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LOAN NUMBER 2415-IND

LOAN AGREEMENT  
(Ordinary Operations)

(National Power Grid Development Investment Program – Tranche 1)

between

POWER GRID CORPORATION OF INDIA LIMITED

and

ASIAN DEVELOPMENT BANK

DATED 28 MARCH 2008

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LAL:IND 39630

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

LOAN AGREEMENT dated 28 March 2008 between POWER GRID CORPORATION OF INDIA LIMITED (hereinafter called "the Borrower") and ASIAN DEVELOPMENT BANK (hereinafter called "ADB").

### WHEREAS

(A) the Borrower is a public limited company, incorporated under the Companies Act, 1956, operating under the laws in force in India, and having its registered office in Delhi, India;

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

(C) the Loan is to be guaranteed by India (hereinafter called "the Guarantor") under the terms of a Guarantee Agreement of even date herewith; and

(D) ADB on the basis *inter alia* of the foregoing, has agreed to make a loan to the Borrower from ADB's ordinary capital resources upon the terms and conditions hereinafter set forth;

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, 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 thereof (said Ordinary Operations Loan Regulations as so modified being hereinafter called the "Loan Regulations"):

(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, unless the context otherwise requires, the several terms defined in the Loan Regulations have the respective meanings therein set forth, and the following additional terms 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) "Companies Act, 1956" means the Companies Act, 1956 (1 of 1956) of the Guarantor, as amended from time to time;

(c) "Consulting Guidelines" means ADB's Guidelines on the Use of Consultants by Asian Development Bank and its Borrowers (2007, as amended from time to time);

(d) "CPTD" means the Compensation Plan for Temporary Damages prepared or to be prepared in accordance with RF by the Borrower in respect of each project under the Facility;

(e) "EARF" means the Environmental Assessment and Review Framework as set out in Schedule 5 to the FFA and prepared in accordance with ADB's *Environment Policy* (2002) and ESPP;

(f) "EIA" means the Environment Impact Assessment report prepared or to be prepared in accordance with the EARF for each of project 1 and 2 as described in paragraph 2 of Schedule 1 to this Loan Agreement;

(g) "EMP" means the Environmental Management Plan prepared or to be prepared for each project under the Facility in accordance with the EARF;

(h) "ESPP" means the Environmental and Social Policy & Procedures, (2005, as amended from time to time) of the Borrower;

(i) “Facility” means a multitranche financing facility provided by ADB to the Borrower in accordance with ADB’s policy under *Pilot Financing Instruments and Modalities* (R194-05) dated 4 August 2005;

(j) “FFA” means the Framework Financing Agreement dated 28 February 2008 and entered into between ADB and the Borrower for the Facility;

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

(l) “Guarantee Agreement” means the agreement of even date herewith between the Guarantor and ADB, referred to in recital (C) of this Loan Agreement;

(m) “IEE” means the initial environmental examination prepared or to be prepared in accordance with the EARF for each of project 1 and 2 as described in paragraph 2 of Schedule 1 to this Loan Agreement;

(n) “Investment Program” means the National Power Grid Development Investment Program, as more fully described in the Schedule 1 to the FFA;

(o) “IPDF” means the Indigenous Peoples Development Framework as set out in Schedule 5 to the FFA and prepared in accordance with ADB’s *Policy on Indigenous Peoples* (1998) and ESPP;

(p) “IPDP” means the Indigenous Peoples Development Plan prepared or to be prepared in accordance with the IPDF for each of project 1 and 2 as described in paragraph 2 of Schedule 1 to this Loan Agreement;

(q) “PFR” means the periodic financing request to be submitted by the Borrower for the purposes of each loan under the Facility, and for the purpose of this Loan Agreement means the PFR dated 28 February 2008;

(r) “PMU” means the Program Management Unit established by the Borrower at its headquarters, headed by the Executive Director (Corporate Planning) in accordance with paragraph 1 of Schedule 5 to this Loan Agreement;

(s) “Procurement Guidelines” means ADB’s Procurement Guidelines (2007, as amended from time to time);

(t) “Procurement Plan” means the procurement plan for the Project dated 28 February 2008 and agreed between the Borrower and ADB, as updated from time to time in accordance with Procurement Guidelines, Consulting Guidelines, and other arrangements agreed with ADB;

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

(v) “Project facilities” mean the facilities to be provided under the Project;

(w) “RF” means the Resettlement Framework as set out in Schedule 5 to the FFA and prepared in accordance with ADB’s *Involuntary Resettlement Policy* (1995) and ESPP;

(x) “RP” means the Resettlement Plan prepared or to be prepared in accordance with the RF for each of project 1 and 2 as described in paragraph 2 of Schedule 1 to this Loan Agreement; and

(y) “Works” means construction or civil works to be financed out of the proceeds of the Loan, and 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 four hundred million Dollars (\$400,000,000), 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 paragraph (c) of this Section.

(c) The term “grace period” as used in paragraph (b) of this Section 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 0.40% 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 sixty (60) days after the date of this Loan Agreement.

Section 2.04. Interest and other charges on the Loan shall be payable semiannually on 15 May and 15 November 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 paragraph (a) of this Section 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 Goods, Works and consulting services and other items of expenditure to be financed out of the proceeds of the Loan and the allocation of amounts of the Loan among different categories of such Goods, Works and consulting services and other items of expenditure shall be 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, all Goods, Works and consulting services to be financed out of the proceeds of the Loan shall be procured in accordance with the provisions of Schedule 4 to this Loan Agreement. ADB may refuse to finance a contract where Goods, Works or consulting services have 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 Goods, Works and consulting services financed out of the proceeds of the Loan to be used exclusively in the carrying out of the Project.

Section 3.05. The closing date for withdrawals from the Loan Account for the purposes of Section 9.02 of the Loan Regulations shall be 30 June 2013 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 administrative, financial, engineering, environmental, and power sector 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, its 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, land, and other resources which are 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) 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 ADB. 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, 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 other 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 Section 4.05(a) hereabove, 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 financed out of the proceeds of the Loan, and any relevant records and documents.

Section 4.07. The Borrower shall ensure that the Project facilities are operated, maintained and repaired in accordance with sound administrative, financial, engineering, environmental, maintenance, and operational practices.

## **ARTICLE V**

### **Suspension; Cancellation; 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.

(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) 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. 1405-IND dated 18 July 1996, No. 1764-IND dated 4 December 2000, and No. 2152-IND dated 3 November 2005; and

(b) receipt by ADB of an independent legal opinion of counsel acceptable to ADB confirming that security documents pursuant to Section 6.01, paragraph (a) above, are legally valid and binding on the Borrower, and create valid pari-passu liens in favor of ADB.

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

## ARTICLE VII

### Miscellaneous

Section 7.01. Each of the Executive Director and the 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  
'SAUDAMANI' Plot No. 2, Sector-29  
Gurgaon – 122001  
Haryana

Facsimile Number:

(0091) 124-2571961  
(0091) 124-2571959

For ADB

Asian Development Bank  
P.O. Box 789  
0980 Manila, Philippines

Cable Address:

ASIANBANK  
MANILA

Telex Numbers:

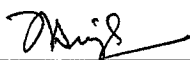
29066 ADB PH (RCA)  
42205 ADB PM (ITT)  
63587 ADB PN (ETPI)

Facsimile Numbers:


(632) 636-2444  
(632) 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 and to be delivered at the principal office of ADB, as of the day and year first above written.

POWER GRID CORPORATION OF  
INDIA LIMITED

By   
\_\_\_\_\_  
R.P. SINGH  
Chairman and Managing Director

ASIAN DEVELOPMENT BANK

By   
\_\_\_\_\_  
TADASHI KONDO  
Country Director  
India Resident Mission

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

1. The objective of the Investment Program is to enhance transmission network reliability and efficiency through expansion and augmentation of the national transmission grid.
2. As part of the Investment Program, the two projects financed under the Facility are:
  - (i) Project 1 – Upgradation of Transmission Capacity from Uttarakhand. This project aims to provide adequate transmission arrangement for evacuation and reliable transfer of power generated from Tehri Valley in the State of Uttarakhand to constituents of the Northern Region, by establishment of 765/400kV, 10 x 500 MVA transformation capacity each at Tehri Pooling Station and Meerut within the existing site, construction of 103km of loop-in-loop-out (LILo) of Bareilly – Mandaula 400kV double-circuit (D/C) transmission line at Meerut (54km of loop-in and 49km of loop-out), and modification of series capacitors for operation at 765kV level.
  - (ii) Project 2 - ±800kV High Voltage Direct Current (HVDC) Northeastern – Northern/Western Inter-connector. This project aims to deliver bulk power generated from hydro power stations in the North-eastern region to the power deficit regions of the Northern region and the Western region through construction of about 1,800km of ±800kV HVDC transmission systems from Biswanath Chariyali to Agra including 800kV converting and inverting stations at both ends, and construction of 400kV connecting transmission lines at Biswanath Chariyali for transfer of power from various power plants in the North-eastern region.
3. The Project under this Loan Agreement shall mean financing of select sub-station contract packages under project 1, and transmission line contract packages under project 2 as described in paragraph 2 of this Schedule 1, and as more fully set out in Annexure 4 to the PFR.

## SCHEDULE 2

### Amortization Schedule (National Power Grid Development Investment Program – Tranche 1)

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 %)
15 May 2013	0.827816
15 Nov 2013	0.869207
15 May 2014	0.912667
15 Nov 2014	0.958301
15 May 2015	1.006216
15 Nov 2015	1.056526
15 May 2016	1.109353
15 Nov 2016	1.164820
15 May 2017	1.223061
15 Nov 2017	1.284214
15 May 2018	1.348425
15 Nov 2018	1.415846
15 May 2019	1.486639
15 Nov 2019	1.560971
15 May 2020	1.639019
15 Nov 2020	1.720970
15 May 2021	1.807019
15 Nov 2021	1.897369
15 May 2022	1.992238
15 Nov 2022	2.091850
15 May 2023	2.196442
15 Nov 2023	2.306264
15 May 2024	2.421578
15 Nov 2024	2.542657
15 May 2025	2.669789
15 Nov 2025	2.803279
15 May 2026	2.943443
15 Nov 2026	3.090615
15 May 2027	3.245146
15 Nov 2027	3.407403
15 May 2028	3.577773

15 Nov 2028	3.756662
15 May 2029	3.944495
15 Nov 2029	4.141720
15 May 2030	4.348806
15 Nov 2030	4.566246
15 May 2031	4.794558
15 Nov 2031	5.034286
15 May 2032	5.286000
15 Nov 2032	5.550311
TOTAL	100.000000

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 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.

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 Goods, Works, services and other items to be financed out of the proceeds of the Loan and the allocation of amounts of the Loan to each such Category (hereinafter called "the Table"). (Reference to "Category" or "Categories" in this Schedule is to a Category or Categories of the Table).

Percentages of ADB Financing

2. Except as ADB may otherwise agree, the items of the Categories listed in the Table 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, by notice to 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 then allocated to any Category appears to exceed all agreed expenditures in that Category, ADB may, by notice to the Borrower, reallocate such excess amount to any other Category.

Disbursement Procedures

4. Except as ADB may otherwise agree, the Loan proceeds for financing Goods, Works, consulting services, if any, and other items shall be disbursed in accordance with ADB's "Loan Disbursement Handbook" dated January 2007 (ADB's Loan Disbursement Handbook), as amended from time to time.

Retroactive Financing

5. Withdrawals from the Loan Account may be made for reimbursement of reasonable expenditures incurred under the Project before the Effective Date, but not earlier than 12 months before the date of this Loan Agreement in connection with procurement of equipment and civil works, subject to a maximum amount equivalent to 20 percent of the Loan amount.

**TABLE**

<b>ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS (National Power Grid Development Investment Program – Tranche 1)</b>				
<b>CATEGORY</b>				<b>ADB FINANCING BASIS</b>
<b>Number</b>	<b>Item</b>	<b>Total Amount Allocated for ADB Financing Categories [\$]</b>		<b>Percentage of ADB Financing from the Loan Account</b>
		<b>Project 1</b>	<b>Project 2</b>	
1	Works	15,000,000	8,000,000	100 percent of total expenditure claimed*
2	Equipment	237,000,000	90,000,000	100 percent of total expenditure claimed*
3	Unallocated	33,000,000	17,000,000	
	Total	285,000,000	115,000,000	

\*Excluding taxes and duties imposed within India

## SCHEDULE 4

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

#### A. General

1. All Goods and Works, and consulting services, if any, to be financed out of the proceeds of the Loan shall be subject to and governed by the Procurement Guidelines, and the Consulting Guidelines, respectively.
2. All terms used and not otherwise defined in this Loan Agreement have the meanings provided in the Procurement Guidelines and/or the Consulting Guidelines, as applicable.

#### B. Procurement for Goods and Works

3. Except as ADB may otherwise agree, Goods and Works shall only be procured on the basis of the methods of procurement set forth below:

International Competitive Bidding
National Competitive Bidding

The methods of procurement are subject to, among other things, the detailed arrangements and threshold values set forth in the Procurement Plan. The Borrower may only modify the methods of procurement or threshold values with the prior agreement of ADB, and modifications must be set out in updates to the Procurement Plan.

4. Domestic Preference. 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 and paragraphs 2.55(b) and 2.56 of the Procurement Guidelines for domestic Works.
5. National Competitive Bidding. The Borrower and ADB shall ensure that, prior to the commencement of any procurement activity under national competitive bidding, the Borrower's national competitive bidding procedures are consistent with the Procurement Guidelines. Any modifications or clarifications to such procedures agreed between the Borrower and ADB shall be set out in the Procurement Plan. Any subsequent change to the agreed modifications and clarifications shall become effective only after written approval of such change by the Borrower and ADB.

#### C. Conditions for Award of Contracts

6. The Borrower shall not award any Works contract financed under the Loan in respect of any project under the Facility unless the related RP, provisional CPTD, IEE/EIA (with EMP), IPDP, as applicable, are submitted to ADB.

**D. Selection of Consulting Services**

7. In the event, any consulting services are financed out of the proceeds of the Loan, the Borrower shall apply quality- and cost-based selection for selecting and engaging consulting services unless otherwise agreed by ADB, and set forth in the Procurement Plan.

**E. Industrial or Intellectual Property Rights**

8. (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.

9. 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.

**F. ADB's Review of Procurement Decisions**

10. All contracts procured under international competitive bidding procedures and contracts for consulting services, if any, 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 and Operation of Project Facilities; Financial Matters

#### Implementation Arrangements

1. The Borrower, as the Program Executing Agency, has set up a PMU headed by an Executive Director (Corporate Planning) at its headquarters. The PMU, through the related functional departments of the Borrower, shall be responsible for processing, appraising, and implementing the Project covering, *inter alia*, the development and completion of technical reports, feasibility studies, preliminary design reports, environmental assessment reports, resettlement plan, indigenous peoples development plan, and detailed design reports to ensure compliance with the laws, regulations, and policies of the Guarantor, relevant State, and ADB.

2. The Borrower has 9 regional offices headed by an executive director/general manager to implement the Project under their respective jurisdiction. The additional general manager/deputy general managers in the region responsible for construction and commissioning of Project shall report to their respective regional heads. The regional heads shall facilitate submission of the monthly progress reports to the management of the Borrower, who shall review the Project every quarter. The PMU shall maintain regular consultations with other funding agencies for implementation of the Projects.

#### Eligibility Criteria

3. The Borrower shall ensure that each of projects 1 and 2 as described in paragraph 2 of Schedule 1 to this Loan Agreement (hereinafter called "project/s under the Facility") shall at all times conform to the criteria set out in Schedule 4 to the FFA.

#### Environment

4. The Borrower shall ensure that each of the projects under the Facility, and all Project facilities are assessed, designed, implemented, constructed, operated, maintained, and monitored in accordance with all applicable environmental laws and regulations of the Guarantor, relevant States, ADB's *Environment Policy* (2002), ESPP, IEE, EIA (if necessary), and EARF.

5. The Borrower shall ensure that (a) EMP, and the mitigation measures included therein, as specified in the IEE, EIAs, and EARF, as applicable, are properly and promptly implemented, (b) the EMP and mitigation measures included therein are updated at the engineering design stage and incorporated into the bidding documents and civil works / supply contracts, (c) any adverse impact on the environment that may arise from Project implementation activities is promptly mitigated or minimized in accordance with the EMP, (d) any major accidents, including any safety breaches, violation of environmental standards, and corrective measures taken thereto, are reported forthwith to ADB, (e) at least semiannual reports on the implementation of the EMP are submitted to ADB, and ADB is allowed to conduct annual environmental reviews, and (f) reports and information are provided to ADB on request to enable it to verify that the Goods, Works, and consulting

services, if any, financed out of the proceeds of the Loan, have been produced in a responsible manner with a view to resource efficiency, waste minimization, and other environmental considerations.

6. The Borrower shall ensure that (a) the Project and/or Project facilities are not located within national parks, wild and planted forests, and wildlife sanctuaries, unless prior environmental clearances are obtained from the relevant government agencies, and (b) monuments of cultural or historical importance are avoided.

#### Land Availability and Resettlement

7. The Borrower shall, subject to compliance with RF, RP, and CPTD, as agreed with ADB, and in accordance with all applicable laws, regulations, and policies of the Guarantor, and the relevant State, acquire or make available the land and rights to land free from any encumbrances, and clear the utilities, trees and any other obstruction from such land by providing adequate compensation and assistance required for commencement of construction activities in accordance with the schedule agreed under the related civil works contract.

8. The Borrower shall ensure that land acquisition and resettlement is undertaken in accordance with applicable laws, regulations and policies of the Guarantor, the relevant State, ADB's *Involuntary Resettlement Policy* (1995), ESPP, as well as in accordance with the RF, RP, and CPTD for each project under the Facility.

9. The Borrower shall (i) prepare and implement RPs for each project under the Facility that entails permanent losses, and CPTDs for each project under the Facility that entails only temporary losses, including any revisions thereto due to detailed designs, in accordance with ADB's *Involuntary Resettlement Policy* (1995), ESPP, and the RF and (ii) disclose the RP and CPTDs to affected persons in a form and language easily comprehended by the affected persons prior to submission to ADB for review.

10. The Borrower shall ensure that prior to commencement of civil works under each project under the Facility, (i) full compensation based on replacement costs in accordance with the related RP is paid to the affected persons such that their living standards are not adversely affected, and (ii) resettlement assistance, grievance redress mechanisms, and monitoring systems are fully implemented. The Borrower shall implement additional activities, such as income generating programs, within 12 and 18 months of the commencement of civil works.

11. The Borrower shall submit progress and completion reports on land acquisition and resettlement under the quarterly progress reports for the Project. In addition, the Borrower shall forward external monitoring report to ADB on a semi-annual basis for review.

12. Prior to any land acquisition and resettlement for each project under the Facility, the Borrower shall ensure that RPs and CPTDs, including their updates, based on consultation with the affected persons are submitted to ADB for its approval, and uploading on ADB's website.

13. The Borrower shall ensure that essential public infrastructure that may be affected under land acquisition and resettlement is replaced, as appropriate, in an expeditious manner in accordance with the related RP.

14. The Borrower shall ensure that construction contracts contain binding requirements for construction contractors to fully reinstate pathways, other local infrastructures, and agricultural land to at least their pre-project condition upon construction completion; and provision is made for adequate recording of the condition of roads, agricultural land and other infrastructure prior to transport of material and construction commencement.

15. In the event irrigation supplies are disrupted and adjacent farmers experience losses, the Borrower shall ensure that provision will be made for independent valuation of the losses and timely compensation in respect thereof.

16. The Borrower shall ensure timely provision of budget for land acquisition, resettlement and other activities outlined in the related RPs, and shall meet any unforeseen obligations in excess of the RP budget estimate in order to satisfy the requirements of the RPs.

17. Within 3 months of the Effective Date, the Borrower shall engage an independent external expert/agency, acceptable to ADB for monitoring and verification of the RP implementation for each project under the Facility that will be responsible for providing ADB through the Borrower quarterly monitoring and evaluation reports on resettlement implementation in accordance with the RPs.

18. Within 3 months of the Effective Date, the Borrower shall establish a grievance redress committee with representation from all the stakeholders to address any grievances from affected persons concerning resettlement and other social issues in a timely manner.

#### Indigenous Peoples

19. In the event of any significant or related impacts on indigenous peoples under any project under the Facility, the Borrower shall prepare and implement the IPDP in accordance with IPDF, ADB's *Policy on Indigenous Peoples* (1998), the applicable law, regulation, and policy of the Guarantor, and the relevant State. In the event of non-significant impact on indigenous peoples, the Borrower shall comply with the requirements set out in the related RP or CPTD.

#### Execution of Civil Works Contracts

20. The Borrower shall ensure that subsequent to award of civil works contract in respect of each project under the Facility, no civil works are started by the contractor unless the applicable provisions of the RF, RP, CPTD, EARF and EMP, as approved by ADB, have been complied with.

21. The Borrower shall cause the contractors to undergo detailed survey of the affected persons during transmission line alignment finalization under the Project. The Borrower shall prepare provisional CPTDs which meet ADB's requirements, based upon the detailed design information during the survey carried out by civil work contractors. The Borrower shall submit to ADB for approval the revised CPTDs progressively during the implementation of the related civil work.

22. Any changes to the location, land alignment, or environment impacts on account of detailed designs of the related project under the Facility shall be subject to prior approval by ADB in accordance with the project selection criteria and procedures included in Schedule 4 of the FFA, before further activities are undertaken in the related civil works contract for substations and commencement of civil works for transmission lines under the Project.

#### Labor Standards

23. The Borrower shall ensure that for procurement of Goods, Works, and consulting services, if any, 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 ((i) elimination of force or compulsory labor; (ii) abolition of child labour; (iii) elimination of discrimination in respect of employment; and (iv) freedom of association).

#### Governance

24. The Borrower shall ensure that its financial accounts are maintained in accordance with Indian GAAP i.e. accounting standards issued by the Institute of Chartered Accountants of India, and consistently applied, as amended from time to time. The Borrower shall keep ADB intimated of any changes in accounting practices.

25. In addition to the requirements of Section 4.05 of the 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.

26. The Borrower shall ensure that -

- (i) it maintains its accounts receivable at a level not exceeding an amount equivalent to the income proceeds of its transmission services for the preceding three months of billable amount as allowed by CERC;
- (ii) it obtains irrevocable letters of credit from the state electricity boards and other beneficiaries, in an aggregate amount based on average monthly billings of the previous financial year, as deemed acceptable by the Borrower and as allowed by CERC;
- (iii) it maintains at all times a debt-equity ratio of 80:20, and a self-financing ratio of at least 20% from 2007 onwards;
- (iv) it exercises, *inter alia*, its rights promptly to effect the reduction/stoppage in supply under the commercial agreements with state electricity boards or other beneficiaries as well as under the

- tripartite agreements with the Government, state governments and Reserve Bank of India; and
- (v) it forwards to ADB, with each set of audited 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.

27. The Borrower shall comply with all requirements of Clause 49 of the listing agreement of the Security Exchange Board of India relating to corporate governance.

#### Government of India

28. This Loan Agreement is subject to the continuing assurances of the Guarantor that -

- (i) 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;
- (ii) it shall maintain the Board of Directors of the Borrower in accordance with statutory requirements regarding corporate governance; and
- (iii) it shall continue to support the autonomy of the Borrower with respect to its commercial, administrative, and operational activities.

#### Anticorruption

29. 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.

#### Performance Monitoring and Progress Reports

30. The Borrower shall prepare progress reports for the Project and submit these to ADB on a quarterly basis within 45 days from the end of each quarter. Each report shall provide a narrative description of progress made during the period in respect the Project, changes in the implementation schedule, problems or difficulties encountered, and the work to be carried out in the next period. The progress report will also include a summary financial account for the Loan components consisting of Project expenditures for the year to date, total expenditure to date, and a contract-wise financing plan. The Borrower shall undertake periodic Project performance to evaluate the scope, implementation arrangements, progress and achievements of objectives of the Project, and the overall Investment Program.

#### Review

31. ADB shall review the implementation and operation of the Project, and the Investment Program, based on the quarterly progress reports and meet with the Borrower

and the Government of India semi-annually to discuss the progress of the Loan and any changes to the implementation arrangements.

32. ADB and the Borrower shall undertake a midterm review 2 years after the Loan effectiveness, focusing on the engineering, resettlement, and environmental aspects, and reviewing the financial status of the Borrower.

33. Within 6 months of completion of the Project, the Borrower shall furnish to ADB a Project completion report. This report shall cover an evaluation of the Project, Facility, and Investment Program respectively, including the milestones achieved, design, costs, contractors' and consultants' performance, social, environmental and economic impact, and other details as may be requested by ADB.