Gujarat and morreage and hypothecation on assets of Kayamkulam & Ramagundam Hydorebad Transmission System
		19002180187 FROM STUDIES EASTED THE COLOR
ප්වි සැද:	00'82)	9.70% Taxable, Secured, Redeemable, Mon-Cum dative, Mon-Convertible Bonds of Rs. 1.5 chore each consistency of 12, 10, 12, 12, 12, 12, 12, 12, 12, 12, 12, 12
327,57	001.98	Bomde Kneelie
		Secured by way of Registered Bond Truss Dood ranking part easts. on 'menovable producty situated at Moule Ambhort Taluka Kapatanai in Dictrict Valsad Grammand mortgage & hypothecation on sasters of Unit Tepeshiration easters.
061%8 8080 147481A 00000 455-4		(d 2.20% Taxable, Secured, Redeenand, Non-Crind Strive, Anno-now, old areas a Secured, Secured and Converging of 6 second and a second and second second and second a
- <u>\$</u> - 12 - 12 - 13 - 13 - 13 - 13 - 13 - 13	en e	
(ರಾಧ್ಯು ಆ) ಕಿರ್ಕರಣಕ್ರ		
		(btnoD) snsol betuted - A 20 elubodo2



(.	"brnoD)	รยองวุ	Secured	-	Å	90	Schedule
----	---------	--------	---------	---	---	----	----------

2005, March, 2008	15M	BONDS XA SERIES
00.25.00	750.00	6-68% Taxable Secured, Non-Cumulative, Non-Convertible Bonds of Rs.1.50 crore each consisting of 12 5TRPP's of Rs 12.50 lakhs each redeemable at par in 12 (twelve) equal annual installments w.e.f. 23.02.2008.
		Secured by way of Registered Bond Trust Deed ranking part passu on immovable property situated at mouje Ambheti, Taluka Kaparada in district Valsad, Gujernt and floating charge on the assets of the Company.
00.027	00° <b>S</b> Z9	7.10% Taxable, Secured, Redeemable, Non-Convertible, Non-Cumulative Bonds of Rs. 1.00 crore each consisting of 10.57RPPs of Rs. 1.0.00 lakh each redeemable at par in 10 (Ten) equal annual installments w.e.f. 18.02.2009
		Secured by way of Registered Bond Trust Deed ranking part passu on immovable property situated at Mouje Ambheti, Taluka Kaparada in district Valsad, Gujarat and floating charge on the assets of the Company.
00.0001	09.0001	7.39% Taxable, Secured. Redeemable, Non-Convertible, Non-Cumulative Bonds of Rs. 1.00 Crore each consisting of 10.57RPP's of Rs. 10.00 lakin each redeemable at pair in 10(ten) equal annual installments w.e.f. 22.09.2009
		Secured by way of Registered Bond Trust Deed ranking part passu on immovable property, sticked at Mouje Ambheti, Taluka Kaparada in district Valsad, Gujarat and floating charge on the assets of the Company.
00.666	00.666	8.15% Taxable, Secured, Redeemable, Mon-Convertible, Mon-Cumulative Bonds of Rs. 1.50 crore each consisting of 12.57 Pp's of Rs. 1.50 secusion Rs. 12.50 lakh each redeemable at par in 12 (twelve) ecual
		annualinszailments w.e.f. 09,03,2010. Secured by way of Registered Bond Trust Deed ranking part passu-on-immovable property-artusted at Mouje Ambheti, Taluka Raparada in district Valsad Culprat-and floating charge on the
00-56+	JO:56 <del>V</del>	assets of the Company.  1.25% Taxable, Secured, Redeemable: Mon-Convertible: Mon-Convertibl
		Secured by way of Registored Bond Trust Deed ranking paripassu on immovable property situated at Mouje Ambheti. Taluka Raparada in district Valsad. Gujarat and floating charge on the assets of the Company.
6008:8008	T 9 O 9 3 9 1 A 1	INNY



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(Legitioner)								
(Dotitioner)								distribution and the state of t
								actual Loans
22.75	33.48	43.41	57.02	91	74.91		9282	Weighted average rate of interest on
6.67	7.37	7.65	7.74	78	7.78		7.00	Rate of Interest on Loan
341.14	454.23	567.33	737	25	963.25		6 6 7	Average Net Normative Loan
284.6	397.68	510.78	623.87	12	850.12		076:37	Net Closing Normative Loan
	-				-		3000 m of 1	during the year
113.08	113.1	113.09	226.25	25	226.25		226.25	Less: Repayment(s) of Normative Loan
						724		the year
0	0	0	0	0			0	Increate/Decrease due to ACE during
397.68	510.78	623.87	850.12	37	1076.37	person for		Net Normative Loans Opening
•								Loans upto Previous Year
2888.86	2775.76	2662.67	2436.42	17	2210.17		583.92	<b>Cumulative Repayments of Normative</b>
3286.54	3286.54	3286.54	3286.54	54	3286.54	- 27	1286,54	Gross Normative Loan Opening
2018-19	2017-18	2016-17	2015-16	15	2014-15		101314	Particulars
Rs. in Lacs			_					
							4	Date of Commercial Operation: 01-Feb-2004
							Section 1	Hosur)
t Kolar &	ion System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hoody, Bays at Kolar &	rur s/s ICT, LILO D	of SRSS-II (Hiriy	assets c	ombinec	em: C	-	Name of the Transmission Element or Communica
				EGION	WE I IN SOUTHERN REGION	NOS		Name of the Project: SYSTEM STREGTHENING SCH
						enterado Alexando O Personal	e de la constante de la consta	Name of the Region: SR-II
				ited	poration of India Limited	9 0 1	25 20 200	Name of the Transmission Licensee: Power Grid C
			pallulation of Interest on Normative Loan	t on Nor	of Interes	ation o		
Form 9E								

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Form 10

## Calculation of Depreciation Rate

Name of the Transmission Licensee: Power Grid Corporation of India Limited

Name of the Region: SR-II

Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION

Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO

Rs. in Lacs Date of Commercial Operation: 01-Feb-2004

	WEE 3		19.	Š,			
72.7 <u>2</u>	₹E 1	Δ <del>μ</del> sz8	74.2S8	0	74.228	BNIFDING	7
0	00	<del></del>	1.25	0	τ.25	ЕВЕЕНОГД ГАИД	Ţ
	201					2017-2018	
ET			_			Lapsed life	
76'7					noiteion	Weighted Average Rate of Depre	
226.25		90.9624	90.9624	0	90'9657	lstoT	
0	48.8	0	0	0	0	LEASEHOLD LAND	9
27.8	££.3	ET.TEI	£7.7£1	0	137.73	PLCC	S
182.64	87.2	91.6248	9T'6S†E	0	3459.16	NOITAT2 AU2	7
<u>2ε.γ</u>	82.2	3.851	3.851	0	138.6	ЭИП ЯТ	3
72.57	48.8	74.228	74.25.47	0	74.2 <u>28</u>	влігріие	7
0	0	1.25	1.25	0	T.ZE	FREEHOLD LAND	τ
						7016-2017	
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<b>76</b> 7					19(6)(1)(2)(6)		
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<b>7</b> £8	££,8	137.73	£L' L'E I	0	£7.7£1	ыесе	S
182.64	82.2	91.624£	3459.16	0	3459,16	NOITAT2 AUZ	7
ZE.7	82.28	3.8£1	3.8££	0	3.851	TR LINE	3
72.72	45.E	74,2 <u>28</u>	<b>₹</b> 75.8	0	74.25.47	влігріме	. 7
O	O	τ:ςε	1.25	0	T'SE	FREEHOLD LAND	ī
						5015-2016	
ττ					<u> </u>	Lapsed life	
Z6.4					ciation	Weighted Average Rate of Depre	
22.922		90.9624	90.9624	0	90.9624	lsfoT	
0	<b>4ε.ε</b>	0	0	0	0	ГЕРЗЕНОГО ГРИО	9
27.8	££.8	ET.TEI	£7.7£ <u>1</u>	0	ET. TEI	PLCC	S
182.64	82.2	9T.624£	3459.16	0	91.6248	NOITAT2 AU2	ħ
<b>2</b> £.7	82.2	3.851	138.6	0	138.6	TR LINE	3
<b>72.7</b> 2	48.8	74.2 <u>28</u>	74.2 <u>28</u>	0	74.228	влігріие	7
0	0	T'SE	1.25	0	1.25	FREEHOLD LAND	τ
						2014-2015	
		Gross Block	at the year	during the year	edt ta gninniged		.oN
JunomA	Dep. Rate	Average Neelg ages 2	Gross block		Gross block	Particulars	.IS

Form 10

Calculation of Depreciation Rate

Name of the Transmission Licensee: Power Grid Corporation of India Limited

Name of the Region: SR-II

Name of the Project: SYSTEM STREGTHENING SCHEME-II IN SOUTHERN REGION

Name of the Transmission Element or Communication System: Combined assets of SRSS-II (Hiriyur s/s ICT, LILO

Date of Commercial Operation: 01-Feb-2004

(Petitioner)				and the second second		entre de la companya	
are and the state of the state	en de la companya de La companya de la companya de	Daniel Berger, de la companya de la La companya de la co	Control of the Contro	nner sommer standard (1), by deleter steel			
	griss was white the years						
A CANADA CARA SA CARAS			3	Marie Services Constitute Constit			
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Z6.p		a - 100 10 100 100 - 100 100 100 100 100	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		ciation	Weighted Average Rate of Depre	
226.25		90.9624	90.9624	0	90.9624	Total	
0	4ε.ε	0	0	0	0	ГЕРЗЕНОГД ГРИД	9
<b>27.8</b>	££.8	£7.7£1	137.73	0	ET.TEI	PLCC	S
185.64	82.2	3459.19	9T:6StE	0	9T:6S7E	NOITAT2 AUZ	7
7.32	82.2	3.851	138.6	0	3.851	TR LINE	3
72.7 <b>2</b>	<b>₽£.</b> £	74.258	74.2 <u>5</u> 8	0	74.228	влігріие	7
0	0	1.25	1.25	0	1.25	FREEHOLD LAND	τ
						5018-2019	
₽ï						Lapsed life	
26.4					noiteio	Weighted Average Rate of Depre	
22.922		90.9624	90.9624	0	90'9657	lstoT	
0	48.8	0	0	0	0	LEASEHOLD LAND	9
<b>27.8</b>	££.8	ET.TEI	ET.TEL	0	ET.TE1	PLCC	S
182.64	82.2	91.624£	3459.16	0	3459.16	NOITATS AUS	7
<b>2</b> £.7	82.2	3.851	3.851	0	3.851	TR LINE	3
			of the year	уеаг	Brinniged		
		Gross Block	bne end te	adring the	edt ta		.oN
JunomA	Dep. Rate	Average	Gross block	qs2 bbA	Gross block	Particulars	· IS
Rs. in Lacs							



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(Petitioner)					
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Augusta	
2072 00	2860 01	10 5050	7624 77	732	Computation description (include AAD)
2860 91	2747.81	2634.72	2408 47		Depreciation into previous year
113 08	113 1	113.09	226.25		Degraciation during the year
1243 95	1357 05	1470 14	1696 30		Possible Value
14	13	. 12	11	10	Elapsed life of the asset (at the beginning of the year)
					beginning of year)
11	12	13	14	15	Balance useful life of the asset (at the
4104.86	4104.86	4104.86	4104.86	0 4104.86	Depreciable Value
4.92	4.92	4.92	4.92	4.92	Rate of Depreciation
35.1	35.1	35.1	35.1	35.1	Freehold Land (Av. Cost)
4596.06	4596.06	4596.06	4596.06	4596.06	Average Capital Cost
4596.06	4596.06	4596.06	4596.06	4596.06	Closing Capital Cost
4596.06	4596.06	4596.06	4596.06	4596.06	Opening Capital Cost
2018-19	2017-18	2016-17	2015-16	2018-14 2014-15	Particulars 20
Rs. in Lacs			•		
					Date of Commercial Operation: 01-Feb-2004
(olar & Hosur)	Hoody, Bays at K	liriyur s/s ICT, LILO Dev-Hoody, Bays at Kolar & Hosur)		tion System: Combined assets of SRSS-II (F	Name of the Transmission Element or Communication
				III IN SOUTHERN REGION	Name of the Project: SYSTEM STREGTHENING SCHEME II IN SOUTHERN REGION
					Name of the Region: SR-II
				Legiation of India Limited	Name of the Transmission Licensee: Power Grid Color
			ation	Statement of Depreciation	
Form 10A					

(Petitioner)				200		
43.62	42.76	41.91	43.79	43.19		Interest on working capital
13.5	13.5	13.5	13.5	13.5		Rate of Interest
323.12	316.74	310.46	324.35	319.95	35.7	Total working capital
177.05	175.35	173.62	191.91	191.76		Receivables
93.9	90.89	87.97	85.14	82.41		Maintenance Spares
52.17	50.5	48.87	47.3	45.78		Op. and Maintenance
2018-19	2017-18	2016-17	2015-16	2014-15	20113 4	Particulars
Rs. in Lacs						
					eb-2004	Date of Commercial Operation: 01-Feb-2004
•	Hosur)	dy, Bays at Kolar & Hosur)	of SRSS-II (Hiriyur s/s ICT, LILO Dev-Hood	SRSS-II (Hiriyur s	Combined assers	Name of the Transmission Element: Combined asset
			EGION	TE-II IN SOUTHERN REGION	THENING SOLE VIE	Name of the Project: SYSTEM STREGTHENING SCHOOL
						Name of the Region: SR-II
			ited	ration of India Limited		Name of the Transmission Licensee: Power Grid
			Mation of Interest on Working Capital	liation of Interest		
Form 11						
				And the second s	And the second s	·



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