## **LOAN NUMBER 7593-IN**

# **Loan Agreement**

(Additional Financing for Fourth Power System Development Project)

between

POWER GRID CORPORATION OF INDIA LIMITED

and

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Dated January 27, 2009

#### **LOAN AGREEMENT**

AGREEMENT dated January 27, 2009, between POWER GRID CORPORATION OF INDIA LIMITED ("Borrower") and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT ("Bank") for the purpose of providing additional financing for activities related and additional to the Original Project (as defined in the Appendix to this Agreement). The Borrower and the Bank hereby agree as follows:

#### ARTICLE I – GENERAL CONDITIONS; DEFINITIONS

- 1.01. The General Conditions (as defined in the Appendix to this Agreement) constitute an integral part of this Agreement.
- 1.02. Unless the context requires otherwise, the capitalized terms used in this Agreement have the meanings ascribed to them in the General Conditions or in the Appendix to this Agreement.

#### ARTICLE II - LOAN

- 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in this Agreement, the amount of four hundred million Dollars (\$400,000,000) ("Loan"), to assist in financing the project described in Schedule 1 to this Agreement ("Project").
- 2.02. The Borrower may withdraw the proceeds of the Loan in accordance with Section IV of Schedule 2 to this Agreement.
- 2.03. The Front-end Fee payable by the Borrower shall be equal to one quarter of one percent (0.25%) of the Loan amount. The Borrower shall pay the Front-end Fee not later than 60 days after the Effective Date.
- 2.04. The interest payable by the Borrower for each Interest Period shall be at a rate equal to LIBOR for the Loan Currency plus the Variable Spread; provided, that upon a Conversion of all or any portion of the principal amount of the Loan, the interest payable by the Borrower during the Conversion Period on such amount shall be determined in accordance with the relevant provisions of Article IV of the General Conditions. Notwithstanding the foregoing, if any amount of the Withdrawn Loan Balance remains unpaid when due and such non-payment continues for a period of thirty (30) days, then the interest payable by the Borrower shall instead be calculated as provided in Section 3.02(d) of the General Conditions.
- 2.05. The Payment Dates are February 1 and August 1 in each year.

- 2.06. The principal amount of the Loan shall be repaid in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.
- 2.07. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management: (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, withdrawn or unwithdrawn, to an Approved Currency; (ii) a change of the interest rate basis applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding from a Variable Rate to a Fixed Rate, or vice versa; and (iii) the setting of limits on the Variable Rate applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding by the establishment of an Interest Rate Cap or Interest Rate Collar on the Variable Rate.
  - (b) Any conversion requested pursuant to paragraph (a) of this Section that is accepted by the Bank shall be considered a "Conversion", as defined in the General Conditions, and shall be effected in accordance with the provisions of Article IV of the General Conditions and of the Conversion Guidelines.
  - (c) Promptly following the Execution Date for an Interest Rate Cap or Interest Rate Collar for which the Borrower has requested that the premium be paid out of the proceeds of the Loan, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and pay to itself the amounts required to pay any premium payable in accordance with Section 4.05(c) of the General Conditions up to the amount allocated from time to time for the purpose in the table in Section IV of Schedule 2 to this Agreement.

#### ARTICLE III - PROJECT

- 3.01. The Borrower declares its commitment to the objectives of the Project. To this end, the Borrower shall carry out the Project in accordance with the provisions of Article V of the General Conditions.
- 3.02. Without limitation upon the provisions of Section 3.01 of this Agreement, and except as the Borrower and the Bank shall otherwise agree, the Borrower shall ensure that the Project is carried out in accordance with the provisions of Schedule 2 to this Agreement.

#### ARTICLE IV - REMEDIES OF THE BANK

- 4.01. The Additional Event of Suspension consists of the following, namely the Memorandum and Articles of Association shall have been amended, suspended, abrogated, repealed or waived so as to affect materially and adversely the ability of the Borrower to perform any of its obligations under this Agreement.
- 4.02. The Additional Event of Acceleration consists of the following, namely that the event specified in Section 4.01 of this Agreement occurs.

## ARTICLE V - EFFECTIVENESS; TERMINATION

5.01. The Effectiveness Deadline is the date ninety (90) days after the date of this Agreement.

#### ARTICLE VI – REPRESENTATIVE; ADDRESSES

- 6.01. The Borrower's Representative is the Chairman and Managing Director.
- 6.02. The Bank's Address is:

International Bank for Reconstruction and Development 1818 H Street, N.W. Washington, D.C. 20433 United States of America

Cable address: Telex: Facsimile:

INTBAFRAD 248423(MCI) or 1-202-4776391

Washington, D.C. 64145(MCI)

6.03. The Borrower's Address is:

Power Grid Corporation of India Limited B-9, Qutab Institutional Area Katwaria Sarai, New Delhi – 110016

Facsimile:

91-11-26560054

AGREED at New Delhi, India, as of the day and year first above written.

## INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By /s/ N. Roberto Zagha Authorized Representative

POWER GRID CORPORATION OF INDIA LIMITED

By /s/ S. K. Chaturvedi Authorized Representative

## **SCHEDULE 1**

## **Project Description**

The objective of the Project is to strengthen the transmission system in order to increase reliable power exchange between the regions and States of India.

The Project consists of the following schemes and activities:

## **Transmission System Strengthening Schemes**

- 1. Completion of the East-West Transmission Corridor, specifically supply and installation of Fixed and Variable Series Compensation at Raipur Substation for 400 kV Raigarh-Raipur double circuit Line.
- 2. Completion of the Western Region System Strengthening Scheme-II, specifically: (a) construction of Wardha-Parli 400kV double circuit line; (b) construction of Bhadrawati-Parli 400kV double circuit line; (c) construction of Raipur-Wardha 400kV double circuit line; (d) construction of 400 kV Parli substation; (e) extension of 400 kV Bhadrawati, Seoni, Parli, Wardha and Raipur; (f) extension of Raigarh, Karamsad, Limbdi, Zerda, Ranchhodpura and Birsinghpur substations; (g) supply and installation of Shunt Reactor; and (h) supply and installation of Fixed Series Compensation Package at Wardha Substation for 400 kV Wardha-Raipur double circuit line and at Rajgarh substation for 400 kV Raigarh-Karamsad double circuit line.
- 3. Completion of the Eastern Region System Strengthening Scheme-I, specifically: (a) supply of conductors for the Durgapur-Jamshedpur, Jamshedpur-Baripada, and Baripada-Mendhasal 400 kV double circuit lines; and (b) reconductoring of the 400 kV double circuit Siliguri-Purnea line.

#### **SCHEDULE 2**

## **Project Execution**

## Section I. <u>Implementation Arrangements</u>

## A. Institutional Arrangements

Throughout Project implementation, the Borrower shall establish and maintain an adequate organizational structure, with functions, powers, staff and resources necessary and appropriate for Project implementation, and satisfactory to the Bank, including internal audit structure.

#### B. Anti-Corruption

The Borrower shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines.

## C. Safeguards

Throughout Project implementation, the Borrower shall ensure that the Project is carried out in accordance with the terms and conditions, and procedures set forth in the ESPP, and shall ensure that the ESPP is revised, repealed, or not enforced only with the prior approval of the Bank.

#### Section II. Project Monitoring, Reporting and Evaluation

#### A. Project Reports

- 1. The Borrower shall monitor and evaluate the progress of the Project and prepare Project Reports in accordance with the provisions of Section 5.08 of the General Conditions and on the basis of indicators agreed with the Bank. Each Project Report shall cover the period of one Fiscal Year quarter, and shall be furnished to the Bank not later than forty-five (45) days after the end of the period covered by such report.
- 2. Notwithstanding the requirement in Section II.A.1 of this Schedule, by April 30, 2010, the Borrower shall carry out a comprehensive mid-term Project review, and shall by June 30, 2010, prepare and furnish to the Bank a mid-term Project progress report, satisfactory to the Bank.
- 3. For purposes of Section 5.08(c) of the General Conditions, the report on the execution of the Project and related plan required pursuant to that Section shall be furnished to the Bank not later than January 31, 2015.

## B. Financial Management, Financial Reports and Audits

- 1. Without limitation upon the provisions of Section 5.09(a) of the General Conditions, the Borrower shall maintain a financial management system and prepare financial statements in accordance with consistently applied accounting standards and the Finance Manuals acceptable to the Bank, both in a manner adequate to reflect the operations and financial condition of the Borrower, including the operations, resources and expenditures related to the Project.
- 2. Without limitation upon the provisions of Part A of this Section, the Borrower shall prepare and furnish to the Bank as part of the Project Reports, not later than thirty (30) days after the end of each month, interim unaudited financial reports for the Project covering the month, in form and substance satisfactory to the Bank.
- 3. Without limitation upon the provisions of Section 5.09(b) of the General Conditions, the Borrower shall have its financial statements referred to above audited by independent auditors acceptable to the Bank, in accordance with consistently applied auditing standards acceptable to the Bank. Each audit of these financial statements shall cover the period of one Fiscal Year of the Borrower. The audited financial statements for each period shall be furnished to the Bank not later than six (6) months after the end of the period.

#### **Section III.** Procurement

#### A. General

- 1. **Goods**. All goods required for the Project and to be financed out of the proceeds of the Loan shall be procured in accordance with the requirements set forth or referred to in Section I of the Procurement Guidelines, and with the provisions of this Section.
- 2. **Definitions**. The capitalized terms used below in this Section to describe particular procurement methods or methods of review by the Bank of particular contracts refer to the corresponding method described in the Procurement Guidelines.

#### B. Particular Methods of Procurement of Goods

- 1. **International Competitive Bidding**. Except as otherwise provided in paragraph 2 below, goods shall be procured under contracts awarded on the basis of International Competitive Bidding procedures.
- 2. **Other Methods of Procurement of Goods**. The following table specifies the methods of procurement, other than International Competitive Bidding, which

may be used for goods. The Procurement Plan shall specify the circumstances under which such methods may be used.

#### **Procurement Method**

- (a) National Competitive Bidding, and the additional provisions agreed between the Borrower and the Bank
- (b) Direct Contracting

#### C. Review by the Bank of Procurement Decisions

The Procurement Plan shall set forth those contracts which shall be subject to the Bank's Prior Review. All other contracts shall be subject to Post Review by the Bank.

## Section IV. Withdrawal of Loan Proceeds

#### A. General

- 1. The Borrower may withdraw the proceeds of the Loan in accordance with the provisions of Article II of the General Conditions, this Section, and such additional instructions as the Bank shall specify by notice to the Borrower (including the "World Bank Disbursement Guidelines for Projects" dated May 2006, as revised from time to time by the Bank and as made applicable to this Agreement pursuant to such instructions), to finance Eligible Expenditures as set forth in the table in paragraph 2 below.
- 2. The following table specifies the categories of Eligible Expenditures that may be financed out of the proceeds of the Loan ("Category"), the allocation of the amounts of the Loan to each Category, and the percentage of expenditures to be financed for Eligible Expenditures in each Category.

Category	Amount of the Loan Allocated (Expressed in Dollars)	Percentage of Expenditures to be Financed
Goods	400,000,000	100%
TOTAL AMOUNT	400,000,000	

#### B. Withdrawal Conditions; Withdrawal Period

- 1. Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made: (a) from the Loan Account until the Bank has received payment in full of the Front-end Fee; or (b) for payments made prior to the date of this Agreement, except that withdrawals up to an aggregate amount not to exceed \$80,000,000 equivalent may be made for payments made prior to this date but on or after April 1, 2008, for Eligible Expenditures.
- 2. The Closing Date is July 31, 2014.

## Section V. Other Undertakings

- 1. Except as the Bank shall otherwise agree, the Borrower shall take all steps necessary to maintain its accounts receivable at a level not exceeding an amount equivalent to the proceeds of its transmission and other regulated services for the three (3) preceding months.
- 2. (a) Except as the Bank shall otherwise agree, the Borrower shall take all such measures (including, without limitation, adjustments of the structure and levels of its tariffs) as shall be required to produce, starting with the fiscal year beginning April 1, 2008, funds from internal cash generation equivalent to not less than twenty (20) percent of the annual average of the Borrower's capital expenditures incurred or expected to be incurred during the previous, current and following fiscal year.
  - (b) For the purposes of this paragraph 2:
    - (i) the term "funds from internal sources" means the difference between: (A) the sum of gross revenues from all sources related the Borrower's operations, contributions in aid of construction, net non-operating income, proceeds from sales of bonds issued in lieu of outstanding receivables, and any reduction in non-cash working capital; and (B) the sum of all expenses of the Borrower's operations, including maintenance and administration (excluding depreciation and other non-cash operating charges), interest and other charges on debt (excluding interest financed under a loan contract), repayment of loans (including sinking fund payments, if any), all taxes or payments in lieu of taxes, all cash dividends and other cash distributions of surplus, increase in non-cash working capital and any other cash outflows other than cash expenditures related to the operations of the Borrower:

- (ii) the term "capital expenditures" means all expenditures incurred on account of fixed or capital assets, including interest charged to construction, related to the operations of the Borrower;
- (iii) the term "gross revenue" means the revenue earned and received for the services provided by the Borrower;
- (iv) the term "expenses" means the sum of all operating expenses, taxes on income and profits, depreciation and interest charged on all debentures, bonds and loans;
- (v) the term "operating expenses" means the cost of operation and maintenance, service management and administrative expenses, and all taxes accruing during the financial year, other than taxes on income and profits of the Borrower;
- (vi) the term "taxes on income and profits" consists of income taxes and other levies accrued by the Borrower according to the provisions of any legislation or regulation applicable in this respect;
- (vii) the term "depreciation" means the applicable provision on depreciation used to prepare the accounts referred to in Section 4.01 of this agreement; and
- (viii) the term "interest charged on all debentures, bonds and loans" means all interest, excluding interest during construction, accrued by the Borrower during the fiscal year and all other charges on debt.
- 3. (a) Except as the Bank shall otherwise agree, the Borrower shall not incur any debt, if after the incurrence of such debt the ratio of debt to equity shall be greater than four (4) to one (1).
  - (b) For purposes of this paragraph 3:
    - (i) The term "debt" means any indebtedness of the Borrower maturing by its terms more than one year after the date on which it is originally incurred.
    - (ii) Debt shall be deemed to be incurred: (A) under a loan contract or agreement or other instrument providing for such debt or for the modification of its terms of payment, on the date, and to the extent, the amount of such debt has become outstanding pursuant to such contract, agreement or instrument; and (B) under a

guarantee agreement, on the date of the agreement providing for such guarantee has been entered into but only to the extent that the guaranteed debt is outstanding.

(iii) The term "equity" means the sum of the total unimpaired paid-up capital, retained earnings and reserves of the Borrower not allocated to cover specific liabilities.

Whenever for the purposes of this Section V it shall be necessary to value, in terms of the currency of the Guarantor, debt payable in another currency, such valuation shall be made on the basis of the prevailing lawful rate of exchange at which such other currency is, at the time of such valuation, obtainable for the purposes of servicing such debt, or, in the absence of such rate, on the basis of a rate of exchange acceptable to the Bank.

#### **SCHEDULE 3**

#### **Amortization Schedule**

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

Principal Payment Date	Installment Share
	(Expressed as a Percentage)
February 1, 2013	1.69%
August 1, 2013	1.70%
February 1, 2014	1.71%
August 1, 2014	1.72%
February 1, 2015	1.72%
August 1, 2015	1.73%
February 1, 2016	1.74%
August 1, 2016	1.75%
February 1, 2017	1.76%
August 1, 2017	1.77%
February 1, 2018	1.78%
August 1, 2018	1.79%
February 1, 2019	1.79%
August 1, 2019	1.80%
February 1, 2020	1.81%
August 1, 2020	1.82%
February 1, 2021	1.83%
August 1, 2021	1.84%
February 1, 2022	1.85%
August 1, 2022	1.86%
February 1, 2023	1.87%
August 1, 2023	1.88%
February 1, 2024	1.89%
August 1, 2024	1.90%
February 1, 2025	1.91%
August 1, 2025	1.91%
February 1, 2026	1.92%

August 1, 2026	1.93%
February 1, 2027	1.94%
August 1, 2027	1.95%
February 1, 2028	1.96%
August 1, 2028	1.97%
February 1, 2029	1.98%
August 1, 2029	1.99%
February 1, 2030	2.00%
August 1, 2030	2.01%
February 1, 2031	2.02%
August 1, 2031	2.03%
February 1, 2032	2.04%
August 1, 2032	2.05%
February 1, 2033	2.06%
August 1, 2033	2.07%
February 1, 2034	2.08%
August 1, 2034	2.09%
February 1, 2035	2.10%
August 1, 2035	2.12%
February 1, 2036	2.13%
August 1, 2036	2.14%
February 1, 2037	2.15%
August 2, 2037	2.16%
February 1, 2038	2.17%
August 1, 2038	2.12%

- 2. If the proceeds of the Loan have not been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:
  - (a) To the extent that any proceeds of the Loan have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the Withdrawn Loan Balance as of such date in accordance with paragraph 1 of this Schedule.
  - (b) Any amount withdrawn after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by the Bank by multiplying the amount of each such withdrawal by a fraction, the numerator of which is the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date ("Original Installment Share") and the denominator of which is the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such amounts repayable to be adjusted, as necessary, to deduct any

amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

- 3. (a) Amounts of the Loan withdrawn within two calendar months prior to any Principal Payment Date shall, for the purposes solely of calculating the principal amounts payable on any Principal Payment Date, be treated as withdrawn and outstanding on the second Principal Payment Date following the date of withdrawal and shall be repayable on each Principal Payment Date commencing with the second Principal Payment Date following the date of withdrawal.
  - (b) Notwithstanding the provisions of sub-paragraph (a) of this paragraph, if at any time the Bank adopts a due date billing system under which invoices are issued on or after the respective Principal Payment Date, the provisions of such sub-paragraph shall no longer apply to any withdrawals made after the adoption of such billing system.
- 4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the Withdrawn Loan Balance to an Approved Currency, the amount so converted in the Approved Currency that is repayable on any Principal Payment Date occurring during the Conversion Period, shall be determined by the Bank by multiplying such amount in its currency of denomination immediately prior to the Conversion by either: (i) the exchange rate that reflects the amounts of principal in the Approved Currency payable by the Bank under the Currency Hedge Transaction relating to the Conversion; or (ii) if the Bank so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.
- 5. If the Withdrawn Loan Balance is denominated in more than one Loan Currency, the provisions of this Schedule shall apply separately to the amount denominated in each Loan Currency, so as to produce a separate amortization schedule for each such amount.

#### **APPENDIX**

#### **Section I.** Definitions

- 1. "Anti-Corruption Guidelines" means the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006.
- 2. "Category" means a category set forth in the table in Section IV of Schedule 2 to this Agreement.
- 3. "ESPP" means the Environmental and Social Policy and Procedures adopted by the Borrower in April, 2006, satisfactory to the Bank, setting forth, inter alia, the policies and procedures of carrying out environmental and social assessment of activities under the Project, preparing and implementing environmental assessment, mitigation and management plans, and, where applicable, resettlement and rehabilitation action plans, tribal development plans, and other development plans and entitlement frameworks for people adversely affected as a result of the implementation of the Project, carrying out consultations, processing and redressing grievances, and monitoring related impacts, as such document may be revised from time to time with the prior approval of the Bank.
- 4. "Finance Manuals" means the manuals approved by the Borrower in March, 2006, satisfactory to the Bank, setting forth the overall Project financial management arrangements in respect of Project flow of funds, accounting policies and procedures, chart of accounts, financial and accounting procedures, books of accounts, financial reporting, and internal controls, as the same may be revised from time to time with the prior approval of the Bank.
- 5. "Fiscal Year" means the Borrower's fiscal year, beginning on April 1 of a calendar year and ending on March 31 of the following calendar year.
- 6. "General Conditions" means the "International Bank for Reconstruction and Development General Conditions for Loans", dated July 1, 2005 (as amended through February 12, 2008), with the modifications set forth in Section II of this Appendix.
- 7. "Guarantee Agreement" means the agreement between India and the Bank of even date herewith, as the same may be amended from time to time, and such term includes all schedules and agreements supplemental to the Guarantee Agreement.
- 8. "Memorandum and Articles of Association" means the Memorandum and Articles of Association of the Borrower, as amended to the date of this Agreement.

- 9. "Original Project" means the project described in Schedule 1 of the Loan Agreement between the Borrower and the Bank, dated March 28, 2008 (Loan No. 4890-IN).
- 10. "Powergrid" (or the "Borrower") means Power Grid Corporation of India Limited, a company registered under the Guarantor's Companies Act (1956), having its registered office at B-9 Qutub Institutional Area, Katwaria Sarai, New Delhi 110016, India.
- 11. "Procurement Guidelines" means the "Guidelines: Procurement under IBRD Loans and IDA Credits" published by the Bank in May 2004, and revised in October 2006.
- 12. "Procurement Plan" means the Borrower's procurement plan for the Project, dated September 6, 2008, and referred to in paragraph 1.16 of the Procurement Guidelines, as applicable, as the same shall be updated from time to time in accordance with the provisions of said paragraphs.

## **Section II. Modifications to the General Conditions**

The modification to the General Conditions is as follows:

Paragraph (1) of Section 7.02 is modified to read:

"Section 7.02. Suspension by the Bank

... (1) *Ineligibility*. The Bank or the Association has declared the Borrower (other than the Member Country) or the Project Implementing Entity ineligible to receive proceeds of any financing made by the Bank or the Association or otherwise to participate in the preparation or implementation of any project financed in whole or in part by the Bank or the Association, as a result of a determination by the Bank or the Association that the Borrower or the Project Implementing Entity has engaged in fraudulent, corrupt, coercive or collusive practices in connection with the use of the proceeds of any financing made by the Bank or the Association."