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LOAN NUMBER 2787-IND

LOAN AGREEMENT  
(Ordinary Operations)  
(National Grid Improvement Project)

between

POWER GRID CORPORATION OF INDIA LIMITED

and

ASIAN DEVELOPMENT BANK

DATED 30 MARCH 2012

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IND 44426

## **LOAN AGREEMENT (Ordinary Operations)**

LOAN AGREEMENT dated 30 March 2012 between POWER GRID CORPORATION OF INDIA LIMITED ("Borrower") and ASIAN DEVELOPMENT BANK ("ADB").

### WHEREAS

(A) the Borrower has applied to ADB for a loan for the purposes of the Project described in Schedule 1 to this Loan Agreement;

(B) the Loan is to be guaranteed by India ("Guarantor") under the terms of the Guarantee Agreement of even date herewith between the Guarantor and ADB;

(C) the Borrower has also applied to ADB for a loan, without a sovereign guarantee by India ("Non-sovereign Loan") for the purposes of the Project, and by an agreement of even date herewith between the Borrower and ADB ("Non-sovereign Loan Agreement"), ADB has agreed to lend to the Borrower from its ordinary capital resources an amount of two hundred and fifty million Dollars (\$250,000,000) for the purposes of the Project; and

(D) ADB has agreed to make a loan to the Borrower from ADB's ordinary capital resources upon the terms and conditions set forth herein;

NOW THEREFORE the parties hereto agree as follows:

## **ARTICLE I**

### **Loan Regulations; Definitions**

Section 1.01. All the provisions of the Ordinary Operations Loan Regulations Applicable to LIBOR-Based Loans Made from ADB's Ordinary Capital Resources, dated 1 July 2001 ("Loan Regulations"), are hereby made applicable to this Loan Agreement with the same force and effect as if they were fully set forth herein, subject, however, to the following modifications:

(a) Section 3.03 is deleted and the following is substituted therefor:

**Commitment Charge; Credit.** (a) The Borrower shall pay a commitment charge on the unwithdrawn amount of the Loan at the rate and on the terms specified in the Loan Agreement.

(b) ADB shall provide to the Borrower a credit at the rate specified in the Loan Agreement, which credit shall remain fixed for the term of the Loan. ADB shall apply the

amount of the credit against the interest payable by the Borrower.

(b) Section 3.06 is deleted and the following is substituted therefor:

(a) Following any announcement by ADB that the Fixed Spread applicable to new Loans shall be reduced, ADB shall provide a Rebate to any Borrower with an outstanding Loan on which a higher Fixed Spread is applicable. The amount of the Rebate shall be determined by multiplying (i) the difference between the Fixed Spread applicable to the outstanding Loan and the Fixed Spread that will be applied to new Loans (expressed as a percentage per annum), by (ii) the principal amount of the outstanding Loan on which the Borrower shall pay interest for all interest periods commencing on and after the effective date of the lower Fixed Spread that will be applied to new Loans.

(b) Following any announcement by ADB that its Funding Cost Margin calculations with respect to any Loan Currency (or Approved Currency) in any Semester resulted in ADB achieving savings, ADB shall provide a Rebate to the Borrower. The amount of the Rebate shall be determined by multiplying (i) the Funding Cost Margin (expressed as a percentage per annum) by (ii) the principal amount of the Loan on which the Borrower shall pay interest for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated. ADB shall apply the amount of the Rebate against the interest payable by the Borrower for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated.

(c) Section 3.07 is deleted and the following is substituted therefor:

(a) Following any announcement by ADB that the Fixed Spread applicable to new Loans shall be increased, any Borrower with an outstanding Loan on which a lower Fixed Spread is applicable shall pay ADB a Surcharge. The amount of the Surcharge shall be determined by multiplying (i) the difference between the Fixed Spread that will be applied to new Loans and the Fixed Spread applicable to the outstanding Loan (expressed as a percentage per annum), by (ii) the principal amount of the outstanding Loan on which the Borrower shall pay interest for all interest periods commencing on and after the effective date of the higher Fixed Spread that will be applied to new Loans.

(b) Following any announcement by ADB that its Funding Cost Margin calculations with respect to any Loan Currency (or Approved Currency) in any Semester resulted in ADB incurring additional costs, the Borrower shall pay ADB a Surcharge. The amount of the Surcharge shall be determined by multiplying (i) the Funding Cost Margin (expressed as a percentage per annum) by (ii) the principal amount of the Loan on which the Borrower shall pay interest for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated. ADB shall add the amount of the Surcharge to the interest payable by the Borrower for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated.

(d) Section 7.07(c) is deleted.

Section 1.02. Wherever used in this Loan Agreement, the several terms defined in the Loan Regulations have the respective meanings therein set forth unless modified herein or the context otherwise requires. Additional terms used in this Loan Agreement have the following meanings:

(a) "CERC" means the Central Electricity Regulatory Commission established in accordance with the Guarantor's Electricity Act, 2003, as amended from time to time;

(b) "Consulting Guidelines" means the Guidelines on the Use of Consultants by Asian Development Bank and its Borrowers (2010, as amended from time to time);

(c) "Consulting Services" means any consulting services that may be financed out of the proceeds of the Loan;

(d) "CPTD" means the compensation plan for temporary damages prepared and submitted by the Borrower and cleared by ADB;

(e) "Environmental Management Plan" or "EMP" means the environmental management plan for the Project, including any update thereto, incorporated in the IEE;

(f) "Environmental Safeguards" means the principles and requirements set forth in Chapter V, Appendix 1, and Appendix 4 (as applicable) of the SPS;

(g) "ESPP" means the Environmental and Social Policy and Procedures, (2009, as amended from time to time) of the Borrower;

(h) "Financial Year" means the period of 12 months commencing on 1 April and ending on 31 March;

(i) “Goods” means equipment and materials to be financed out of the proceeds of the Loan, including related services such as transportation, insurance, installation, commissioning, training, and initial maintenance, but excluding Consulting Services;

(j) “HVDC” means high voltage direct current;

(k) “Indigenous Peoples Safeguards” means the principles and requirements set forth in Chapter V, Appendix 3, and Appendix 4 (as applicable) of the SPS;

(l) “Initial Environmental Examination” or “IEE” means the initial environmental examination for the Project, including any update thereto, prepared and submitted by the Borrower and cleared by ADB;

(m) “Involuntary Resettlement Safeguards” means the principles and requirements set forth in Chapter V, Appendix 2, and Appendix 4 (as applicable) of the SPS;

(n) “Loan Disbursement Handbook” means ADB’s Loan Disbursement Handbook (2007, as amended from time to time);

(o) “PAM” means the project administration manual for the Project dated 24 August 2011 and agreed between the Borrower and ADB, as updated from time to time in accordance with the respective administrative procedures of the Borrower and ADB;

(p) “Procurement Guidelines” means ADB’s Procurement Guidelines (2010, as amended from time to time);

(q) “Procurement Plan” means the procurement plan for the Project dated 24 August 2011 and agreed between the Borrower and ADB, as updated from time to time in accordance with the Procurement Guidelines, the Consulting Guidelines, and other arrangements agreed with ADB;

(r) “Project Executing Agency” for the purposes of, and within the meaning of, the Loan Regulations means the Borrower;

(s) “Resettlement Plan” or “RP” means the resettlement plan for the Project, including any update thereto, prepared and submitted by the Borrower and cleared by ADB;

(t) “Safeguard Policy Statement” or “SPS” means ADB’s Safeguard Policy Statement (2009);

(u) “Safeguards Monitoring Report” means each report prepared and submitted by the Borrower to ADB that describes progress with implementation of and compliance with the IEE, the EMP, the CPTD and the RP including any corrective and preventative actions; and

(v) “Works” means construction or civil works to be financed out of the proceeds of the Loan, including services such as drilling or mapping, and project related

services that are provided as part of a single responsibility or turnkey contract, but excluding Consulting Services.

## ARTICLE II

### The Loan

Section 2.01. (a) ADB agrees to lend to the Borrower from ADB's ordinary capital resources an amount of five hundred million Dollars (\$500,000,000), as such amount may be converted from time to time through a Currency Conversion in accordance with the provisions of Section 2.06 of this Loan Agreement.

(b) The Loan has a principal repayment period of 20 years, and a grace period as defined in subsection (c) hereinafter.

(c) The term "grace period" as used in subsection (b) hereinabove means the period prior to the first Principal Payment Date in accordance with the amortization schedule set forth in Schedule 2 to this Loan Agreement.

Section 2.02. The Borrower shall pay to ADB interest on the principal amount of the Loan withdrawn and outstanding from time to time at a rate for each Interest Period equal to the sum of LIBOR and 0.60% as provided by Section 3.02 of the Loan Regulations, less a credit of 0.20% as provided by Section 3.03 of the Loan Regulations.

Section 2.03. The Borrower shall pay a commitment charge of 0.15% per annum. Such charge shall accrue on the full amount of the Loan (less amounts withdrawn from time to time), commencing 60 days after the date of this Loan Agreement.

Section 2.04. Interest and other charges on the Loan shall be payable semiannually on 1 February and 1 August in each year.

Section 2.05. The Borrower shall repay the principal amount of the Loan withdrawn from the Loan Account in accordance with the provisions of Schedule 2 to this Loan Agreement.

Section 2.06. (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, whether withdrawn and outstanding 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 Floating Rate to a Fixed Rate, or vice versa; and

(iii) the setting of limits on the Floating 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 said Floating Rate.

(b) Any conversion requested pursuant to subsection (a) hereinabove that is accepted by ADB shall be considered a "Conversion", as defined in Section 2.01(6) of the Loan Regulations, and shall be effected in accordance with the provisions of Article V of the Loan Regulations and the Conversion Guidelines.

### **ARTICLE III**

#### **Use of Proceeds of the Loan**

Section 3.01. The Borrower shall cause the proceeds of the Loan to be applied to the financing of expenditures on the Project in accordance with the provisions of this Loan Agreement.

Section 3.02. The proceeds of the Loan shall be allocated and withdrawn in accordance with the provisions of Schedule 3 to this Loan Agreement, as such Schedule may be amended from time to time by agreement between the Borrower and ADB.

Section 3.03. Except as ADB may otherwise agree, the Borrower shall procure, or cause to be procured, the items of expenditure to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to this Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 3.04. Except as ADB may otherwise agree, the Borrower shall cause all items of expenditure financed out of the proceeds of the Loan to be used exclusively in the carrying out of the Project.

Section 3.05. The Loan Closing Date for the purposes of Section 9.02 of the Loan Regulations shall be 30 June 2017 or such other date as may from time to time be agreed between the Borrower and ADB.

## ARTICLE IV

### Particular Covenants

Section 4.01. (a) The Borrower shall cause the Project to be carried out with due diligence and efficiency and in conformity with sound applicable technical, financial, business, and development practices.

(b) In the carrying out of the Project and operation of the Project facilities, the Borrower shall perform, or cause to be performed, all obligations set forth in Schedule 5 to this Loan Agreement.

Section 4.02. The Borrower shall make available, promptly as needed, the funds, facilities, services, and other resources, as required, in addition to the proceeds of the Loan, for the carrying out of the Project and for the operation and maintenance of the Project facilities.

Section 4.03. (a) Whenever applicable, in the carrying out of the Project, the Borrower shall cause competent and qualified consultants and contractors, acceptable to ADB to be employed to an extent and upon terms and conditions satisfactory to the Borrower and ADB.

(b) The Borrower shall cause the Project to be carried out in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to the Borrower and ADB, as applicable. The Borrower shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.

Section 4.04. The Borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the Project and operation of the Project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.

Section 4.05. (a) The Borrower shall (i) have its accounts and financial statements (balance sheet, statement of income and expenses, cash flow and related statements) audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; (ii) furnish to ADB, as soon as available but in any event not later than 6 months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of this Loan Agreement), all in the English language; and (iii) furnish to ADB such further information concerning such accounts and financial statements, and the audit thereof, as ADB shall from time to time reasonably request.

(b) The Borrower shall enable ADB, upon ADB's request, to discuss the Borrower's financial statements and its financial affairs from time to time with the auditors appointed by the Borrower pursuant to subsection (a) hereinabove, and shall authorize and



require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of the Borrower unless the Borrower shall otherwise agree.

Section 4.06. The Borrower shall enable ADB's representatives to inspect the Project, the Goods and Works, and any relevant records and documents.

Section 4.07. (a) The Borrower shall, promptly as required, take all action within its powers to maintain its corporate existence, to carry on its operations and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its business.

(b) The Borrower shall at all times conduct its business in accordance with sound technical, financial, business and development practices, and under the supervision of competent and experienced management and personnel.

(c) The Borrower shall at all times operate and maintain its plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound applicable technical, financial, business, development, operational and maintenance practices.

Section 4.08. Except as ADB may otherwise agree, the Borrower shall not sell, lease or otherwise dispose of any of its assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice the ability of the Borrower to perform satisfactorily any of its obligations under this Loan Agreement.

Section 4.09 No provision under this Loan Agreement shall operate to mitigate or prejudice any requirement on either party under the Non-sovereign Loan Agreement.

## **ARTICLE V**

### **Suspension; Acceleration of Maturity**

Section 5.01. The following are specified as additional events for suspension of the right of the Borrower to make withdrawals from the Loan Account for the purposes of Section 9.01(l) of the Loan Regulations:

- (a) any change shall have been made in the memorandum and articles of association of the Borrower, which may in the reasonable opinion of ADB, materially and adversely affect the financial condition, operations, or ability of the Borrower to perform any of its obligations under this Loan Agreement; or
- (b) a subsidiary or any other entity shall have been created, acquired, or taken over by the Borrower, if such creation, acquisition or taking over, in the reasonable opinion of ADB, may materially and adversely affect

the conduct of its business or its financial condition or the efficiency of its management and personnel or the carrying out of the Project.

Section 5.02. The following is specified as an additional event for acceleration of maturity for the purposes of Section 9.07(a)(iv) of the Loan Regulations: any of the events specified in Section 5.01 of this Loan Agreement shall have occurred.

## **ARTICLE VI**

### **Effectiveness**

Section 6.01. The following are specified as additional conditions to the effectiveness of this Loan Agreement for the purposes of Section 10.01(f) of the Loan Regulations:

- (a) all conditions precedent to disbursement of the Non-sovereign Loan under the Non-sovereign Loan Agreement shall have been met in accordance with its terms;
- (b) creation by the Borrower in favor of ADB of a pari-passu interest in the liens created on its assets as security for debt in order to equally and ratably secure the payment of ADB loans under No. 2415 dated 28 March 2008 and No. 2510 dated 27 March 2009; and
- (c) receipt by ADB of a legal opinion, satisfactory to ADB, of an independent counsel acceptable to ADB, confirming that security documents pursuant to subsection (b) hereinabove, are legally valid and binding on the Borrower, and create valid pari-passu liens in favor of ADB.

Section 6.02. A date 90 days after the date of this Loan Agreement is specified for the effectiveness of this Loan Agreement for the purposes of Section 10.04 of the Loan Regulations.

## **ARTICLE VII**

### **Miscellaneous**

Section 7.01. Each of the Executive Director (Corporate Planning), the General Manager (Corporate Planning), and the Additional General Manager (Corporate Planning) of the Borrower is designated as representative of the Borrower for the purposes of Section 12.02 of the Loan Regulations.

Section 7.02. The following addresses are specified for the purposes of Section 12.01 of the Loan Regulations:

For the Borrower

Power Grid Corporation of India Limited  
'SAUDAMINI' Plot No. 2, Sector-29  
Gurgaon – 122001  
Haryana

Facsimile Numbers:

+91 124 257-1959  
+91 124 257-1961.

For ADB


Asian Development Bank  
6 ADB Avenue  
Mandaluyong City  
1550 Metro Manila  
Philippines

Facsimile Numbers:

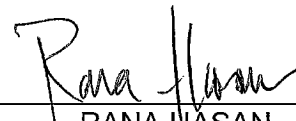
+63 2 636-2444  
+63 2 636-2338.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Loan Agreement to be signed in their respective names as of the day and year first above written and to be delivered at the principal office of ADB.

POWER GRID CORPORATION OF  
INDIA LIMITED

By  \_\_\_\_\_  
R. N. NAYAK  
Chairman and Managing Director

ASIAN DEVELOPMENT BANK

By  \_\_\_\_\_  
RANA HASAN  
Officer-in-Charge  
India Resident Mission

**SCHEDULE 1****Description of the Project**

1. The objective of the Project is to increase reliable power supply from private independent power producers and public utilities within the interconnected grid network by strengthening interregional transmission network. The Project also aims to strengthen the Borrower's operations by improving its access to diversified sources of financial credit, through provision of a combined sovereign Loan and Non-sovereign Loan.
2. The Project shall comprise:  
  
Establishment of HVDC interregional transmission system between the northern (Haryana) and western (Chhattisgarh) regions
  - (a) Construction of a 800kV HVDC transmission line (approximately 1,365 km) between Champa (in Chhattisgarh) and Kurukshetra (in Haryana);
  - (b) Establishment of 800kV HVDC terminals at Champa and Kurukshetra; and
  - (c) Any Works related to the above.
3. The Project is expected to be completed by 31 December 2016.

## SCHEDULE 2

### Amortization Schedule

#### (National Grid Improvement Project)

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 shall 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 ADB by multiplying: (a) the total principal amount of the Loan withdrawn and outstanding as of the first Principal Payment Date; by (b) the Installment Share for each Principal Payment Date, such repayment amount to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

<u>Payment Due</u>	<u>Installment Share</u> (Expressed as a %)
1 February 2017	0.827816
1 August 2017	0.869207
1 February 2018	0.912667
1 August 2018	0.958301
1 February 2019	1.006216
1 August 2019	1.056526
1 February 2020	1.109353
1 August 2020	1.164820
1 February 2021	1.223061
1 August 2021	1.284214
1 February 2022	1.348425
1 August 2022	1.415846
1 February 2023	1.486639
1 August 2023	1.560971
1 February 2024	1.639019
1 August 2024	1.720970
1 February 2025	1.807019
1 August 2025	1.897369
1 February 2026	1.992238
1 August 2026	2.091850
1 February 2027	2.196442
1 August 2027	2.306264
1 February 2028	2.421578
1 August 2028	2.542657
1 February 2029	2.669789
1 August 2029	2.803279
1 February 2030	2.943443

<u>Payment Due</u>	<u>Installment Share</u> (Expressed as a %)
1 August 2030	3.090615
1 February 2031	3.245146
1 August 2031	3.407403
1 February 2032	3.577773
1 August 2032	3.756662
1 February 2033	3.944495
1 August 2033	4.141720
1 February 2034	4.348806
1 August 2034	4.566246
1 February 2035	4.794558
1 August 2035	5.034286
1 February 2036	5.286000
1 August 2036	5.550311
<b>Total</b>	<b>100.000000</b>

2. If the proceeds of the Loan shall not 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 as follows:

(a) To the extent that any proceeds of the Loan shall have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the amount withdrawn and outstanding as of such date in accordance with paragraph 1 of this Schedule.

(b) Any withdrawal made 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 ADB by multiplying the amount of each such withdrawal by a fraction, the numerator of which shall be the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date (the Original Installment Share) and the denominator of which shall be the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such repayment amounts to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

3. Withdrawals made within 2 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.

4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the withdrawn principal amount of the Loan to an Approved Currency, the amount so converted in said Approved Currency that shall be repayable on any Principal Payment Date occurring during the Conversion Period, shall be

determined by ADB by multiplying such amount in its currency of denomination immediately prior to said Conversion by either: (i) the exchange rate that reflects the amounts of principal in said Approved Currency payable by ADB under the Currency Hedge Transaction relating to said Conversion; or (ii) if ADB so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.

5. If the principal amount of the Loan withdrawn and outstanding from time to time shall be 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.



### SCHEDULE 3

#### Allocation and Withdrawal of Loan Proceeds

##### General

1. The table attached to this Schedule sets forth the Categories of items of expenditure to be financed out of the proceeds of the Loan and the allocation of the Loan proceeds to each such Category ("Table"). (Reference to "Category" in this Schedule is to a Category or Subcategory of the Table.)

##### Percentages of ADB Financing

2. Except as ADB may otherwise agree, each item of expenditure shall be financed out of the proceeds of the Loan on the basis of the percentages set forth in the Table.

##### Reallocation

3. Notwithstanding the allocation of Loan proceeds and the withdrawal percentages set forth in the Table,

(a) if the amount of the Loan allocated to any Category appears to be insufficient to finance all agreed expenditures in that Category, ADB may, in consultation with the Borrower, (i) reallocate to such Category, to the extent required to meet the estimated shortfall, amounts of the Loan which have been allocated to another Category but, in the opinion of ADB, are not needed to meet other expenditures, and (ii) if such reallocation cannot fully meet the estimated shortfall, reduce the withdrawal percentage applicable to such expenditures in order that further withdrawals under such Category may continue until all expenditures thereunder shall have been made; and

(b) if the amount of the Loan allocated to any Category appears to exceed all agreed expenditures in that Category, ADB may, in consultation with the Borrower, reallocate such excess amount to any other Category.

##### Disbursement Procedures

4. Except as ADB may otherwise agree, the Loan proceeds shall be disbursed in accordance with the Loan Disbursement Handbook and as set out in the PAM.

##### Retroactive Financing

5. Withdrawals from the Loan Account may be made for reimbursement of eligible expenditures incurred under the Project before the Effective Date, but not earlier than 12 months before the date of this Loan Agreement subject to a maximum amount equivalent to 20% of the Loan amount.

TABLE

<b>ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS</b>				
<b>(National Grid Improvement Project)</b>				
<b>CATEGORY</b>				<b>ADB FINANCING</b>
<b>Number</b>	<b>Item</b>	<b>Total Amount Allocated for ADB Financing* (\$)</b>		<b>Percentage and Basis for Withdrawal from the Loan Account</b>
		<b>Category</b>	<b>Subcategory</b>	
1	Equipment	471,800,000		
1A	Substations		399,000,000	63% of total expenditure claimed*
1B	Transmission Line		72,800,000	63% of total expenditure claimed*
2	Unallocated	28,200,000		
	<b>Total</b>	<b>500,000,000</b>		

\*Exclusive of taxes, duties, inland freight and insurance in the territory of the Borrower

## **SCHEDULE 4**

### **Procurement of Goods, Works and Consulting Services**

#### General

1. The procurement of Goods, Works, and Consulting Services shall be subject to and governed by the Procurement Guidelines, and the Consulting Guidelines, respectively.
2. All terms used in this Schedule and not otherwise defined in this Loan Agreement have the meanings provided in the Procurement Guidelines and/or the Consulting Guidelines, as applicable.

#### Goods and Works

3. Except as ADB may otherwise agree, Goods and Works shall only be procured on the basis of the following method of procurement: International Competitive Bidding.
4. The method of procurement is subject to, among other things, the detailed arrangements and threshold values set forth in the Procurement Plan. The Borrower may only modify the method of procurement or threshold values with the prior agreement of ADB, and modifications must be set out in updates to the Procurement Plan.

#### Domestic Preference

5. The Borrower may grant a margin of preference in the evaluation of bids under international competitive bidding in accordance with paragraphs 2.55(a) and 2.56 of the Procurement Guidelines for domestically manufactured Goods.

#### Conditions for Award of Contract

6. The Borrower shall not award any works contract which involves environmental impacts until the Borrower has incorporated the relevant provisions from the EMP into the works contract.
7. The Borrower shall not award any works contract which involves involuntary resettlement impacts, until the Borrower has prepared and submitted to ADB the CPTD and the final RP, and shall obtain ADB's clearance of such CPTD and RP prior to commencement of works.

#### Consulting Services

8. Except as ADB may otherwise agree, the Borrower shall apply quality- and cost-based selection or individual selection for selecting and engaging Consulting Services, if any.

Industrial or Intellectual Property Rights

9. (a) The Borrower shall ensure that all Goods and Works procured (including without limitation all computer hardware, software and systems, whether separately procured or incorporated within other goods and services procured) do not violate or infringe any industrial property or intellectual property right or claim of any third party.

(b) The Borrower shall ensure that all contracts for the procurement of Goods and Works contain appropriate representations, warranties and, if appropriate, indemnities from the contractor or supplier with respect to the matters referred to in subparagraph (a) of this paragraph.

10. The Borrower shall ensure that all ADB-financed contracts with consultants contain appropriate representations, warranties and, if appropriate, indemnities from the consultants to ensure that the Consulting Services provided do not violate or infringe any industrial property or intellectual property right or claim of any third party.

ADB's Review of Procurement Decisions

11. Contracts procured under international competitive bidding procedures and contracts for Consulting Services shall be subject to prior review by ADB, unless otherwise agreed between the Borrower and ADB and set forth in the Procurement Plan.

## SCHEDULE 5

### Execution of Project; Financial Matters

#### Implementation Arrangements

1. The Borrower shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in the PAM. Any subsequent change to the PAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the PAM and this Loan Agreement, the provisions of this Loan Agreement shall prevail.

#### Accounting

2. The Borrower shall ensure that its financial accounts are maintained in accordance with Indian generally accepted accounting principles, i.e., accounting standards issued by the Institute of Chartered Accountants of India. The Borrower shall inform ADB within 60 days of adoption of any changes in accounting practices, but in no case later than the date of any financial reporting required under this Loan Agreement.

3. In addition to the requirements of Section 4.05 of this Loan Agreement, the Borrower shall continue the existing practice of engaging independent chartered accountants as statutory auditors to audit its annual financial statements and annual Project accounts, together with the memorandum on issues identified during the audit process.

#### Financial

4. Except as ADB may otherwise agree, the Borrower shall, in relation to the transmission operations undertaken directly by it or by its subsidiaries for the Financial Year commencing 1 April 2012 and for each Financial Year thereafter during the term of this Loan Agreement, ensure that it:

- (a) maintains corporate accounts receivables (excluding such amounts for which billing has not been approved by CERC but including for those assets for which a provisional tariff approval has been granted and allowed by CERC) not exceeding the previous 3 months invoicing amounts;
- (b) obtains and holds irrevocable letters of credit from all customers in an aggregate amount equivalent to 105% of the average monthly billings of the previous Financial Year, in a form deemed acceptable by the Borrower and as allowed by CERC; and
- (c) exercises, inter alia, its rights promptly to effect the reduction/stoppage in supply, reallocation of charges, and/or replacement of defaulting customers as permitted under its commercial agreements with generators, state transmission utilities, state electricity boards, bulk consumers, and any other entity or person benefitting from the Borrower's transmission services as well as under the tripartite

agreements with the Guarantor, the state governments and the Reserve Bank of India.

5. Except as ADB may otherwise agree, the Borrower shall for the Financial Year commencing 1 April 2012 and for each Financial Year thereafter during the term of this Loan Agreement, generate cash from internal sources equivalent to not less than 20% of the average of the Borrower's capital expenditures incurred, or expected to be incurred, for the current Financial Year, the previous Financial Year, and the next Financial Year. For the purposes of this paragraph:

- (a) the term "cash from internal sources" means the difference between (i) the sum of cash flows from all sources related to operations, plus cash generated from consumer deposits and consumer advances of any kind, sale of assets, cash yield of interest on investments, extraordinary gains, and net non-operating income, decrease in working capital other than cash, and other cash inflows; and (ii) the sum of all expenses related to operations, including administration, adequate maintenance, and current taxes and payments in lieu of taxes (excluding provision for depreciation, other non-cash operating charges and taxes), debt service requirements, extraordinary losses, all cash dividends paid and other cash distributions of surplus, increase in working capital other than cash and other cash outflows other than capital expenditures;
- (b) the term "net non-operating income" means the difference between (i) revenues from all sources other than those related to operations, after making adequate provisions for uncollectible debts; and (ii) expenses, including taxes and payments in lieu of taxes, incurred in the generation of revenues in (i) hereinabove;
- (c) the term "working capital other than cash" means the difference between current assets excluding cash and current liabilities at the end of each Financial Year;
- (d) the term "current assets excluding cash" means all assets other than cash which could in the ordinary course of business be converted into cash within 12 months, including accounts receivable, marketable securities, inventories and prepaid expenses properly chargeable to operating expenses within the next Financial Year;
- (e) the term "current liabilities" means all liabilities which will become due and payable or could under circumstances then existing be called for payment within 12 months, including accounts payable, customer advances, debt service requirements taxes and payments in lieu of taxes, and dividends;
- (f) the term "debt" means any indebtedness of the Borrower maturing by its terms more than 1 year after the date on which it is originally incurred;

- (g) the debt shall be deemed to be incurred: (i) under a loan contract or agreement, or conditional sale or transfer or financing lease agreement or other instrument providing for such debt or for the modification of its terms of payment on the date of such contract, agreement or instrument; and (ii) under a guarantee agreement, on the date the agreement providing for such guarantee has been entered into. Financial liabilities incurred by the Borrower who is a lessee under finance leasing agreements may also be included as debt;
- (h) the term “debt service requirements” means the aggregate amount of all repayments (including sinking fund payments, and lease payments under finance leases if any), whether or not actually paid, and interest and other charges on debt. Interest charges which are incurred in financing capital expenditures during development are excluded, if such charges are capitalized;
- (i) the term “capital expenditures” means all expenditures incurred on account of fixed assets including interest charged to construction, related to operations;
- (j) the projections for the “next Financial Year” will be based on the Borrower’s 10-year financial projections, updated at least annually, and will include its investment program, financial plan, income statements, cash flow and balance sheets with all its assumptions, provided annually to ADB as of 30 September of each Financial Year;
- (k) the terms “operations” or “operating” refers to all the businesses of the Borrower, including without limitation its transmission operations, telecom operations, consultancy operations and any other businesses in which the Borrower is engaged; and
- (l) in the event cash from internal resources is less than 20% as required hereinabove, any grant provided by the Guarantor or additional equity capital raised by the Borrower (including any share premium) in the current and/or the previous Financial Year to the extent paid up but not utilized for capital expenditures, may also be added to the cash from internal resources for purposes of computing such financial ratio; provided further that for purposes of computing such financial ratio for the Financial Year 2012-13, any additional equity capital raised by the Borrower (including any share premium) in the previous 2 Financial Years to the extent paid up but not utilized for capital expenditures, may also be added to the amount of cash from internal sources.

6. Except as ADB may otherwise agree, the Borrower shall for the Financial Year commencing 1 April 2012 and for each Financial Year thereafter during the term of this Loan Agreement, ensure that the free cash flows of the Borrower: (a) for the current Financial Year shall be at least 1.2 times the debt service requirements of the Borrower for the same period on all debt; and (b) for the current Financial Year, the previous Financial Year, and the next Financial Year shall on average be at least 1.3 times the debt service requirements of the Borrower for the current Financial Year on all debt. For the purposes of this paragraph:

- (a) the term “free cash flows” means the difference between: (i) the sum of revenues from all sources related to operations, after making adequate provisions for uncollectible debts, adjusted to take account of the Borrower’s rates, dues or other such receivables accrued at the time of the incurrence of debt, and net non-operating income; and (ii) the sum of all expenses related to operations including administration, maintenance, current taxes and payments in lieu of current taxes (but excluding provision for depreciation, other non-cash operating charges, and deferred taxes), movements in working capital other than cash, and interest and other charges on debt, excluding interest capitalized; and
- (b) the terms “net non-operating income”, “working capital other than cash”, “debt”, “debt service requirements”, “next Financial Year”, and “operations”, shall have the same meanings as defined in subparagraphs 5(b), 5(c), 5(f), 5(h), 5(i), and 5(k) hereinabove, respectively.

7. The Borrower shall maintain a corporate debt to equity ratio of not more than 3 to 1 during the term of this Loan Agreement. For purposes of this paragraph:

- (a) 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; and
- (b) the term “debt” shall mean any outstanding indebtedness of the Borrower, but excluding any amount due for payment within 1 year of the date as of which this ratio is computed.

8. (a) Before 28 February of each Financial Year, the Borrower shall, on the basis of forecasts prepared by the Borrower, satisfactory to ADB, review whether it will meet the requirements set forth in paragraphs 4 to 7 of this Schedule 5 in respect of such Financial Year and the following Financial Year, and shall furnish to ADB a copy of such review.

(b) The Borrower shall forward to ADB, with each set of audited annual financial statements, a compliance certificate signed by its statutory auditors and/or director-finance setting out computations as to compliance with the financial covenants described above.

(c) Whenever for the purposes of this Loan Agreement, 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 ADB.



Governance

9. The Borrower shall comply with all statutory requirements and the provisions of the listing agreement with the Securities and Exchange Board of India relating to corporate governance.

10. The Borrower shall ensure that all contracts financed by ADB in connection with the Project shall include provisions specifying the right of ADB to audit and examine the records and accounts of the Borrower, and all contractors, suppliers, consultants, and other service providers as they relate to the Project. The Borrower shall allow and assist ADB's representatives to carry out random spot checks on the work in progress and utilization of funds for the Project. The Borrower shall update its website regularly to include (a) bidding procedures, bidders and contract awards; (b) use of the funds disbursed under the Project; and (c) physical progress of the Project.

11. This Loan Agreement is subject to the continuing assurances of the Guarantor that:

- (a) the Borrower shall continue to function as the central transmission utility under the (Indian) Electricity Act 2003, as amended from time to time, provide transmission services, and facilitate private sector participation in power transmission as per its directives from time to time; and
- (b) it shall continue to support the autonomy of the Borrower with respect to its commercial, administrative, and operational activities.

Environment

12. The Borrower shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of the Guarantor and the relevant States relating to environment, health and safety; (b) the ESPP; (c) the Environmental Safeguards; and (d) all measures and requirements set forth in the IEE, the EMP, and any corrective or preventative actions set forth in the Safeguards Monitoring Report.

13. The Borrower shall ensure that (a) the Project and/or Project facilities are not located within national parks, forests, and wildlife sanctuaries, unless prior environmental clearances are obtained from the relevant government agencies; (b) the monuments of cultural or historical importance are avoided; and (c) works do not commence without obtaining prior forest clearances, wherever applicable.

Land Acquisition and Involuntary Resettlement

14. The Borrower shall ensure, or cause to be ensured, that all land and all rights-of-way required for the Project are made available to the works contractor in accordance with the schedule agreed under the related works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of the Guarantor and the relevant States relating to land acquisition and involuntary resettlement; (b) ESPP; (c) the Involuntary Resettlement Safeguards; and (d) all

measures and requirements set forth in the CPTD and the RP, and any corrective or preventative actions set forth in the Safeguards Monitoring Report.

15. Without limiting the application of the Involuntary Resettlement Safeguards, the CPTD or the RP, the Borrower shall ensure that no physical or economic displacement takes place in connection with the Project until:

- (a) compensation and other entitlements have been provided to affected people in accordance with the CPTD or the RP; and
- (b) a comprehensive income and livelihood restoration program has been established in accordance with the RP.

16. In the event irrigation supplies are disrupted and affected farmers experience losses, the Borrower shall ensure that a provision is made for independent valuation of the losses and timely compensation in respect thereof.

#### Human and Financial Resources to Implement Safeguards Requirements

17. The Borrower shall make available necessary budgetary and human resources to fully implement the EMP, the CPTD and the RP.

#### Safeguards-Related Provisions in Bidding Documents and Works Contracts

18. The Borrower shall ensure that all bidding documents and contracts for works contain provisions that require contractors to:

- (a) comply with the measures relevant to the contractor set forth in the IEE, the EMP, the CPTD and the RP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in the Safeguards Monitoring Report;
- (b) make available a budget for all such environmental and social measures;
- (c) provide the Borrower with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, the CPTD and the RP;
- (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and
- (e) reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.

Safeguards Monitoring and Reporting

19. The Borrower shall do the following:
- (a) submit semiannual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;
  - (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, the CPTD and the RP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;
  - (c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP, the CPTD and the RP promptly after becoming aware of the breach; and
  - (d) in the event unexpected significant safeguard impacts are identified, promptly engage qualified and experienced external expert or agency under terms of reference intimated to ADB, to verify information produced through the Project monitoring process, and facilitate the carrying out of any verification activities by such external experts.

Execution of Works Contracts

20. The Borrower shall ensure that subsequent to award of works contract, no works are commenced by the contractor unless the applicable provisions of the IEE, the EMP, the CPTD and the RP, as approved by ADB, have been complied with.

21. In relation to the Project, the Borrower shall cause the contractors to undertake detailed survey of the affected persons during transmission line alignment finalization. The Borrower shall prepare CPTD which meets ADB's requirements, and update it based upon the detailed design information during the survey carried out by work contractors. The Borrower shall submit to ADB for approval the revised CPTD progressively during the implementation of the related works.

22. Any changes to the location, land alignment, or environment impacts on account of detailed designs of the Project shall be subject to prior approval by ADB before commencement of works for transmission lines under the Project.

Indigenous Peoples

23. In the event of any significant or related impacts on indigenous peoples, the Borrower shall prepare and implement an indigenous peoples plan in accordance with the applicable laws and regulations of the Guarantor and the relevant States, and the Indigenous Peoples Safeguards.

Prohibited List of Investments

24. The Borrower shall ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.

Labor Standards

25. The Borrower shall ensure that for procurement of Goods, Works, and Consulting Services, the contractors, subcontractors and consultants will comply with the applicable labor legislations of the Guarantor, and the relevant States, (e.g. safe working conditions, etc.), as well as with the core labor standards: (a) elimination of force or compulsory labor; (b) abolition of child labor; (c) elimination of discrimination in respect of employment; and (d) freedom of association.

Gender and Development

26. The Borrower shall ensure that the principles of gender equity are followed during implementation of the Project, including (a) equal pay to men and women for work of equal value; and (b) enabling working conditions for women workers. The Borrower, in coordination with the appropriate agencies, shall ensure the effective implementation of measures aimed at increasing Project benefits and impacts on women in and around the Project area.