

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION FOR

APPROVAL OF TRANSMISSION TARIFF
for

“LILO of both circuits of Tuticorin JV – Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor under Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – PART-A”

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**

GS



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

PETITION NO.:

IN THE MATTER OF: Approval under regulation-86 of CERC (Conduct of Business) Regulations '1999 and CERC (Terms and Conditions of Tariff) Regulations '2014 for determination of Transmission Tariff from DOCO to 31.03.2019 for "LILO of both circuits of Tuticorin JV – Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (Initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor under Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – PART-A" 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).

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

----- RESPONDENTS

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

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GURGAON
DATED 20.06.2014

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





Dy. General Manager (Commercial)

**BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
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PETITION NO.:

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---- RESPONDENTS

NPKRR Maaligai, 800, Anna Salai

Chennai – 600 002

Represented by its Chairman And Others

To

The Secretary
Central Electricity Regulatory Commission
New Delhi 110001
Sir,

The application filed under Regulation 86 of CERC (Conduct of Business) Regulation, 1999 and CERC (Terms and Conditions of Tariff) Regulations'2014 for determination of Transmission tariff from DOCO to 31.03.2019 may please be registered.

GURGAON
DATED: 20.6.2014

FILED BY
POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY


Dy. General Manager (Commercial)



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

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--- PETITIONER

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

NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002

Represented by its Chairman
And Others

--- RESPONDENTS

MEMO OF PARTIES

Power Grid Corporation of India Ltd.

VERSUS

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

2 Transmission Corporation of Andhra Pradesh Ltd.,
(APTRANSCO), Vidyut Soudha, Hyderabad–
500082

Represented by its Chairman

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

--- PETITIONER

--- RESPONDENTS



- 4 Tamilnadu Electricity Board (TNEB)
NPKRR Maaligai, 800, Anna Salai
Chennai – 600 002
Represented by its Chairman
- 5 Electricity Department
Government of Goa
Vidyuti Bhawan, Panaji
Goa 403001
Represented by Chief Engineer (Electrical)
- 6 Electricity Department
Govt of Pondicherry,
Pondicherry - 605001
Represented by its Chief Secretary
- 7 Eastern Power Distribution Company of Andhra
Pradesh Limited (APEPDCL)
APEPDCL, P&T Colony,
Seethmmadhara, VISHAKHAPATNAM
Andhra Pradesh,
Represented by its Managing Director
- 8 Southern Power Distribution Company of Andhra
Pradesh Limited (APSPDCL)
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
TIRUPATI-517 501,
Chittoor District, Andhra Pradesh
Represented by Its Managing Director
- 9 Central Power Distribution Company of Andhra
Pradesh limited (APCPDCL)
Corporate Office, Mint Compound,
HYDERABAD – 500 063
Andhra Pradesh
Represented by Its Managing Director
- 10 Northern Power Distribution Company of Andhra
Pradesh Limited (APNPDCL)
Opp. NIT Petrol Pump
Chaitanyapuri, Kazipet,
WARANGAL – 506 004
Andhra Pradesh
Represented by Its Managing Director
- 11 Bangalore Electricity Supply Company Ltd.,
(BESCOM), Corporate Office, K.R.Circle
BANGALORE – 560 001
Karnataka
Represented by Its Managing Director



- 12 Gulbarga Electricity Supply Company Ltd.,
(GESCOM)
Station Main Road, GULBURGA
Karnataka
Represented by Its Managing Director
- 13 Hubli Electricity Supply Company Ltd., (HESCOM)
Navanagar, PB Road
HUBLI, Karnataka
Represented by Its Managing Director
- 14 MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle
MANGALORE – 575 001
Karnataka
Represented by Its Managing Director
- 15 Chamundeswari Electricity Supply Corporation
Ltd., (CESC)
927, L J Avenue
Ground Floor, New Kantharaj Urs Road
Saraswatipuram, MYSORE – 570 009
KARNATAKA
Represented by Its Managing Director
- 16 Coastal Energen Private Limited
5th Floor, Buhari Towers,
No. 4, Moores Road
Chennai – 600 006
Tamil Nadu
Represented by Its Managing Director
- 17 Ind-Bharath Power (Madras) Limited
Plt No 30-A, Road No 1,
Film Nagar, Jubilee Hills
Hyderabad – 500 033
Andhra Pradesh
Represented by Its Managing Director

PETITIONER

GURGAON
DATED:- 29.06.2014

POWER GRID CORPORATION OF INDIA LTD.
REPRESENTED BY


Dy. General Manager (Commercial)





हरियाणा HARYANA

29AA 128564

BEFORE
THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

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Power Grid Corporation of India Ltd.

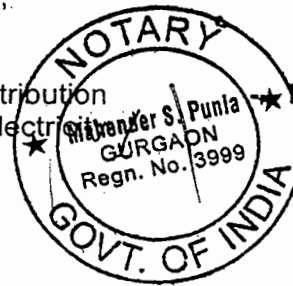
--- PETITIONER

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

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

Represented by its Chairman
And Others



RESPONDENT

Affidavit verifying the Petition

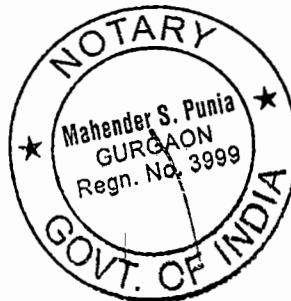
I, Fahlad Saraswat, S/O, Sh R. M. Saraswat, working as Deputy General Manager



Handwritten signature/initials.

(Commercial) 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:-

1. I am the Dy. General Manager of Power Grid Corporation of India Ltd., the representative of the Petitioner in the above matter, and am duly authorised to make this affidavit.
2. I submit that the enclosed tariff Petition is being filed for determination of Transmission Tariff for 2014-19 Block for "LILO of both circuits of Tuticorin JV – Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor under Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – PART-A" in Southern Region.
3. I submit that no other tariff Petition except this Petition has been filed directly or indirectly for approval of Transmission Tariff for 2014-19 Block for "LILO of both circuits of Tuticorin JV – Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor under Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – PART-A" Southern Region.
4. The statements made in the tariff Petition herein are based on petitioner company's official records maintained in the ordinary course of business and I believe them to be true and correct.
5. The documents attached with the petition are legible copies and duly attested by me.




(DEPONENT)

VERIFICATION

Solemnly affirmed at Gurgaon on this 20th day of June, 2014 that the contents of the above affidavit are true to my knowledge and belief and no part of it is false and nothing material has been concealed there from.

ATTESTED

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



20 JUN 2014

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NEW DELHI**

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

--- RESPONDENT

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

MOST RESPECTFULLY SHOWETH

- 1.0 That, Hon'ble Commission have made CERC (Terms and Conditions of Tariff) Regulations, 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 The tariff for the said transmission systems shall be determined by the Hon'ble Commission in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2014.

4.0 That the instant petition covers approval of transmission tariff for "LILO of both circuits of Tuticorin JV – Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor (**Asset-I**) under Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – PART-A" in Southern Region, which is anticipated to be put under commercial operation w.e.f. 31-07-2014.

5.0 **Approval of the Scheme**

That the petitioner has been entrusted with the implementation of "Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – Part-A". The investment approval of the project was accorded by Board of Directors of POWERGRID vide the **Memorandum Ref.: C/CP/LTA Tuticorin Part-A dated 12.12.2011, at an estimated cost of Rs. 90.44 Crores including IDC of Rs 4.02 Crores, price level –3rd Qtr 2011; a copy whereof is enclosed as Encl-1, page 2 to 21...** That the scope of the scheme was discussed and agreed in the 29th & 30th SCM of Southern Region Constituents, extract of the MOM is enclosed as Encl-2 page 22 to 31...

5.1 The scope of work covered under "Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – Part-A in Southern Region is as follows:

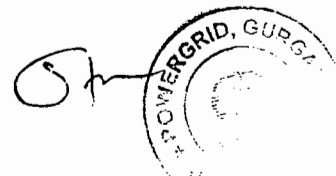
Transmission Line

(i) LILO of both circuits of Tuticorin JV – Madurai 400kV D/C (Quad) Line at Tuticorin Pooling Station

Sub Station

(i) Establishment of 765kV Pooling Station at Tuticorin (Initially charged at 400kV) including 1 x 80MVAR 400kV Bus Reactor.

The Schematic diagram of the "Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – Part-A is enclosed as Encl. - 3, (page 32).



All assets under the Scheme are covered under this petition for tariff determination

6.0 Implementation Schedule

As per the approval, the transmission scheme was scheduled to be commissioned in 28 months from the date of investment approval. The date of Investment Approval is 12.12.2011. Hence the commissioning schedule comes to 12-04.2014 against which the subject asset is anticipated to be commissioned and put under commercial operation w.e.f. 31.07.2014. Hence there is a time overrun of 3.5 months in commissioning of the subject assets. Here it may be mentioned that optimistic Commissioning schedule of 28 months (less than 32 months time line specified by CERC in Tariff Regulation 2009 for such work) was kept in Investment Approval considering small line length of 10 KM.

However, marginal delay of 3.5 months (from optimistic schedule) is due to the late award of the package which was placed on 25-03-2013 (almost after 15 months from Investment Approval). Initially LOA was placed on 17.01.2012 on the lowest evaluated bidder M/s Siemens. However, M/s Siemens did not start the work after lot of follow up and persuasion and award had to be cancelled. Subsequently, retendering was done and award was placed on lowest evaluated bidder M/s L&T on 25.03.2013. This caused the delay of around 15 months. It is to be mention that the petitioner was unable to start construction works due to absence of award of contract and accordingly fund flow could not be started. However, best efforts are being made to expedite and complete the work in 16 months i.e. by 31.07.2014. This above marginal delay of 3.5 months with actual completion time of 32 months is very much within the time line of 36 months specified by CERC in tariff Regulation 2014 for such work for claiming additional 0.5% RoE.

7.0 Completion Cost

7.1 That the application for determination of tariff is filed in line with provision 7 (2) of tariff Regulation 2014 applicable for 2014-19 period. Further, that the present petition covers approval of tariff based on actual/estimated expenditure incurred up to actual/anticipated DOCO and additional capitalization projected to be incurred from DOCO to 31.03.2019 in respect of the subject asset as per detail given below. That the capital cost incurred upto DOCO and projected to be incurred during 2014-15, 2015-16 & 2016-17 is duly certified; copy whereof in respect of the assets covered in this petition is enclosed as Encl - 4 (page 33 to 34.).

(Rs in Lakhs)

Name of the element	Approved Cost (Apportioned)	Exp. Up to DOCO	Proposed Exp. For FY 2014-15	Proposed Exp. For FY 2015-16	Proposed Exp for FY 2016-17	Estimated completion Cost	Spares	
							SS	TL
Asset-I	9044.0	7548.17	931.84	1058.97	50.00	9588.98	160.29 (4.17%)	8.57 (0.95%)

5



Against the total apportioned approved cost of Rs 90.44 crores, the anticipated completed cost is Rs 95.89 crores, so, there is cost overrun in comparison to FR cost. Cost overrun is mainly due to change in price level of awarded packages and higher award cost received in competitive bidding compared to initial estimates. For procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may happen to be lower or higher than the cost estimate depending upon prevailing market conditions. The reasons for item wise cost variation between approved cost (FR) and anticipated cost as on DOCO are explained in detail in Form-5. Based on the actual expenditure, the revised cost (RCE) for the project is under approval of the management and the same shall be filed before Hon'ble Commission in due course of time

Further, it is humbly prayed that tariff may be allowed on the estimated completion cost. The completion cost for the assets covered under instant Petition works out to Rs 95.89 Crores.

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

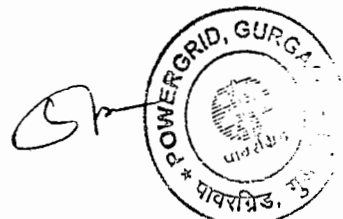
The admissibility of additional capital expenditure (Add. Cap.) incurred after DOCO is to be dealt in accordance with the provisions of Regulation 14, the extract of Regulation 14 of the regulations, 2014 is reproduced as under:

"Additional Capitalization"

- (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and upto the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
- (v) Change in law or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original 48 scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.



- 7.3 The additional Capitalization incurred/projected to be incurred in the contextual asset is mainly on account of Balance/Retention Payments and hence the same may be allowed by Hon'ble Commission. The details of underlying reasons for additional capitalization for "LILO of both circuits of Tuticorin JV – Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor under Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – PART-A" in Southern Region are given in form -7.

That the petition for determination of tariff is being filed in line with Regulation 7 under chapter 3 of tariff Regulation 2014 applicable for 2014-19 period.

- 8.0 Additional ROE @ 0.5% has been claimed in the instant petition in line with Tariff Regulations, 2014 as per attached Form 8B.

9.0 **TRANSMISSION TARIFF for 2014-19 BLOCK:**

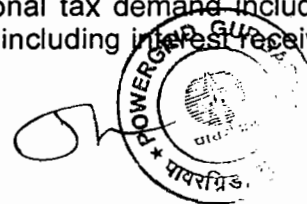
- 9.1 The tariff for block 2014-2019 has been worked out as per CERC (Terms and Conditions of Tariff) Regulations, 2014. In the present petition the transmission tariff has been calculated taking actual expenditure / estimated Expenditure upto DOCO/ anticipated DOCO and estimated expenditure from DOCO/ anticipated DOCO to 31.03.2019. Calculations for working out the tariff along with supporting documentation are enclosed as Encl-5 (Page 35 - 66..).

- 9.2 The annual transmission tariff for the tariff period 2014-19 is summarized as below:

	Rupees in lakhs#				
Name of the asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	1123.33	1841.77	1917.88	1897.47	1872.82

- 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.

- 9.3 That, it is submitted that the petitioner being liable to pay income tax at MAT rate, the ROE has been calculated @ 20.243 % after grossing up the ROE with MAT rate of 20.961% 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. 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 interest received from IT authorities shall be recoverable /adjustable during / after completion of income tax assessment of the financial year.

- 9.4 That as provided in clause 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.
- 9.5 Service tax on transmission has been put in the negative list w.e.f. 01.04.2012 and accordingly the Transmission Charges indicated at para 6.1 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.
- 9.6 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.
- 9.7 The transmission charges at para-9.2 above is inclusive of O&M expenses for the project derived based on the norms for O&M expenditure 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 Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming the impact of wage hike during 2014-19.
- 9.8 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).



9.9 The Transmission Charges and other related Charges indicated at para 9.2 above, is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess, filing fees, license fee, 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.

10.0 Sharing of Transmission Charges

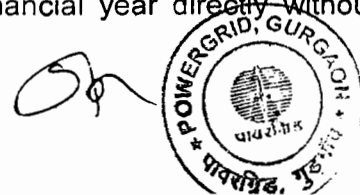
The Tariff for Transmission of Electricity (Annual Fixed Cost) as per para 9.0 of petition shall be shared as per Regulation-43 of CERC (Terms and Conditions of Tariff) Regulations, 2014. These charges shall be recovered on monthly basis and the billing collection and disbursement of Transmission Charges shall be governed by provision of CERC (sharing of interstate Transmission Charges and Losses) Regulations, 2010.

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

PRAYER

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

- 1) Approve the Transmission Tariff for the tariff block 2014-19 block for the assets covered under this petition, as per para -9.0 above.
- 2) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.
- 3) Tariff may be allowed on the estimated completion cost, since RCE for the project is under approval.
- 4) 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.
- 5) Approve the Additional ROE as claimed in the Petition.
- 6) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without



making any application before the Commission as provided under clause 25 of the Tariff regulations 2014.

- 7) 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.
- 8) 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.
- 9) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014-19 period, if any, from the respondents.
- 10) 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.
- 11) Allow tariff up to 90% of the Annual Fixed Charges in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges
- 12) Allow the petitioner to bill Tariff from actual DOCO and also the petitioner may be allowed to submit revised Management Certificate and tariff Forms (as per the Relevant Regulation) based on actual DOCO.

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

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

REPRESENTED BY



DY. GENERAL MANAGER(COMMERCIAL)

GURGAON

DATED: 20.06.2014



पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)



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

संदर्भ संख्या/Ref. Number

C/CP/LTA-Tuticorin Part-A

December 12, 2011

MEMORANDUM

SUB: INVESTMENT APPROVAL FOR "COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH POWER (MADRAS) LIMITED LTOA GENERATION PROJECTS IN TUTICORIN AREA (PART-A)"

The Board of Directors of POWERGRID, in exercise of powers delegated to it by the Department of Public Enterprises (DPE), Ministry of Heavy Industries and Public Enterprises, Government of India through its Office Memorandum No. 26(3)/2005-GM-GL-92 dated 1st May, 2008 and Office Memorandum No. DPE/11(2)/97-Fin. dated 22nd July, 1997 (modified subsequently through Office Memorandum No. 18(24)/2003-GM-GL.64 dated 5th August, 2005), have accorded investment approval for "Common System associated with Coastal Energen Private Limited and Ind-Barath Power (Madras) Limited LTOA Generation Projects in Tuticorin area PART-A" in its 263rd meeting held on December 05, 2011 as per the details given below:

1. Scope of project

The broad scope of works is given below:

Transmission lines

- (i) LILO of both circuits of Tuticorin JV – Madurai 400 kV D/c (quad) line at Tuticorin Pooling Station.

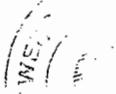
Substations

- (i) Establishment of 765 kV pooling station in Tuticorin (initially charged at 400 kV) including 1x80 MVAR, 400kV bus reactor.

पंजीकृत कार्यालय : बी-9, कृष्ण इन्स्टीट्यूशनल एरिया, कतवाना सारो, नई दिल्ली-110016, फ़ोन : 26560121, फ़ैक्स : 011-26560039, तार 'नेटग्रिड'
Registered Office : B 9, Krishna Institutional Area, Katwana Sarai, New Delhi-110016, Tel. : 26560121, Fax : 011-26560039, Gram : NATGRID

स्वहित एवं राष्ट्रहित में ऊर्जा बचाएँ

Save Energy for Benefit of Self and Nation



17



True Copy
of the
Office Memorandum
of the
Board of Directors
of the
Power Grid Corporation of India Ltd.

POWER GRID CORPORATION OF INDIA LIMITED
GURGAON, HARYANA

2. **Project Cost & Funding**

The estimated cost of the project based on 3rd Quarter, 2011 price level is Rs. 90.44 Crore including IDC of Rs. 4.02 Crore. The abstract cost estimate is attached as Annexure-I.

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

3. **Commissioning Schedule**

The project is scheduled to be commissioned within 28 months from the date of investment approval.

This is issued in pursuance of 263rd meeting of Board of Directors held on December 05, 2011.

Seema Gupta
12/12/11
(Seema Gupta)
General Manager (CP)

Power Grid Corporation of India Ltd. / Certified to be True Copy
शक्ति पावर ग्रीड कॉर्पोरेशन ऑफ इंडिया लि.
For Power Grid Corporation of India Ltd.
Singh Paudyal
Company Secretary

Gr



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GM: Cost Engg. / ESMD

Dy. CVO

Company Secretary

For kind information of:

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

2/11/11
12/12/11

(Seema Gupta)
General Manager (CP)

OR

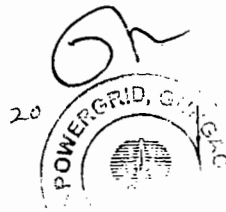


Distribution:

1. PS to Secretary (Power), MoP, Shram Shakti Bhawan, New Delhi-110001
2. Chairman, CERC, Core-3, 6th floor, SCOPE complex, NEW DELHI- 110 003
3. Chairman, CEA , Sewa Bhawan, R.K.Puram, New Delhi -66
4. Chairman, Kerala State Electricity Board, Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram-695 004.
5. Chairman, Karnataka Power Transmission Corporation Ltd, Cauvery Bhawan, Bangalore -560 009
6. Chairman, Tamil Nadu Electricity Board, 800, NPKR Ramaswamy Maligai, Anna Salai, Chennai-600 002
7. Chairman, APTRANSCO, Vidyut Soudha, Hyderabad-500 049
8. Chief Secretary, Electricity Department of Pondicherry, Pondicherry-605001.
9. Advisor, PAMD, Planning Commission , Yojana Bhawan, New Delhi
10. Additional Secretary, MoP, Shram Shakti Bhawan, New Delhi
11. Member Secretary, Planning Commission , Yojana Bhawan, New Delhi
12. Member Secretary, SRPC, Central Electricity Authority, No. 29 Race Course Cross Road, Bangalore-560 009
13. Member (Power Systems), CEA, R.K.Puram, New Delhi -66
14. Secretary, CEA, Sewa Bhawan, R.K.Puram, New Delhi -66 – 03 copies
15. Joint Secretary, Ministry of Statistics & Programme Implementation, Sardar Patel Bhawan, New Delhi.
16. Joint Secretary & Financial Advisor, MoP, Shram Shakti Bhawan, New Delhi
17. Joint Secretary (Transmission), MoP, Shram Shakti Bhawan, New Delhi
18. Joint Secretary (Plan Finance Div.-II), Ministry of Finance, North Block, New Delhi
19. Director (Transmission), MoP, Shram Shakti Bhawan, New Delhi
20. Director, Ministry of Finance (Plan finance Div.), North Block, New Delhi
21. Deputy Secretary, Cabinet Secretariat, Rashtrapati Bhawan, New Delhi
22. Under Secretary, Finance & Budget Section, MoP

(Signature)
12/12/11

(Seema Gupta)
General Manager (CP)



Certified to be True Copy
शुद्ध सच प्रमाणित किया जाता है
Power Grid Corporation of India Ltd.
कम्पनी सचिव / Company Secretary

(Signature)

ANNEXURE - I**ABSTRACT COST ESTIMATE
(BASE COST)****COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH
POWER (MADRAS) LIMITED LTOA GENERATION PROJECTS IN TUTICORIN AREA-PART-A**

(Cost updated to 3rd Quarter 2011 price level)

Sr. No.	DESCRIPTION	AMOUNT (Rs. in Crs.)
A	Preliminary Survey & Soil Investigation	0.13
B	Land Acquisition for Substation and R & R Compensation	10.03
C	Cost of Compensation for Transamission Lines	
	i) Compensation towatds Crop, Tree & PTCC	0.15
	ii) Compensation towards Forest	0.11
D	Civil Works	
	i) Infrastructure for substations	8.39
	ii) Non Residential Buildings	1.85
	iii) Colony for Trans. Lines & Substations	7.01
E	Equipment Cost	
	a) Trans.Lines	22.41
	b) Sub-Stations	29.13
F	Sub Total E	51.54
G	Misc. Tools & Plants @ 1% of F	0.52
H	Maintenance during construction @ 1% of F	0.52
I	Engg. & Administration @ 8.5% of F	4.38
J	Losses on Stock @ 0.25% of F	0.13
K	Contingencies @ 3% @ 3% of F	1.55
L	Customs Duty @ 20.941% & handling charges @2%	0.12
	Sub Total (A to L)	86.42
M	Interest During Construction(IDC)	4.02
	GRAND TOTAL	90.44

- Note:
1. Loan has been assumed to be available from Domestic sources.
 2. Interest rate on Loan has been considered @ 10.5% for Domestic Loan subject to actuals.
 3. Debt:Equity ratio has been considered as 70:30.
 4. The project is scheduled to be commissioned within 28 months progressively from the date of investment approval. However, for the purpose of phasing of funds, the Investment approval has been assumed on 01.01.2012.

सत्यापित प्रती / Certified to be True Copy
शुद्ध पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लि०
For Power Grid Corporation of India Ltd.

Singh Pandey
Secretary



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

No. 51/4/SP&PA-2009/ 920 - 929

Date: September 04, 2009

To

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

Sub: 29th meeting of the Standing Committee on Power System Planning of Southern Region
- Minutes of the meeting.

Sir,

The **29th meeting** of the Standing Committee on Power System Planning of Southern Region was held on **27th August 2009** at 10:00 AM at Taj Krishna, Hyderabad, Andhra Pradesh. Minutes of the meeting are enclosed.

The minutes are also available at CEA's website, www.cea.nic.in.

Yours faithfully,

(Pardeep Jindal)
Director (SP&PA)
(Telephone No.: 011 26198092 / 26732325)
(FAX No.: 011 26102045)



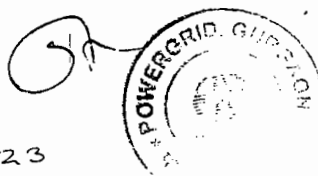
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MINUTES OF THE 29th MEETING

Minutes of 29th Meeting of the Standing Committee on Power System Planning in Southern Region (SCPSPSR) held on August 27, 2009(Thursday) at Taj Krishna, Hyderabad, Andhra Pradesh

List of participants is given at Annex-I.

- 1.0 ED(SR-I), PGCIL welcomed all the participants. He stated that as more and more IPPs were setting up generation projects and seeking LTOA, development of optimum system was also becoming increasingly difficult. He stressed that the problem could be effectively solved through joint efforts like the platform of this standing Committee. He also highlighted lack of skilled manpower and number of adequate gangs in implementing large number of transmission projects.
- 1.1 Member(PS), CEA thanked Power Grid Corporation of India Ltd (PGCIL) for warm hospitality and excellent arrangements for the meeting. He stated that next meeting of the Southern Region Power Committee(SRPC) meeting was scheduled for 16th September 2009 and some pending issues including some LTOA transmission requirements needed to be finalized for putting up to the SRPC for approval. He said that Southern Region(SR) has good number of reservoir based Hydro Electric Project, and if SR has better connectivity with rest of All-India grid, the SR constituents can avail base power from outside the grid and at the same time back-down their hydro generation to save peak power potential. He also stated that CERC was in the process of formulating new transmission tariff regulation, therefore, the constituents may decide the transmission investments in ISTS considering technical requirements rather than present methodology of payment of transmission charges.
- 2.0 **Confirmation of the minutes of 28th meeting of the Standing Committee**
Director, CEA stated that minutes of 28th meeting of the Standing Committee on Power System Planning of Southern Region, held on 15th June, 2009 at Coorg, Karnataka, were issued vide CEA's letter number 51/4/SP&PA-2009/629-638 dated July 15, 2009 and that no observations/comments were received on the circulated minutes. The minutes as circulated were confirmed by the Standing Committee.
- 3.0 **Status of Under Construction / Approved Schemes:**
 - 3.1 PGCIL informed about the progress of the transmission works that were being implemented by them as part of regional schemes. A copy of the implementation status is given at Annex-II. PGCIL also informed that status of progress of their works were also available at their website and they would keep updating this periodically.
 - 3.2 Member(PS), CEA stated that transmission schemes of State utilities should be implemented matching with the respective generation projects and also with the development of central



be sent to Punjab State Electricity Board. He further said that KPTCL was constructing 400kV quad moose DC line from UPCL switch yard to Shanthigrama, Hassan (PGCIL) sub station and 220 kV DC line to 220kV Khemar sub station. In this regard, he stated that, UPCL had been asked to sign Bulk Power Transmission Agreement(BPTA) with Power Grid Corporation of India for the whole capacity of the project. He also informed that UPCL was also considering selling power to Kerala. During discussions, it was suggested that Punjab might sign BPTA in proportion to its share from the project for sharing transmission charges for SR, WR and NR. Kerala, if it signs PPA with UPCL might share SR charges in proportion to its share from UPCL and Karnataka might share SR transmission charges in proportion to the power they intend to draw at Mysore. The issue was further discussed and it was decided that the issue needed to be resolved by Commercial Committee of SRPC.

12.0 Discussions on the Inter State Transmission System(ISTS) Issues in respect of Long Term Open Access Applications(LTOA) made to the Central Transmission Utility(CTU) for Projects in Southern Region:

12.1 Requirement of transmission systems for providing long term open access to following five projects in Southern Region were discussed:

- (i) East Coast Energy Pvt Ltd (4x660 MW) in Srikakulam , AP
- (ii) NCC Power Project Ltd. (2x660 MW) in Srikakulam , AP
- (iii) Coastal Energen Pvt Ltd (2x660 MW), Tuticorin area Tamil Nadu
- (iv) IND Barath Power Madras Ltd (4x350 MW), Tuticorin area Tamil Nadu
- (v) Singareni Collieries Company Ltd (2x270 MW) near Ramagundam, AP

12.2 Regarding the Singareni Collieries Company Ltd (2x270 MW) near Ramagundam, AP, the project representative informed that they were considering increasing capacity of the project and also that they might sell power to Andhra Pradesh for which AP would build the transmission system. Therefore, they were asked to approach APTRANSCO for LTOA in the State's system.

12.3 Following transmission system for other four projects was decided:

12.3.1 Transmission System for East Coast Energy Pvt Ltd (4x660 MW) and NCC Power Project Ltd. (2x660 MW) projects in Srikakulam Area, Andhra Pradesh:

- (i) LILO of one circuit of Behrampur- Gazuwaka 400kV D/C line at East-Coast switchyard
- (ii) LILO of 2nd circuit of Behrampur - Gazuwaka 400kV D/c line at NCC switchyard
- (iii) East Coast - Angul 765 kV 2xS/C line (one circuit via NCC).
- (iv) Angul - Jharsuguda - Dharamjaigarh 765 kV 2xS/C line.
- (v) Provision of 2x1500 MVA, 765/400 kV transformers at East Coast
- (vi) Provision of 1x1500 MVA, 765/400 kV transformers at NCC

12.3.2 Transmission System for Coastal Energen Pvt Ltd (2x660 MW) and IND Barath Power Madras Ltd (4x350 MW) projects in Tuticorin of Tamil Nadu:

- (i) Establishment of 765 kV pooling station in Tuticorin, Salem and Madhugiri (north of Bangalore) (initially charged at 400kV)
- (ii) Coastal Energen generation switchyard- Tuticorin pooling station 400kV D/C Quad / High capacity line
- (iii) Ind-Barath generation switchyard - Tuticorin pooling station 400kV D/c Quad/ High capacity line
- (iv) Tuticorin Pooling station - Salem Pooling station 765kV D/C line initially charged at 400kV
- (v) Salem pooling station-Madhugiri pooling station 765kV S/C initially charged at 400kV.

- (vi) Madhugiri – Yelahanka 400kV Quad D/C line
- (vii) Tuticorin pooling station – Tuticorin JV 400kV D/C quad line

12.3.3 Common Transmission System for transfer of power from SR to WR & NR:

- (i) Sholapur – Pune 765 kV 2nd S/C line(1st already covered under transmission associated with Krishnapatnam UMPP).
- (ii) Establishment of 765kV station at Orai by LILO of one circuit of Satna – Gwalior 765kV line.
- (iii) Establishment of 765kV station at Buland Shahar by LILO of Agra – Meerut 765kV line.
- (iv) Establishment of 765kV station at Sonipat by LILO of Bhiwani – Meerut 765kV line.
- (v) Jabalpur Pooling station – Orai 765kV S/C line.
- (vi) Orai – Bulandshahar – Sonipat 765 kV S/C line.

12.3.4 Transmission charges for all the transmission systems at 12.3.1 and 12.3.2 above would be shared by all the IPPs of Southern Region who have applied for LTOA in proportion to the capacity for which LTOA had been applied/granted. These charges would be transferred to their beneficiaries as and when confirmed.

12.3.5 Transmission charges for the item no. (i) and (ii) at 12.3.3 above would be shared by all the IPPs of Southern Region who have applied for LTOA for exporting power to Western Region and Northern Region. These charges would be transferred to their beneficiaries as and when confirmed.

12.3.6 Transmission charges for the item no. (iii), (iv), (v) and (vi) at 12.3.3 above would be shared by all the IPPs of Southern Region who have applied for LTOA for exporting power to Northern Region. These charges would be transferred to their beneficiaries as and when confirmed.

12.4 Detailed Minutes of the discussion on LTOA application would be issued by PGCIL.



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

No. 51/4/SP&PA-2009/171-180

Date: November 30, 2009

To

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

Sub: 29th meeting of the Standing Committee on Power System Planning of Southern Region
- Minutes of the meeting - Issuing of Corrigendum

Sir,

Minutes of 29th meeting of the Standing Committee on Power System Planning of Southern Region were issued vide our letter number 51/4/SP&PA-2009/920-929 dated 04-09-2009. PGCIL have given their observation regarding establishment of 765kV Madhugiri S/S(to be initially charged at 400kV). Based on the observation of PGCIL, a corrigendum of the minutes of 29th meeting is enclosed at Annex-I.

Encl: Corrigendum to 29th Minutes

Yours faithfully,


(Pardeep Jindal)

Director (SP&PA)

(Telephone No. 011 26198092)





Standing Committee on Power System Planning of Southern Region (SCPSP SR)

Corrigendum to Minutes of the 29th Meeting of the Standing Committee on Power System Planning of Southern Region held on August 27, 2009 at Hyderabad

Minutes of 29th meeting of the Standing Committee on Power System Planning of Southern Region were issued vide our letter number 51/4/SP&PA-2009/920-929 dated 04-09-2009. PGCIL, vide their letter no. C/ENG/SEF/S/00/PLG dated 05-11-2009 have given their observation regarding establishment of 765kV Madhugiri S/S(to be initially charged at 400kV).

It is observed that the establishment of a new 400/220 kV sub-station at Madhugiri with provision of establishing a 765/400 kV substation in the same switchyard alongwith Gooty - Madhugiri 400kV D/C line, to be implemented by PGCIL, was agreed in the 28th Meeting of Standing Committee (refer Para 4.6.2 of the Minutes of the 28th Meeting of the Standing Committee on Power System Planning of Southern Region held on 15-06-2009) and also in the 10th Meeting of SRPC (refer Para 30.2 of the 10th Meeting of SRPC held on 02-07-2009). Subsequently the same was also inadvertently covered under Para 12.3.2 of the 29th Standing Committee Meeting.

Based on above observations, following changes are made in the Minutes of 29th meeting of the Standing Committee on Power System Planning of Southern Region:

- (1) **Para 12.3.2:** Transmission System for Coastal Energen Pvt Ltd (2x660 MW) and IND Barath Power Madras Ltd (4x350 MW) projects in Tuticorin, Tamil Nadu:

The Para 12.3.2(i) may be modified as:

- 12.3.2(i) Establishment of 765kV pooling stations at Tuticorin and Salem to be initially charged at 400kV.



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

No. 51/4/SP&PA-2010/ 442 - 451

Date: May 05, 2010

To

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

**Sub: 30th meeting of the Standing Committee on Power System Planning of Southern Region
- Minutes of the meeting.**

Sir,

The 30th meeting of the Standing Committee on Power System Planning of Southern Region was held on 13th April 2010 at PGCIL office, Sector-29, Gurgaon.

Minutes of the meeting are enclosed. The minutes are also available at CEA's website, www.cea.nic.in.

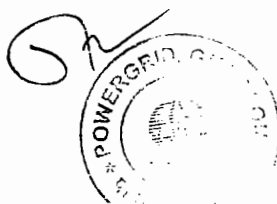
Yours faithfully,

Sd/-

(Pardeep Jindal)

Director (SP&PA)

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



**Minutes of 30th Meeting of the
Standing Committee on Power System Planning of Southern Region (SCPSPSR)
Held on April 13, 2010 at PGCIL Office, Sector-29, Gurgaon**

- 1.0 **List of participants is given at Annex-I.**
- 1.1 Welcoming the participants, Director(Projects), PGCIL stated that the new generation projects being set up by private sector were mainly inter-state in nature and required more of Inter State Transmission System and higher investment in the transmission sector. He further said that the uncertainty in generation was an issue for planning of transmission system and also that implementation was becoming more difficult.
- 1.2 Member(PS), CEA thanked PGCIL for arranging the meeting. Opening the discussions of the meeting, he stated that independent power producers were faster in putting up their generation projects, therefore, the transmission system needed to be planned well in advance so as to get sufficient time for its implementation. He advised for planning high capacity corridors wherever feasible so as to save Right of Way and optimize total investment in transmission system. He stated that, after unbundling of Electricity Boards, there was lack of a focal or nodal agency for integrated power system planning at State level. He expressed the need of establishing such an institution, which would also facilitate better coordination with States during the process of integrated planning of power system at all-India level.
- 1.3 CE(SP&PA),CEA welcomed ED(SO&NLDC) to the meeting and requested him to participate in future meetings of all Regions and give his feedback and proposals for system strengthening with a view to remove transmission congestion which was becoming a common problem with the increase in short term trading.
- 2.0 **Confirmation of the minutes of 29th meeting of the Standing Committee**
- 2.1 Chief Engineer, CEA stated that the minutes of 29th meeting of the Standing Committee on Power System Planning of Southern Region, held on 27th August 2010 at Hyderabad, were issued vide CEA's letter number 51/4/SP&PA-2009/ 920-929 dated September 04, 2009. Subsequently, it was observed that the establishment of a new 400/220 kV sub-station at Madhugiri with provision of establishing a 765/400 kV substation in the same switchyard which was agreed in the 28th Meeting of Standing Committee and also in the 10th Meeting of SRPC as regional project, got inadvertently covered under transmission system for IPP projects in Tuticorin area in the Para 12.3.2 of minutes of the 29th Meeting of the Standing Committee. Accordingly, CEA issued a corrigendum to the minutes of the 29th meeting vide letter no. 51/4/SP&PA-2009/171-180 dated 30-11-2009.
- 2.2 There were no further comments and the minutes as circulated and amended as per the corrigendum were confirmed by the Standing Committee.



TNEB Schemes:

- 3.4.1 TNEB informed that the Alamathy – SVChatram 400kV D/C line would be completed by June 2010. The transmission system for NCTPS Stage-II would be completed by March 2011 and that for Mettur TPS Ext by June 2011 matching with commissioning of the generation projects.
- 3.4.2 Regarding the Udangudi TPS (JV project of TNEB and BHEL) TNEB stated to check and confirm status of the generation project.

KSEB Schemes:

- 3.5 KSEB inform that they would complete their 220kV lines inter-linking with PGCIL's Pallakad, Cochin and Kozhikode 400kV S/Ss matching with commissioning of the 400kV Substations.

4.0 Madhugiri 400kV S/S with provision of upgrading to 765/400kV in future:

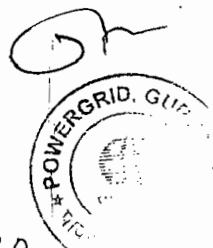
Chief Engineer, CEA informed that KSEB vide their letter no. CP/LFS/SRPC/Madhugiri/2010-11/5 dated 06-04-2010 had conveyed their agreement for establishing Madhugiri 400/220kV 2x500 MVA sub-station as regional project. Accordingly, following transmission system was agreed to be implemented by PGCIL as regional system under their scheme - "System Strengthening in Southern Region-XIII":

- a) Establishment of new 400/220kV substation at Madhugiri with 2x500 MVA transformers. While establishing the 400/220kV S/S at Madhugiri, provision of upgrading this S/S to 765kV level in future in the same switchyard would be kept. Upgradation of Madhugiri S/S to 765kV level by establishing 765/400kV part would be associated with transmission system for IPP generation projects in Southern Region.
- b) Gooty – Madhugiri 400kV D/C line
- c) Madhugiri – Yelahanka 400kV D/C Quad line

5.0 Transmission System Associated with the Coastal Energen Pvt Ltd(2x600 MW) and IND Barath Power Ltd (2x660 MW) projects in Tuticorin area of Tamil Nadu:

- 5.1 Chief Engineer, CEA explained that the Tuticorin Pooling Station – Tuticorin JV Station (of NLC) 400kV D/C Quad line was inter-alia agreed as part of the transmission system associated with the Coastal Energen Pvt Ltd(2x600 MW) and IND Barath Power Ltd (2x660 MW) projects in Tuticorin area of Tamil Nadu. Later, NLC informed that they could spare only one bay at their Tuticorin JV station. As such, considering space constraint and better capacity utilization of the 400kV quad D/C line, it is now proposed that instead of the ~~Tuticorin JV – Madhugiri 400kV D/C line, both the circuits in Tuticorin JV – Madhugiri 400kV Quad D/C line may be bunched at Tuticorin Pooling Station.~~

He further stated that a new 765/400kV Substation at Salem Pooling Station (to be initially operated at 400kV) was also inter-alia agreed as part of the above transmission system. Connectivity of this new Salem S/S with existing grid was yet to be firmed up depending upon location of the new Salem Pooling Station. It is now proposed that Salem Pooling Station be connected with existing Salem 400kV S/S with a 400kV Quad D/C line.



5.2 After discussions, the above proposed modifications in the transmission system for the Coastal Energen Pvt Ltd(2x600 MW) and IND Barath Power Ltd. (2x660 MW) projects in Tuticorin area of Tamil Nadu were agreed.

6.0 System Strengthening Proposals in Southern Region:

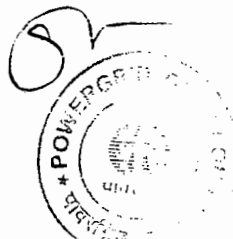
6.1 CE, CEA said that following transmission additions were proposed to be implemented for strengthening of the electric transmission grid of Southern Region:

- (i) Salem – Somanahalli 400kV Quad D/C line.
- (ii) 1x500 MVA 400/220kV Transformer Augmentation at Hosur 400/230 kV S/S
- (iii) Tiruvalam – Kolar 400kV D/C Quad D/C line.
- (iv) North Trissur – Kozhikode 400kV Quad D/C line

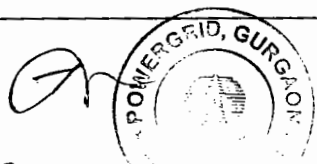
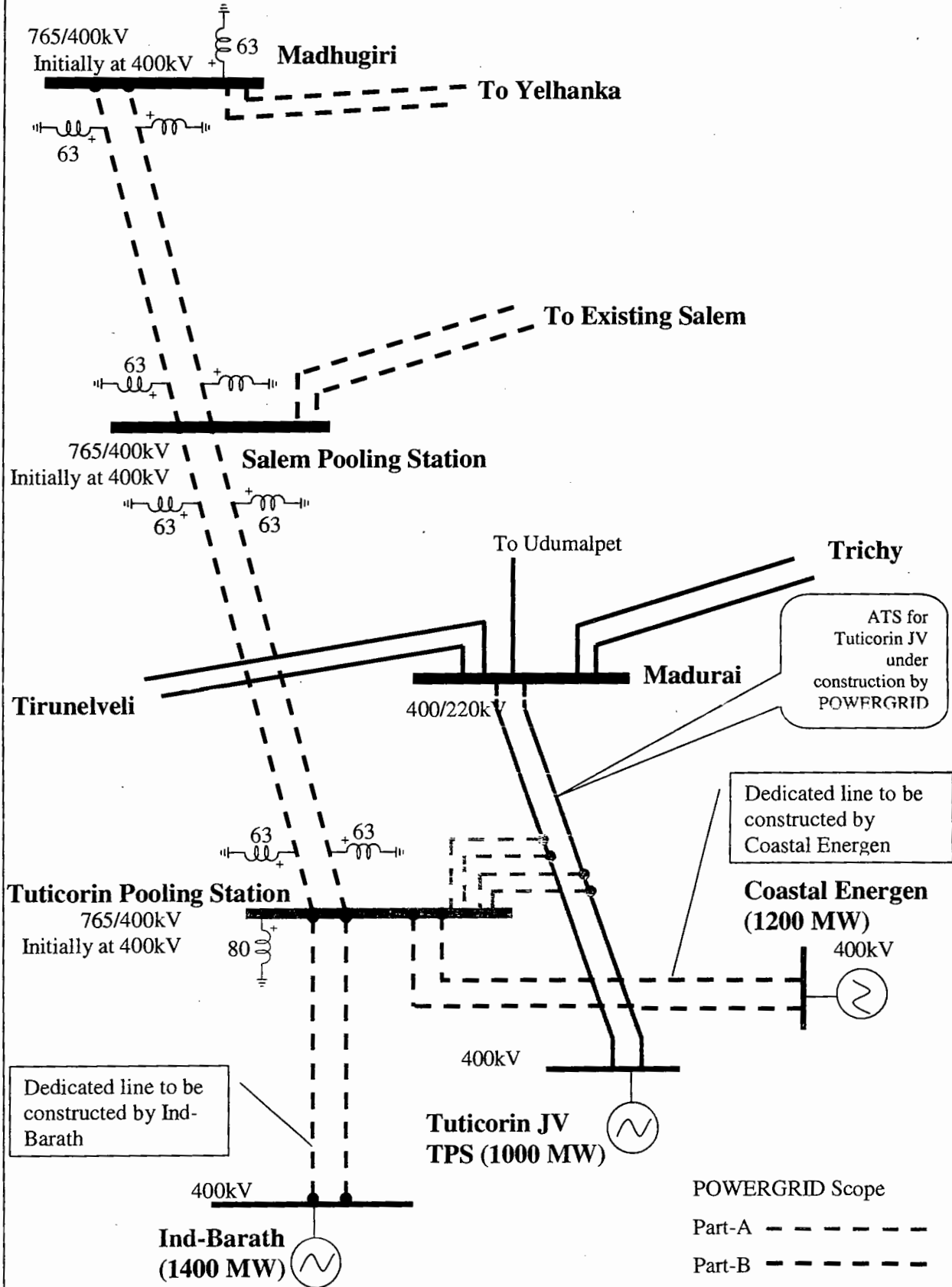
He asked the members to discuss the proposed transmission additions. ED(SO&NLDC) said that due to heavy demand by Southern Region states especially by Tamil Nadu, the Salem-Somanahalli, and Hosur-Salem lines were getting overloaded. These lines were also crucial in the event SR constituents wanted to export power during good monsoon period. PGCIL said that as the Singarapet-Hosur 400kV D/C line considered in the studies was never approved in the Standing Committee/SRPC, therefore, instead of Singarapet-Hosur 400kV D/C line, the Salem-Hosur link should also be strengthened by adding a 400kV D/C line.

Following were highlights of the discussions:

- 6.2 **Salem – Somanahalli 400kV Quad D/C line:** All the members agreed for taking up this line as regional system strengthening scheme of Southern Region.
- 6.3 **1x500 MVA 400/220kV Transformer Augmentation at Hosur 400/230 kV S/S:** All the members agreed for augmentation of transformer capacity by adding 1x500 MVA transformer at the Hosur 400/230 kV S/S as regional system strengthening scheme of Southern Region. It was clarified that as per the prevalent CERC regulation, transmission charges in respect of this transformer augmentation would be borne by TNEB.
- 6.4 **North Trissur – Kozhikode 400kV Quad D/C line:** All the members agreed for taking up this line as regional system strengthening scheme of Southern Region. Regarding using Right of Way (RoW) of existing Trissur-Kozhikode 220kV S/C line of KSEB for implementation of this line Member (Transmission), KSEB said that the North Trissur-Kozhikode 400 kV Quad D/C line might be implemented with fresh RoW and in case PGCIL faces difficulty in obtaining fresh RoW then KSEB would spare RoW of its Trissur-Kozhikode 220 kV S/C line for constructing the North Trissur- Kozhikode 400 kV D/C line.
- 6.5 **Salem – Hosur 400kV D/C line:** APTRANSCO stated that the Salem-Hosur 400kV D/C line was a new proposal and was not indicated in the studies given in the Agenda. As such, it should be considered after revised studies. However, all the other constituents agreed for taking up these transmission additions as system strengthening scheme for Southern Region. It was decided that further studies would be done by PGCIL, CEA and APTRANSCO for which APTRANSCO would inform CEA about their availability for jointly carrying out the studies. Based on result of the studies, the Salem – Hosur 400kV D/C line would be re-discussed in the next meeting of the Standing Committee.



Evacuation Arrangement for LTOA projects in Tuticorin Area



**POWER GRID CORPORATION OF INDIA LIMITED
SOUTHERN REGION - II
MANAGEMENT CERTIFICATE**

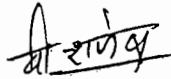
This is to Certify that the capital cost for i) LILO of both circuits of Tuticorin JV-Madurai 400 KV D/C(QUAD) line at Tuticorin Pooling Station and ii) Establishment of 765KV pooling station in Tuticorin (initially charges at 400 KV) including 1X80 MVAR, 400 KV Bus Reactor associated with Common system associated with Coastal Energen Private Limited and IND-Bharath Power(Madras) Limited LTOA generation projects in Tuticorin area (Part-A) which is anticipated to be under Commercial operation from 31.07.2014 is as below.

₹. in lakhs

Sl. No.	Description	Freehold Land	Building and other Civil works	Sub-Station	Transmission Lines	PLCC	Total
1	Expenditure up to 31.03.14	1876.29	882.65	1315.60	208.97	215.57	4499.08
2	Projected Expenditure from 01.04.2014 to 30.07.2014 (ie., up to anticipated DOCO)	0.00	686.40	1785.38	546.00	31.31	3049.09
3	Projected expenditure from 31.07.2014 to 31.03.2015	0.00	348.56	463.40	108.02	11.86	931.84
4	Projected expenditure from 01.04.2015 to 31.03.2016	0.00	375.35	539.26	144.36	0.00	1058.97
5	Projected expenditure from 01.04.2016 to 31.03.2017	0.00	50.00	0.00	0.00	0.00	50.00
	GRAND TOTAL	1876.29	2342.96	4103.64	1007.35	258.74	9588.98

Sl. No.	Particulars	TL	Sub-Station
1.	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of Civil works for the purpose of Initial Spares)	901.01	3837.47
2.	Initial Spares included above	8.57	160.29

We further certify that expenditure up to 31.03.2014 is based on the audited statement of accounts of Power Grid Corporation of India Limited, SRTS-II, Bangalore for the year ended 31.03.2014 and the projected expenditure is on the basis of estimation.



V.Rajesh,
Chief Manager(PMS)



A.H.Char
CM(Finance)

Date: 04.06.2014

वी. राजेश/V. RAJESH

मुख्य प्रबंधक(बी.डी.सी.पी.आई.ओ)/ CM(BDD, CPIO)
पावरग्रिड, दक्षिण-II क्षेत्र/POWERGRID, SRTS-II RHQ,
नं. 62, तीसरा क्रॉस, एच.ई.आई. रोड./No. 62, 3rd Cross, MEI Road,
इंडस्ट्रियल उपनगर, यशवंतपुर/Industrial Suburb, Yeshwantpur
बैंगलूरु (कर्नाटक)/Bangalore - 560 022. (Karnataka)

ए. हनुमंत चार /A. HANUMANTHA C
मुख्य प्रबंधक(वि. एन.पी.ओ)/Chief Manage-
पावरग्रिड दक्षिण-II क्षेत्र/POWERGRID, SRTS-II RHQ,
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**POWER GRID CORPORATION OF INDIA LIMITED
SOUTHERN REGION - II
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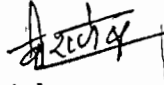
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₹. in lakhs


Sl. No.	Particulars	DCO	IEDC	IDC	Total
1	Expenditure up to 31.03.14	3578.49	466.78	453.81	*4499.08
2	Projected Expenditure from 01.04.2014 to 30.07.2014 (ie., up to anticipated DOCO)	2693.93	150.89	204.27	3049.09
3	Projected expenditure from 31.07.2014 to 31.03.2015	931.84	0.00	0.00	931.84
4	Projected expenditure from 01.04.2015 to 31.03.2016	1058.97	0.00	0.00	1058.97
5	Projected expenditure from 01.04.2016 to 31.03.2017	50.00	0.00	0.00	50.00
	GRAND TOTAL	8313.23	617.67	658.08	9588.98

We further certify that expenditure up to 31.03.2014 is based on the audited statement of accounts of Power Grid Corporation of India Limited, SRTS-II, Bangalore for the year ended 31.03.2014 and the projected expenditure is on the basis of estimation.

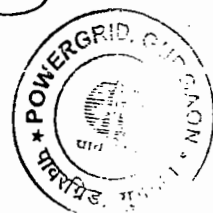
Date: 04.06.2014


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Chief Manager(PMS)

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बंगलूरु (कर्नाटक)/Bangalore - 560 022. (Karnataka)



Summary Sheet						Form I
Name of the Transmission Licensee: Power Grid Corporation of India Limited						
Name of the Region: SOUTHERN REGION						
Name of the Project: LTOA in Tuticorin Part A						
Name of the Transmission Element or Communication System: LLO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor_1						
Date of Commercial operation : 31-Jul-2014						
Particulars	Existing 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Rs. in Lacs						
Depreciation-(Form No. 10A)	0	196.05	338.52	363.66	364.49	364.49
Interest on Loan-(Form No. 9E)	0	364.72	588.19	592.93	559.41	523.79
Return on Equity-(Form No. 8)	0	325.77	547.14	580.81	582.33	582.33
Int. on Working Capital-(Form No. 11)	0	31.73	51.41	53.45	53.34	53.13
Op. and Maintenance-(Form No. 2)	0	205.06	316.51	327.03	337.9	349.08
Total		1123.33	1841.77	1917.88	1897.47	1872.82
(Petitioner)						

5



Details of Transmission Lines and Substations - Communication System

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

Name of the Region: **SOUTHERN REGION**

Name of the Project: **LTOA in Tuticorin Part A**

Name of the Transmission element or Communication system: **LLO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765KV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400KV Bus Reactor**

Date of Commercial Operation: **31-Jul-2014**

Transmission Lines:

Sl.No.	Name of Line	Type of Line AC/HVDC	S/C or D/C	No. of Sub-Conductors	Voltage level KV	Line Length Ckt. KM	Line length	Date of Commercial operation	Covered in the present petition	
									Yes/No	If No, petition No.
1	LLO of both circuits of Madurai - Tuticorin JV 400KV D/C Quad line at Tuticorin Pooling Station	AC	DC	4	400 KV	9.138	4.569	31-Jul-14	Y	

Substations:

Sl. No.	Name of Sub-station	Type of Substation	Voltage level KV	No. of Transformers / Reactors/ SVC etc.	No. of Bays	Date of Commercial operation	Covered in the present petition	
							Yes/No	If No, petition No.
1	TUTICORIN POOLING STATION-madurai - I bay		400	765 KV	220 KV	31-Jul-14	Y	
2	TUTICORIN POOLING STATION-madurai - II bay		400			31-Jul-14	Y	
3	TUTICORIN POOLING STATION-Tuticorin JV-I bay		400			31-Jul-14	Y	
4	TUTICORIN POOLING STATION-Tuticorin JV-II bay		400			31-Jul-14	Y	
5	TUTICORIN POOLING STATION-Bus reactor bay		400			31-Jul-14	Y	
Total				5				

Communication System:

Sl. No.	Name of Communication System	Type of Communication	Technical Particulars	Number / length	Date of Commercial	Covered in the present petition	
						Yes/No	If No, petition No.

(Petitioner)



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Normative parameters considered for tariff computations

Name of the Petitioner :: Power Grid Corporation of India Limited
 Name of the Region :: SOUTHERN REGION
 Name of the Project :: LTOA in Tuticorin Part A
 Name of the Transmission Element or Communication System :: LIO of both circuits of Tuticorin JV Madurai 400KV D/C (Quad) line at Tuticorin Pooling Station along with new 765KV Pooling Station at Tuticorin (initially charged at 400KV) including 1 x 80 MVAR, 400KV Bus Reactor
 Date of Commercial Operation: 31-Jul-2014

Particulars	Unit	Existing 2013-14	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%	20.96%	20.96%	20.96%	20.96%	20.96%
Effective tax rate	%	17.48%	19.61%	19.61%	19.61%	19.61%	19.61%
Grossed up Rate of ROE	%		98%	98%	98%	98%	98%
Target availability - AC System	%		96%	96%	96%	96%	96%
Target availability - HVDC System	%						
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							
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
Balia-Bhiwadi HVDC Bipole Scheme	Rs. Lakh	1326.25	1537	1666	1805	1955	2119
HVDC Back-to Back Stations	Rs. Lakh	553	578	627	679	736	797
Rihand-Dadri HVDC Bipole 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	2
Bank Rate as on 1st April, 2014	%	13.2	13.5	13.5	13.5	13.5	13.5

(Petitioner)



Statement of Capital Cost

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

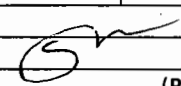
Name of the Region: SOUTHERN REGION

Name of the Project: LTOA in Tuticorin Part A

Name of the Transmission Element: LILO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Date of Commercial Operation: 31-Jul-2014

Particulars	Rs. in Lacs					
	Existing 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
A. a) Opening Gross Block Amount as per books		7548.17	8480.01	9538.98	9588.98	9588.98
b) Amount of capital liabilities in A(a) above						
c) Amount of IDC,FC,FERV and Hedging cost included in A(a) above		658.08	658.08	658.08	658.08	658.08
d) Amount of IEDC (excluding IDC,FC,FERV and Hedging cost) included in A(a) above		617.67	617.67	617.67	617.67	617.67
B. a) Addition in Gross Block Amount during the period		931.84	1058.97	50		
b) Amount of capital liabilities in B(a) above						
c) Amount of IDC,FC,FERV and Hedging cost included in B(a) above						
d) Amount of IEDC (excluding IDC,FC,FERV and Hedging cost) included in B(a) above						
C. a) Closing Gross Block Amount as per Books		8480.01	9538.98	9588.98	9588.98	9588.98
b) Amount of capital liabilities in C(a) above						
c) Amount of IDC,FC,FERV and Hedging cost included in C(a) above		658.08	658.08	658.08	658.08	658.08
d) Amount of IEDC (excluding IDC,FC,FERV and Hedging cost) included in C(a) above		617.67	617.67	617.67	617.67	617.67


(Petitioner)

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

Name of the Transmission Licensee : Power Grid Corporation of India Ltd
 Name of the Region : Southern Region-II
 Name of the Project : COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH POWER (MADRAS) LIMITED LTOA GENERATION PROJECTS IN TUTICORIN AREA-PART-A
 Transmission Line : LILO OF BOTH CIRCUITS OF TUTICORIN JV-MADURAI 400KV D/C (QUAD) LINE AT TUTICORIN POOLING STATION
 Sub-Station : 765/400 KV TUTICORIN NEW SUBSTATION
 Anticipated DOCO : 31.07.2014

Capital Cost Estimates

Board of Director/ Agency approving the Capital cost estimates:	Govt of India	
Date of approval of the Original cost estimates:	IA No: C/CP/LTA-Tuticorin Part-A Dt:12.12.2011 Date of approval: 05.12.2011	
Price level of approved estimates	Cost as per original estimates 3rd Quarter 2011	Completed Cost As on Scheduled COD of the transmission
Foreign Exchange rate considered for the Capital cost estimates	NIL	NIL
Capital Cost excluding IDC , IEDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)	NIL	NIL
Domestic Component (Rs. lac.)	7972.46	8313.23
Capital cost excluding IDC & FC (Rs. lac)	7972.46	8313.23
IDC , IEDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)	NIL	NIL
Domestic Component (Rs. lac.)	1071.63	1275.75
Total IDC & FC (Rs.lac)		
Rate of taxes & duties considered		
Capital cost Including IDC & FC		
Foreign Component, if any (In Million US \$ or the relevant Currency)	NIL	NIL
Domestic Component (Rs. lac.)	9044.09	9588.98
Total Capital cost Including IDC & FC (Rs. lac)	9044.09	9588.98
Schedule of Commissioning	28 Months from date of investment approval i.e. 12.12.2011	31.07.2014
(Scheduled DOCO elementwise)	NA	

[Handwritten Signature]

PETITIONER



Element wise Break-up of Project Cost for Transmission System

Name of the Transmission Licensee :

Power Grid Corporation of India Ltd

Name of the Region :

Southern Region-II

Name of the Project :

COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH POWER (MADRAS) LIMITED LTGA GENERATION PROJECTS IN TUTICORIN AREA-PART-A

Name of the Transmission Element:

- i) Transmission Line
 - ii) Substation
- Anticipated DOCO

L1LO OF BOTH CIRCUITS OF TUTICORIN JV-MADURAI 400KV D/C (QUAD) LINE AT TUTICORIN POOLING
785/400 KV TUTICORIN NEW SUBSTATION
31.07.14

Cost in Rs. Lacs

S.No	Break Down	As per original Estimates			Actual expenditure as on COD			Liabilities / Provision (Balance)	Variation	Reasons for Variation	Admitted Cost
		Qty	Rate	Total	Qty	Rate	Total				
1	2	3			4			5	6=3-4-5	7	8
				Total							
A	TRANSMISSION LINE										
1.00	Preliminary works			0.00			0.00	0.00	0.00		
1.10	Design & Engineering			0.00			0.00	0.00	0.00	Compenstaion is per the assesment by Revenue Authorities	
1.20	Preliminary investigation, Right of way, forest clearance, PTCC, general civil works etc.			0.91			0.00	0.00	0.91		
	Compenstaion			26.11			1.00	3.00	22.11		
1.30	Total Preliminary works			27.02			1.00	3.00	23.02		
2.00	Transmission Lines material										
2.10	Towers Steel	988.00	0.58	574.48	426.00	0.76	241.00	82.00	251.48	Variation in cost is due to change in price levels of awarded packages through competitive bidding	
2.20	Conductor	244.00	3.43	836.41	111.00	2.36	210.00	52.00	574.41		
2.30	Earth Wire	21.00	0.53	11.22	7.22	0.42	2.73	0.27	8.22		
2.40	Insulators										
	120 KN Insulators	281.00	0.06	17.83	145.00	0.07	7.30	3.40	7.13		
	160 KN Insulators	632.00	0.08	52.23	436.00	0.08	18.70	16.06	17.47		
2.50	Hardware Fittings(No)	329.00	0.34	113.26	192.00	0.35	50.00	18.00	45.28		
2.60	Conductor & Earthwire accessories	2106.00	0.02	39.21	886.00	0.02	13.00	1.00	25.21		
2.70	Spare			19.79			0.00	8.57	11.22		
2.80	Erection, Stringing, wind measure equipment & Civil										
	Tower Erection	988.00	0.05	45.55	426.00	0.05	10.00	9.79	25.76		
	Civil works			301.80			90.00	13.08	198.72		
	Stringing (km)	10.00	3.08	30.78	4.57	3.31	5.00	10.13	16.83		
	Total Transmission Lines material			2042.86			647.73	214.39	1180.83		
3.00	Taxes and Duties			0.00			0.00	35.00	0.00		
3.10	Custom Duty			0.00			0.00	0.00	0.00	Taxes & duties as per Actual	
3.20	Other Taxes & Duties			0.00			0.00	0.00	0.00		
	Total Taxes & Duties			210.90			0.00	35.00	175.90		
	Total - Transmission Lines			2280.48			648.73	252.30	1379.46		
B	SUBSTATION										
4.00	Preliminary works & land			0.00			0.00	0.00	0.00		
4.10	Design & Engineering			12.00			0.00	0.00	0.12	Compenstaion is per the assesment by Revenue Authorities	
4.20	Land			1002.87			1492.00	4.00	-4.93		
4.30	Site preparation			0.00			0.00	30.10	-0.30		
	Total Preliminary works & land			1014.87			1492.00	34.10	-811.23		
5.00	Civil Works										
5.10	Township & Colony			701.00			0.00	514.00	187.00		
5.20	Control Room & Office Building including IIVAC										
5.30	Roads and Drainage(incl.in 5.2)										
5.40	Foundation for structures			1297.00			1311.00	229.00	-243.00		
5.50	Misc. civil works										
	Total Civil Works			1998.00			1311.00	743.00	-56.00		



Element wise Break-up of Project Cost for Transmission System

Name of the Transmission Licensee :
Name of the Region :

Power Grid Corporation of India Ltd
Southern Region-II

Name of the Project :

COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH POWER (MADRAS) LIMITED LTOA GENERATION PROJECTS IN TUTICORIN AREA-PART-A

Name of the Transmission Element:

- i) Transmission Line
 - ii) Substation
- Anticipated DOCO

L10 OF BOTH CIRCUITS OF TUTICORIN JV-MA^SURAI 400KV DIC (QUAD) LINE AT TUTICORIN POOLING
765/400 KV TUTICORIN NEW SUBSTATION
31.07.14

Cost in Rs. Lacs

S.No	Break Down	As per original Estimates			Actual expenditure as on COD			Liabilities / Provision (Balance)	Variation	Reasons for Variation	Admitted Cost
		Qty	Rate	Total	Qty	Rate	Total				
1	2	3			4			5	6=3-4-5	7	8
				Total							
6.00	Substation Equipments										
6.10	Switchgear (CT, PT, Circuit Breaker, Isolator etc)										
	Circuit Breaker	9.00	24.53	220.78	9.00	42.71	307.10	77.28	-163.62	Variation in cost is due to change in price levels of awarded packages through competitive bidding	
	Isolators	28.00	6.34	177.59	28.00	7.57	169.54	42.39	-34.34		
	Current Transformer	27.00	6.30	170.02	27.00	8.76	189.27	47.32	-66.57		
	CVT	18.00	3.22	57.88	18.00	4.74	84.82	20.47	-27.41		
	LA, WT etc			22.30			114.48	49.05	-141.21		
6.20	Transformers										
6.30	Compensating Equipment(Reactor, SVCs etc)	1.00	345.79	345.79	1.00	378.00	302.00	76.00	-32.21		
6.40	Control, Relay & Protection Panel	1.00	162.44	162.44	1.00	348.00	275.00	71.00	-183.56		
6.50	PLCC	1.00	129.55	129.55	1.00	210.00	193.00	17.00	-80.45		
6.60	HVDC package										
6.70	Bus Bars/ conductors/Insulators/Hardwares	1.00	227.20	227.20	1.00	422.00	303.00	119.00	-194.80		
6.80	Outdoor lighting										
6.90	Station Auxiliaries	1.00	398.78	398.78	1.00	717.30	494.16	221.71	-318.52		
6.10	Grounding System										
6.11	Structure for switchyard erection	1.00	298.28	298.28	1.00	417.00	363.00	54.00	-118.72		
6.12	Erection			86.88			45.00	56.00	-14.02		
	Total Substation Equipments			2297.57			2820.36	851.21	-1374.00		
7.00	Spares			81.56			0.00	160.20	-78.64		
8.00	Taxes and Duties			260.81				0.00	260.81	No Taxes due to bought-out items	
8.10	Custom Duty										
8.20	Other Taxes & Duties										
	Total Taxes & Duties			260.81				0.00	260.81		
								0.00	0.00		
	Total (Sub-station)			5652.81			5623.36	1788.51	-1758.06		
9.00	Construction and pre-commissioning expenses			0.00				0.00	0.00		
9.10	Site supervision & site admn.etc			0.00				0.00	0.00		
9.20	Tools and Plants			0.00				0.00	0.00		
9.30	construction Insurance			0.00				0.00	0.00		
	Total Construction and pre commissioning expenses			0.00				0.00	0.00		
10.00	Overheads			802.62						IEDC as per actual	
10.10	Establishment			81.64			618.00	0.00	90.88		
10.20	Audit & Accounts										
10.30	Contingency			184.62					00.68		
	Total Overheads			708.68			618.00	0.00	90.68		
11.00	Project cost without IDC & FC			6641.97			6890.09	2040.81	-288.93		
12.00	Total Cost (Plant & Equipment)										
12.10	Interest During Construction			402.06			658.08	0.00	-256.02	IDC as per Actual	
12.20	Financing charges			0.00							
12.30	FERV			0.00							
12.40	Hedging Cost			0.00							
	Total of IDC, FERV & Hedging cost			402.06			658.08	0.00	-256.02		
13.00	Project cost including IDC & FC			9044.03			7548.17	2040.81	-544.95		

Petitioner

2/2



Break-up of Construction/Supply/Service packages

Name of the Transmission Licensee : Power Grid Corporation of India Ltd
Name of the Region : Southern Region-II

Name of the Project : COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH POWER (MADRAS) LIMITED LTOA GENERATION PROJECTS IN TUTICORIN AREA-PART-A

Name of the Transmission Element: LILO OF BOTH CIRCUITS OF TUTICORIN JV-MADURAI 400KV D/C (QUAD) LINE AT TUTICORIN POOLING STATION
Transmission Line Sub-station: 76S/400 KV TUTICORIN NEW SUBSTATION
Anticipared DOCO: 31.07.14

Sl.No	Name/No. of Construction/supply/service package	Scope of works ¹ (in line with head of cost break-ups as applicable)	Whether awarded through ICB/DCB/ Departmentally/ Deposit Work etc & No. of bids received	No. of bids received	Date of Award	Date of Start of work	Date of Completion of Work	Value of Award ² in (Rs. Cr.)	Firm or With Escalation in prices	Actual expenditure till the completion or up to COD whichever is earlier (incl PV & taxes & duties)	IEDC	IDC, FC, FERV & Hedging cost	Sub-total
B	Substation package for construction of 400 kV Tuticorin SS along with LILO of both Circuits of 400 kV Tuticorin-Madurai JV												
1.0	Sub-station & LILO composite package	Supply +Erection	DCB		25.03.2013	26.03.2013	25.09.14 (18 Months from the date of Award)	6130.00	Escalation	44.77	6.18	6.58	72.75
4.0	80 MVAR Bus Reactor	Supply & Erection	DCB		15.12.2011	16.12.2011	01.07.2013	346.00	Escalation	3.02			
3.0	Compensation									14.93			
									Total	62.72	6.18	6.58	75.48

Peditioner

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DETAILS OF ELEMENT WISE COST

Power Grid Corporation of India Ltd
Southern Region-II

COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE
LIMITED AND IND-BARATH POWER (MADRAS) LIMITED LTOA
GENERATION PROJECTS IN TUTICORIN AREA-PART-A

Name of the Region :

Name of the Project :

Name of the Transmission Element:

Transmission Line:

Sub-station

Anticipated DOCO

LILO of both ckts of Tuticorin JV-Madurai 400kV D/C Quad Line at
Tuticorin Pooling Station

400 KV TUTICORIN NEW SUBSTATION

31.07.14

Transmission lines

S.NO.	Name of line	Apportioned approved Cost (Rs. Crores)	Completed Cost (Rs. Crores)	Covered in the Present Petition	
				Yes / NO	If No, Petition No.
1	COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH POWER (MADRAS) LIMITED LTOA GENERATION PROJECTS IN TUTICORIN AREA-PART-A	90.44	95.89	Yes	
	Total	90.44	95.89		

Petitioner



Financial Package upto COD (Block Year- 2014-2019)					Form-6
Name of the Transmission Licensee: Power Grid Corporation of India Limited					
Name of the Region: SOUTHERN REGION					
Name of the Project: LTOA in Tuticorin Part A					
Name of the Transmission Element or Communication Element: LILO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor					
Date of commercial Operation: 31-Jul-2014					
					Rs. In Lakhs
Particulars	Financial Package as Approved		Financial Package as on COD		As Admitted by COD / 31.03.2014
	Currency and Amount		Currency and Amount		Currency and Amount
Loans					
Loans-Domestic	INR	6331.01	INR	5283.72	
Loans-Foreign			INR	0	
Total Loans	INR	6331.01	INR	5283.72	INR
Equity					
Foreign					
Domestic	INR	2713.29	INR	2264.45	
Notional					
Total Equity	INR	2713.29	INR	2264.45	INR
Debt Equity Ratio				70:30:00	
Total Cost	INR	9044.3	INR	7548.17	INR
	Debt	Equity	Total		
Add Cap for 2014-2015			931.84		
Add Cap for 2015-2016			1058.97		
Add Cap for 2016-2017			50		
Add Cap for 2014-2015	Actual	Normative			
Debt		652.29			
Equity		279.55			
Total		931.84			
Add Cap for 2015-2016	Actual	Normative			
Debt		741.28			
Equity		317.69			
Total		1058.97			
Add Cap for 2016-2017	Actual	Normative			
Debt		35			
Equity		15			
Total		50			
Total Capital cost with Addcap		9588.98			

(Petitioner)



Statement of Additional Capitalisation after COD

Name of the Petitioner: Power Grid Corporation of India Limited

Name of the Region: SOUTHERN REGION

Name of the Project: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication system: LILO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Date of Commercial Operation: 31-Jul-2014

Sl. No.	Year	Work / Equipment proposed to be added after COD upto cut off date/beyond cut off date	Amount capitalised and proposed to be capitalised	Justification	Regulation under which covered ☺	Admitted Cost
1	2014-2015	BUILDING	348.56	Balance and Retention, under 14 (1) (3)		
2	2014-2015	TR LINE	108.02	Balance and Retention		
3	2014-2015	SUB STATION	463.4	Balance and Retention		
4	2014-2015	PLCC	11.86	Balance and Retention		
	2014-2015	Total	931.84			
5	2015-2016	BUILDING	375.35	Balance and Retention		
6	2015-2016	TR LINE	144.36	Balance and Retention		
7	2015-2016	SUB STATION	539.26	Balance and Retention		
	2015-2016	Total	1058.97			
8	2016-2017	BUILDING	50	Balance and Retention		
	2016-2017	Total	50			

☺ Under 14 (1) (2)

(Petitioner)




Financing of Additional Capitalisation

Name of the Petitioner: Power Grid Corporation of India Limited

Name of the Region: SOUTHERN REGION

Name of the Project: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication System: LLO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Date of Commercial Operation: 31-Jul-2014

Financial Year	Actual/Projected					Admitted			Amount in Lakhs
	2014-15	2015-16	2016-17	2017-18	2018-19				
Amount Capitalised in Work/Equipment									
Financing Details									
Loan	652.29	741.28	35	0	0				
Total Loan	652.29	741.28	35	0	0				
Equity	279.55	317.69	15	0	0				
Total	931.84	1058.97	50	0	0				

(Petitioner)



Calculation of Return on Equity

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

Name of the Region: SOUTHERN REGION

Name of the Project: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication System: LLO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Date of Commercial operation: 31-Jul-2014

Particulars	Rs. in Lacs					
	Existing 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	0	2264.45	2544	2861.69	2876.69	2876.69
Notional Equity on Add Cap	0	279.55	317.69	15	0	0
Total Equity	0	2544	2861.69	2876.69	2876.69	2876.69
Average Equity	0	2404.23	2702.85	2869.19	2876.69	2876.69
Rate of Return on Equity (%)	0	20.243	20.243	20.243	20.243	20.243
Return on Equity	0	486.69	547.14	580.81	582.33	582.33
Pro rata Return on Equity	0	325.77	547.14	580.81	582.33	582.33
Calculation of Grossed up Rate of ROE						
Rate of ROE	0	15.5	15.5	15.5	15.5	15.5
Time Line Incentive	0	0.5	0.5	0.5	0.5	0.5
Communication Dis-incentive	0	0	0	0	0	0
Effective Rate of ROE	0	16	16	16	16	16
MAT Rate	0	20.96	20.96	20.96	20.96	20.96
Grossed up Rate of ROE	0	20.243	20.243	20.243	20.243	20.243

(Petitioner)



Details of additional RoE

Name of the Transmission Licensee : Power Grid Corporation of India Ltd
 Name of the Region : Southern Region-II
 Name of the Project : COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH POWER (MADRAS) LIMITED LTOA GENERATION PROJECTS IN TUTICORIN AREA-PART-A

Name of the Transmission Element: LILO OF BOTH CIRCUITS OF TUTICORIN JV-MADURAI 400KV D/C (QUAD) LINE AT TUTICORIN POOLING STATION
 Transmission Line SUBSTATION : 765/400kV TUTICORIN NEW POOLING SUBSTATION
 Anticipated DOCO : 31.07.2014

Project/ Element	Completion Time as per Investment approval			Actual Completion time			Qualifying time schedule(as per regulation) (in months)
	Start Date	Scheduled COD (Date)	Months	Start Date	Actual COD (Date)	Months	
Transmission Line: Salem Pooling station to Salem 400kV D/C quad line Substation: i. Extension of Salem substation ii. Establishment of 765/400kV pooling station at Salem (Initially charged at 400kV)	12.12.2011	12.04.2014	28	12.12.2011	31.07.2014	31	36

(Petitioner)




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: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication System: LILO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Date of Commercial Operation: 31-Jul-2014

Particulars						Rs. in Lacs
	Existing 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
BOND-XXXIV-Loan-1-						
Gross Opening Loan	0	463	463	463	463	463
Cumulative Repayments of Loans upto Previous Year	0	0	38.58	77.16	115.74	154.32
Net Loans Opening	0	463	424.42	385.84	347.26	308.68
Add: Drawl(s) during the year	0	0	0	0	0	0
Less: Repayment(s) of Loan during the year	0	38.58	38.58	38.58	38.58	38.58
Net Closing Loan	0	424.42	385.84	347.26	308.68	270.1
Average Net Loan	0	443.71	405.13	366.55	327.97	289.39
Rate of Interest on Loan	0	8.84	8.84	8.84	8.84	8.84
Interest on Loan	0	39.22	35.81	32.4	28.99	25.58
BOND XXXVII-Loan-3-						
Gross Opening Loan	0	1293	1293	1293	1293	1293
Cumulative Repayments of Loans upto Previous Year	0	0	0	107.75	215.5	323.25
Net Loans Opening	0	1293	1293	1185.25	1077.5	969.75
Add: Drawl(s) during the year	0	0	0	0	0	0
Less: Repayment(s) of Loan during the year	0	0	107.75	107.75	107.75	107.75
Net Closing Loan	0	1293	1185.25	1077.5	969.75	862
Average Net Loan	0	1293	1239.13	1131.38	1023.63	915.88
Rate of Interest on Loan	0	9.25	9.25	9.25	9.25	9.25
Interest on Loan	0	119.6	114.62	104.65	94.69	84.72

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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: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication System: LILO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Date of Commercial Operation: 31-Jul-2014

Particulars	Existing 2013-14	2014-15	2015-16	2016-17	2017-18	Rs. in Lacs
						2018-19
SBI (21.03.2012)-Loan-2-						
Gross Opening Loan	0	1394	1394	1394	1394	1394
Cumulative Repayments of Loans upto	0	0	0	0	126.73	253.46
Net Loans Opening	0	1394	1394	1394	1267.27	1140.54
Add: Drawl(s) during the year	0	0	0	0	0	0
Less: Repayment(s) of Loan during the year	0	0	0	126.73	126.73	126.73
Net Closing Loan	0	1394	1394	1267.27	1140.54	1013.81
Average Net Loan	0	1394	1394	1330.64	1203.91	1077.18
Rate of Interest on Loan	0	10.25	10.25	10.25	10.25	10.25
Interest on Loan	0	142.89	142.89	136.39	123.4	110.41
PROPOSED LOAN 2014-15 (10.25%)-Loan-4-						
Gross Opening Loan	0	2133.72	2133.72	2133.72	2133.72	2133.72
Cumulative Repayments of Loans upto	0	0	0	0	0	0
Net Loans Opening	0	2133.72	2133.72	2133.72	2133.72	2133.72
Add: Drawl(s) during the year	0	0	0	0	0	0
Less: Repayment(s) of Loan during the year	0	0	0	0	0	177.81
Net Closing Loan	0	2133.72	2133.72	2133.72	2133.72	1955.91
Average Net Loan	0	2133.72	2133.72	2133.72	2133.72	2044.82
Rate of Interest on Loan	0	10.25	10.25	10.25	10.25	10.25
Interest on Loan	0	218.71	218.71	218.71	218.71	209.59
Summary						
Gross Opening Loan	0	5283.72	5283.72	5283.72	5283.72	5283.72
Cumulative Repayments of Loans upto	0	0	38.58	184.91	457.97	731.03
Net Loans Opening	0	5283.72	5245.14	5098.81	4825.75	4552.69
Add: Drawl(s) during the year	0	0	0	0	0	0
Less: Repayment(s) of Loan during the year	0	38.58	146.33	273.06	273.06	450.87
Net Closing Loan	0	5245.14	5098.81	4825.75	4552.69	4101.82
Average Net Loan	0	5264.43	5171.98	4962.29	4689.23	4327.27
Rate of Interest on Loan	0	9.89	9.9	9.92	9.93	9.94
Interest on Loan	0	520.42	512.02	492.15	465.79	430.31

(Petitioner)





भारतीय स्टेट बैंक
State Bank of India

कॉर्पोरेट लेखा समूह शाखा, जवाहर व्यापार भवन,
11-12 वां तल, 1, टॉलस्टॉय मार्ग, नई दिल्ली-110 001
Corporate Accounts Group Branch, Jawahar Vyapar Bhawan,
11th & 12th Floor, 1, Tolstoy Marg, New Delhi-110 001

Tel. : 23374525, 23374505, 23374541 (AMT-1), 23353022 (AGM & COO), 23701043, 23359506 (A & A), 23352995 (CS), 23352968 (IB)
Fax : 23353101 (Sectt.), 23352793 (CS), 23353029 (IB)

TO WHOM IT MAY CONCERN

CERTIFICATE: BASE RATE (BR)

We confirm that the BASE RATE of State Bank of India on the following dates was as under:

Base Rate as on 01.04.2014

10.00% p.a.


(IPS Manchanda)

Chief Manager & Credit Analyst (AMT-1)
08.04.2014





**NATIONAL STOCK EXCHANGE
OF INDIA LIMITED**

Stock of the nation

Ref.: NSE/LIST/ 151475-T

November 15, 2010

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

Kind Attn. : Mr. K.C. Pant

Dear Sir,


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

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

In this connection, we are pleased to inform you that the securities as specified in the application are duly listed on the WDM segment with effect from November 15, 2010 and all members have been suitably informed as per details given in Annexure I.

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

Yours truly,
For National Stock Exchange of India Limited


Johnson Joseph
Chief Manager





Annexure I
Power Grid Corporation of India Limited
Details of Securities

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





**NATIONAL STOCK EXCHANGE
OF INDIA LIMITED**

50
Stock of the nation

Ref.: NSE/LIST/155559-V

January 4, 2012

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

Kind Attn. : Mr. K.C. Pant

Dear Sir,


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

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

In this connection, we are pleased to inform you that the securities as specified in the application are duly listed on the WDM segment with effect from January 4, 2012 and all members have been suitably informed as per details given in Annexure I.

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

Yours truly,
For National Stock Exchange of India Limited


Johnson Joseph
Chief Manager

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Continuation Sheet

Annexure I
Power Grid Corporation of India Limited
Details of Securities

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





भारतीय स्टेट बैंक
State Bank of India

कॉरपोरेट लेखा समूह शाखा, जवाहर व्यापार भवन,
11-12 या तल, 1, टॉलस्टोय मार्ग, नई दिल्ली-110 001
Corporate Accounts Group Branch, Jawahar Vyapar Bhawan,
11th & 12th Floor, 1, Tolstoy Marg, New Delhi-110 001

Tel. : 23374525, 23374505, 23374541 (AMT-1), 23353022 (AGM & COO), 23701043, 23359506 (A & A), 23352995 (CS), 23352968 (IB)
Fax : 23353101 (Sectt.), 23352793 (CS), 23353029 (IB)

The Dy. General Manager (Finance),
Power Grid Corporation of India Ltd.,
Corporate Office,
Saudamini, Plot No 2
Sec-29, Gurgaon-122001
Haryana

Fax No. 0124-2571889

CAG/AMT-1/2013-14/ 669

26.12.2013

Dear Sir,

PAYMENT OF MONTHLY INTEREST ON TERM LOANS
INTEREST FOR THE MONTH OF DEC 2013

With reference to above, an interest calculated on daily products basis, as detailed below, is payable on 01.01.2014. We give below the term loan-wise/account-wise break up enabling you to make the payment online.

Term Loan

Account No	Amount	Period	Days	Interest Rate(%)	Amount Payable(INR)
32247673988	39500000000	01.12.13 to 01.12.13	1	10.25	11092466
	40500000000	02.12.13 to 05.12.13	4	10.25	45493151
	42000000000	06.12.13 to 12.12.13	7	10.25	82561644
	45750000000	13.12.13 to 15.12.13	3	10.25	38542808
	47350000000	16.12.13 to 16.12.13	1	10.25	13296918
	48350000000	17.12.13 to 23.12.13	7	10.25	95044178
	49350000000	24.12.13 to 31.12.13	8	10.25	110868493
		TOTAL	31		396899658

Short Term Loan

Account No	Amount	Period	Days	Interest Rate(%)	Amount Payable(INR)
32842014906	20000000000	01.12.13 to 31.12.13	31	10	169863014
		TOTAL	31		169863014
GRAND TOTAL					566762672

2. We, therefore, request you to make suitable arrangements to fund your current account, so that we receive the credit into your TL account on 01.01.2014.

Yours faithfully

Dy. General Manager & RM(AMT-1)



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: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication System: LILO of both circuits of Tuticorin JV-Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Date of Commercial Operation: 31-Jul-2014

Particulars	2013-14		2014-15		2015-16		2016-17		2017-18		2018-19	
	Existing											Rs. in Lacs
Gross Normative Loan Opening	0	5283.72	5936.01	6677.29	6712.29	6712.29	6712.29	6712.29	6712.29	6712.29	6712.29	6712.29
Cumulative Repayments of Normative Loans upto Previous Year	0	0	196.05	534.57	898.23	1262.72						1262.72
Net Normative Loans Opening	0	5283.72	5739.96	6142.72	5814.06	5449.57						5449.57
Increase/Decrease due to ACE during the year	0	652.29	741.28	35	0	0						0
Less: Repayment(s) of Normative Loan during the year	0	196.05	338.52	363.66	364.49	364.49						364.49
Net Closing Normative Loan	0	5739.96	6142.72	5814.06	5449.57	5085.08						5085.08
Average Net Normative Loan	0	5511.84	5941.34	5978.39	5631.82	5267.33						5267.33
Rate of Interest on Loan	0	9.89	9.9	9.92	9.93	9.94						9.94
Interest on Normative Loan	0	544.87	588.19	592.93	559.41	523.79						523.79
Pro rata Interest on Normative Loan	0	364.72	588.19	592.93	559.41	523.79						523.79

(Petitioner)



Calculation of Depreciation Rate

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

Name of the Region: SOUTHERN REGION

Name of the Project: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication System: LILO of both circuits of Tuticorin JV, Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Date of Commercial Operation: 31-Jul-2014

Sl. No.	Particulars	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Dep. Rate	Rs. in Lacs Amount
2014-2015							
1	FREEHOLD LAND	1876.29	0	1876.29	1876.29	0	0
2	BUILDING	1569.05	348.56	1917.61	1743.33	3.34	58.23
3	TR LINE	754.97	108.02	862.99	808.98	5.28	42.71
4	SUB STATION	3100.98	463.4	3564.38	3332.68	5.28	175.97
5	PLCC	246.88	11.86	258.74	252.81	6.33	16
6	LEASEHOLD LAND	0	0	0	0	3.34	0
	Total	7548.17	931.84	8480.01	8014.09		292.91
	Weighted Average Rate of Depreciation						3.65
	Lapsed life						1
2015-2016							
1	FREEHOLD LAND	1876.29	0	1876.29	1876.29	0	0
2	BUILDING	1917.61	375.35	2292.96	2105.29	3.34	70.32
3	TR LINE	862.99	144.36	1007.35	935.17	5.28	49.38
4	SUB STATION	3564.38	539.26	4103.64	3834.01	5.28	202.44
5	PLCC	258.74	0	258.74	258.74	6.33	16.38
6	LEASEHOLD LAND	0	0	0	0	3.34	0
	Total	8480.01	1058.97	9538.98	9009.5		338.52
	Weighted Average Rate of Depreciation						3.76
	Lapsed life						2
2016-2017							
1	FREEHOLD LAND	1876.29	0	1876.29	1876.29	0	0
2	BUILDING	2292.96	50	2342.96	2317.96	3.34	77.42
3	TR LINE	1007.35	0	1007.35	1007.35	5.28	53.19
4	SUB STATION	4103.64	0	4103.64	4103.64	5.28	216.67
5	PLCC	258.74	0	258.74	258.74	6.33	16.38
6	LEASEHOLD LAND	0	0	0	0	3.34	0
	Total	9538.98	50	9588.98	9563.98		363.66
	Weighted Average Rate of Depreciation						3.8
	Lapsed life						3

Y2



Calculation of Depreciation Rate

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

Name of the Region: SOUTHERN REGION

Name of the Project: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication System: LILO of both circuits of Tuticorin JV-Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Date of Commercial Operation: 31-Jul-2014

Sl. No.	Particulars	Gross block at the beginning of the year	Add Cap during the year	Gross block at the end of the year	Average Gross Block	Dep. Rate	Rs. in Lacs Amount
2017-2018							
1	FREEHOLD LAND	1876.29	0	1876.29	1876.29	0	0
2	BUILDING	2342.96	0	2342.96	2342.96	3.34	78.25
3	TR LINE	1007.35	0	1007.35	1007.35	5.28	53.19
4	SUB STATION	4103.64	0	4103.64	4103.64	5.28	216.67
5	PLCC	258.74	0	258.74	258.74	6.33	16.38
6	LEASEHOLD LAND	0	0	0	0	3.34	0
	Total	9588.98	0	9588.98	9588.98		364.49
	Weighted Average Rate of Depreciation						3.8
	Lapsed life						4
2018-2019							
1	FREEHOLD LAND	1876.29	0	1876.29	1876.29	0	0
2	BUILDING	2342.96	0	2342.96	2342.96	3.34	78.25
3	TR LINE	1007.35	0	1007.35	1007.35	5.28	53.19
4	SUB STATION	4103.64	0	4103.64	4103.64	5.28	216.67
5	PLCC	258.74	0	258.74	258.74	6.33	16.38
6	LEASEHOLD LAND	0	0	0	0	3.34	0
	Total	9588.98	0	9588.98	9588.98		364.49
	Weighted Average Rate of Depreciation						3.8
	Lapsed life						5

The Calculation of Total Life of Asset

Sl. No.	Name of the Assets	Gross Block	Life As per CERC Norms	Weighted Life
	-1	-2	-3	(4)=Col.2 x Col.3
1	FREEHOLD LAND	1876.29	0	0
2	BUILDING	1569.05	25	39226.25
3	TR LINE	754.97	35	26423.95
4	SUB STATION	3100.98	25	77524.5
5	PLCC	246.88	25	6172
6	LEASEHOLD LAND	0	25	0
	Total	5671.88		149346.7
	Total Life of Asset		149346.7/5671.88	26

(Petitioner)

2/2



Statement of Depreciation										Form 10A
Name of the Transmission Licensee: Power Grid Corporation of India Limited										
Name of the Region: SOUTHERN REGION										
Name of the Project: LTOA in Tuticorin Part A										
Name of the Transmission Element or Communication System: LILO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor										
Date of Commercial Operation: 31-Jul-2014										
Particulars	Existing 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	Rs. in Lacs			
Opening Capital Cost	0	7548.17	8480.01	9538.98	9588.98	9588.98				9588.98
Closing Capital Cost	0	8480.01	9538.98	9588.98	9588.98	9588.98				9588.98
Average Capital Cost	0	8014.09	9009.5	9563.98	9588.98	9588.98				9588.98
Freehold Land (Av. Cost)	0	1876.29	1876.29	1876.29	1876.29	1876.29				1876.29
Rate of Depreciation	0	3.65	3.76	3.8	3.8	3.8				3.8
Depreciable Value	0	5524.02	6419.89	6918.93	6941.43	6941.43				6941.43
Balance useful life of the asset (at the beginning of year)	0	26	25	24	23	22				22
Elapsed life of the asset (at the beginning of the year)	0	0	1	2	3	4				4
Remaining Depreciable Value	0	5524.02	6223.84	6384.36	6043.2	5678.71				5678.71
Depreciation during the year	0	196.05	338.52	363.66	364.49	364.49				364.49
Depreciation upto previous year	0	0	196.05	534.57	898.23	1262.72				1262.72
Cumulative depreciation (incl. of AAD)	0	196.05	534.57	898.23	1262.72	1627.21				1627.21
										(Petitioner)



Calculation of Interest on Working Capital

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

Name of the Region: SOUTHERN REGION

Name of the Project: LTOA in Tuticorin Part A

Name of the Transmission Element: LLO of both circuits of Tuticorin JV-Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor_1

Date of Commercial Operation: 31-Jul-2014

Particulars	2014-15					Rs. in Lacs	
	Existing 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	
Op. and Maintenance	0	25.53	26.38	27.25	28.16	29.09	
Maintenance Spares	0	45.95	47.48	49.05	50.69	52.36	
Receivables	0	279.7	306.96	319.65	316.25	312.14	
Total working capital	0	351.18	380.82	395.95	395.1	393.59	
Rate of Interest	0	13.5	13.5	13.5	13.5	13.5	
Interest on working capital	0	47.41	51.41	53.45	53.34	53.13	
Pro rata interest on working capital	0	31.73	51.41	53.45	53.34	53.13	

(Petitioner)



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Details of Time Overrun

Power Grid Corporation of India Ltd
Southern Region-II

Name of the Region :

COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH POWER (MADRAS)
LIMITED LTOA GENERATION PROJECTS IN TUTICORIN AREA-PART-A

Name of the Project :

Name of the Transmission

Transmission Line: LILO of both ckts of Tuticorin JV-Madurai 400KV D/C Quad Line at Tuticorin Pooling Station

Sub-station: 400 KV TUTICORIN NEW SUBSTATION

Anticipated DOCO 31.07.14

SI No	Description of Activity/ Works/ Service	Original Schedule (As per Planning)		Actual Schedule (As per Actual)		Time Overrun		Agency responsible and whether such time over run was beyond the control of the Transmission Licensee	Reasons for delay	Other Activity affected (Mention SI No of activity affected)
		Start Date	Completion Date	Start Date	Completion Date	Months	Actual			
1	LILo of both ckts of Tuticorin JV-Madurai 400KV D/C Quad Line at Tuticorin Pooling Station	12.12.2011	12.04.2014	25.03.2013	31.07.2014	28	32	-	Delay in placement of LOA	-
2	400 KV TUTICORIN NEW SUBSTATION									

Petitioner



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Incidental Expenditure during Construction

Name of the Petitioner
Name of Region:
Name of the Project :

Power Grid Corporation of India Limited
SR-II
Common Transmission System associated with Coastal Energy Private Limited and Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin area Part-A in Southern Region

Name of the Transmission Element :

LILO of both circuits of Tuticorin JV - Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

(Amount in Rs. Lakh)

S. No.	Parameters	2012-2013	2013-2014	01-Apr-14 to 30-Jul-2014	Total
A	Expenses:				
1	Employees' Remuneration & Benefits	143.18	253.94	115.43	512.55
2	Water Charges		0.29	0.16	0.45
3	Communication Expenses		0.96	1.35	2.31
4	Power Charges		10.19	4.62	14.81
5	Other Office and Administrative Expenses		4.73	1.58	6.31
6	Others (Please Specify Details)				
	Professional charges		0.13	0.51	0.64
	Tender expenses		-	-	-
	Printing & Stationary		0.38	0.28	0.66
	Hiring of vehicles		7.06	2.77	9.83
	Legal Expenses		0.65	-	0.65
	Travelling		11.23	5.40	16.63
	Security		9.61	2.05	11.66
	RHQ IEDC		55.85	18.62	74.47
	CORPORATE IEDC		8.65	2.88	11.53
7	Other pre-Operating Expenses				-
	Sub Total A	143.18	363.67	155.65	662.50
B	Total Expenses				
	Less: Income from sale of tenders	-	-	-	-
	Less: Income from guest house	-	-	-	-
	Less: Income recovered from Contractors		38.78	4.62	43.40
	Less: other Income		1.29	0.14	1.43
	Sub Total B		40.07	4.76	44.83
	TOTAL	143.18	323.60	150.89	617.67

Petitioner

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Draw Down Schedule for Calculation of IDC & Financing Charges

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

Name of the Region: SOUTHERN REGION

Name of the Project: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication System: LILO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Rs. In Lakhs

Draw Down Schedule for Calculation of IDC & Financing Charges

Sl.No.	Drawn Do Particular	Quarter 1			Quarter 2			Quarter n (COD)		
		Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee
	Loans									
	Foreign Loans									
	Total of Foreign Loans									
	Drawn Down Account									
	IDC									
	Financing Charges									
	Indian Loans									
	BOND-XXXIV									
	Draw Down Account									463
	IDC									
	Financing Charges									
	BOND XXXVII									
	Draw Down Account									1293
	IDC									
	Financing Charges									
	SBI (21.03.2012)									
	Draw Down Account									1394
	IDC									
	Financing Charges									

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Draw Down Schedule for Calculation of IDC & Financing Charges

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

Name of the Region: SOUTHERN REGION

Name of the Project: LTOA in Tuticorin Part A

Name of the Transmission Element or Communication System: LLO of both circuits of Tuticorin JV Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 765kV Pooling Station at Tuticorin (Initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

Rs. In Lakhs

Drawn Down Schedule for Calculation of IDC & Financing Charges

Sl.No.	Drawn Do	Quarter 1			Quarter 2			Quarter n (COD)		
		Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC	Ex. Rate on Drawn Date	Amount in Indian Rupee	Quantum in FC
		PROPOSED LOAN 2014-15 (10.25%)								
		Draw Down Account								
										2133.72
		Financing Charges								
		Total of Indian Loans								
		Drawn Down Account								
										5283.72
		Financing Charges								
		Total of Loan Drawn								
		Drawn Down Account								
										5283.72
										658.08
		Financing Charges								
		Equity								
		Foreign Equity Drawn								
		Indian Equity Drawn								
										2544
		Total Equity Drawn								
										2544

(Petitioner)

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Breakup of Initial Spares

Name of the Transmission Licensee :
Name of the Region :

Power Grid Corporation of India Ltd
Southern Region-I

Name of the Project :
COMMON SYSTEM ASSOCIATED WITH COASTAL ENERGEN PRIVATE LIMITED AND IND-BARATH POWER (MADRAS) LIMITED LTOA GENERATION PROJECTS IN TUTICORIN AREA-PART-A

Name of the Transmission Element:

Transmission Line
LILO OF BOTH CIRCUITS OF TUTICORIN JV-MADURAI 400KV D/C (QUAD) LINE AT TUTICORIN POOLING STATION

Substation
Anticipated DOCO

765/400KV TUTICORIN NEW POOLING SUBSTATION
31.07.14

(Amount in Rs. Lakh)

Particulars	Plant & Machinery Cost (excluding IDC and IEDC) Upto DOCO	IDC	IEDC	Year wise additional Capital expenditure up to cut off date			Total Cost	Initial spares claimed	
				01.08.13 to 31.03.15	01.04.15 to 31.05.15	01.04.15 to 31.06.16		Amount	%
LILO OF BOTH CIRCUITS OF TUTICORIN JV-MADURAI 400KV D/C (QUAD) LINE AT TUTICORIN POOLING STATION	6272.42	658.08	617.67	931.84	1058.97	50	9588.98	8.57	0.95
765/400KV TUTICORIN NEW POOLING								160.2	4.17



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(Petitioner)

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**CHECK LIST
PART-III**

Name of the Company

Power Grid Corporation of India Ltd.

Name of the Project :

Transmission System associated with Common System Associated with Coastal Energen Private Limited & Ind-Bharat Power (Madras) Limited LTOA Generation Projects in Tuticorin Area – PART-A

Name of the Transmission Element:

LILO of both circuits of Tuticorin JV – Madurai 400kV D/C (Quad) line at Tuticorin Pooling Station along with new 766kV Pooling Station at Tuticorin (Initially charged at 400kV) including 1 x 80 MVAR, 400kV Bus Reactor

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

Form No.	Tariff Filing Formats (Transmission)	Tick
FORM-1	Summary Sheet	Yes
FORM-2	Details of TL,SS & Communication System	Yes
FORM-3	Normative parameters considered for tariff computation	Yes
FORM-4	Abstract of admitted parameters for the existing transmission assets/elements under project	Not applicable and hence not enclosed
FORM-4A	Statement of capital cost	Yes
FORM-4B	Statement of capital works in progress	Not applicable and hence not enclosed
FORM-4C	Abstract of capital cost estimates and schedule of commissioning for the new project/Element	Yes
FORM-5	Element wise Breakup of Project/Asset/Element cost for Transmission System	Yes
FORM-5A	Breakup of construction/Supply/Service package	Yes
FORM-5B	Details of element wise cost of the project	Yes
FORM-6	Financial package up to COD	Yes
FORM-7	Statement of additional capitalisation	Yes
FORM-7A	Financing of additional capitalization	Yes
FORM-7B	Statement of Additional capitalization during lag end of the project	Not applicable and hence not enclosed
FORM-8	Calculation of Return on Equity	Yes
FORM-8A	Details of foreign equity	Not applicable and hence not enclosed
FORM-8B	Details of additional RoE	Yes
FORM-9	Details of allocation of corporate loans to various transmission elements	Not applicable and hence not enclosed
FORM-9A	Details of project specific loan	Not applicable and hence not enclosed
FORM-9B	Details of foreign loan	Not applicable and hence not enclosed
FORM-9C	Calculation of weighted average rate of interest on actual Loans	Yes
FORM-9D	Loans in Foreign currency	Not applicable and hence not enclosed
FORM-9E	Calculation of Interest on Normative Loan	Yes
FORM-10	Calculation of depreciation rate	Yes
FORM-10A	Statement of Depreciation	Yes
FORM-10B	Statement of Decapitalization	Not applicable and hence not enclosed
FORM-11	Calculation of interest on working capital	Yes
FORM-12	Details of time over run	Yes
FORM-12A	IEDC	Yes
FORM-12B	Draw down schedule for calculation of IDC & Financing Charges	Yes
FORM-13	Breakup of Initial Spares	Yes
FORM-14	Other Income as on COD	Not applicable and hence not enclosed

Other Information/ Documents		
Sl. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Station setup by a company making tariff application for the first time to CERC)	- Not Applicable -
2	Regionwise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the new Transmission System & for the relevant years.	Consolidated Balancesheet of POWERGRID & Regional Balance Sheet of SR for FY 2014-15 shall be submitted shortly
3	Copies of relevant loan Agreements	-Not Applicable -
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	-Not Applicable -
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	Equity contribution by GOI (57.9%) and others(32.1%)
6	Copies of the BPTA/TSA with the beneficiaries, if any	-Not Applicable -
7	Detailed note giving reasons of time and cost over run, if applicable.	-Not Applicable -
8	Any other relevant information, (Please specify)	-Not Applicable -

