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**THE SUPPLEMENTARY TRANSMISSION AGREEMENT
BETWEEN
POWERGRID CORPORATION OF INDIA LIMITED
AND
PUNJAB STATE ELECTRICITY BOARD**

THIS SUPPLEMENTARY TRANSMISSION AGREEMENT entered into on 24th June 2004 between **POWERGRID CORPORATION OF INDIA LIMITED**, a company incorporated under the Companies Act, 1956 and wholly owned by Government of India, having its registered office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110 016 (hereinafter called **POWERGRID** which expression shall unless repugnant to the context or meaning thereof include its successors and assigns) as party of the first part and **PUNJAB STATE ELECTRICITY BOARD** having its Head Office at The Mall, Patiala; (referred to as 'PSEB') which expression shall unless repugnant to the context or meaning thereof include its successors and assigns as party of the second part.

AND WHEREAS **POWERGRID** entered into a Bulk Power transmission Agreement earlier on 02.06.2003 (hereinafter referred to as "BPTA") forming integral part of the Supplementary Agreement for transmission of power from Central Sector Generating stations to the Bulk Power Customers in Northern Region.

As per Clause 2.0 of the said BPTA, it is mentioned that further Transmission system/ lines may be added by **POWERGRID** during the course of the said BPTA as may be approved by CEA on recommendation of NREB.

AND WHEREAS **POWERGRID** has now been asked by Ministry of Power (MOP), Govt. of India (GOI), Central Electricity Authority (CEA) to construct, own, operate and maintain the transmission Schemes as per para 1.1 below in order to strengthen the Northern grid and to evacuate power within and across the region. The same shall form part of the said BPTA dated 02.06.2003.

NOW, therefore, in consideration of the premises and mutual agreements, covenants and conditions set forth herein it is hereby agreed by and between the parties as follows:

1.0 TRANSMISSION SYSTEM IN NORTHERN REGION

1.1 The details of transmission Schemes envisaged to strengthen the regional grid of Northern Region as also the associated transmission system as approved by CEA are enclosed at Annexure-A.

POWERGRID is to construct, own, operate and maintain the transmission system mentioned at Annexure-A.

2.0 TARIFF AND TERMS AND CONDITIONS

2.1 The transmission tariff and terms and conditions for the power to be transmitted by **POWERGRID** shall be as per Notification issued by Ministry of Power/ CERC from time to time.

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- 2.2 This tariff is payable by Bulk Power Customer to POWERGRID in addition to the tariff already included in the BPTA signed by POWERGRID with PSEB on 02.06.2003 and the applicable tariff for the agreed system in NR which is under various stages of implementation.

3.0 BILLING AND PAYMENT

Bulk Power Customer shall pay the tariff to POWERGRID on monthly basis in accordance with the Clause 2.0 of this agreement.

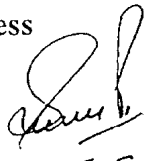
4.0 INTEGRAL PART

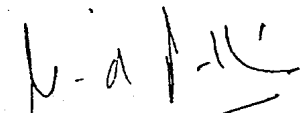
Save as above, the terms and conditions of the said BPTA signed between POWERGRID and PSEB on 02.06.2003 shall remain in full force and effect.

IN WITNESS WHEREOF the parties have executed these presents through their duly authorised representative at Patiala.

Witness


1.


S.S. Pall
Mgs.


For and on behalf of
Power Grid Corporation of India Ltd.

Dy. General Manager
POWERGRID CORPN. OF INDIA LTD.

2.


(PADAMJIT SINGH)
ADVISOR TO m/b.
PSEB.

For and on behalf of
Punjab State Electricity Board


Chief Engineer 50 & C
P.S.E.B. Patiala.

- (i) **System strengthening in Uttaranchal**
- Establishment of Pithoragarh 2* 100MVA, 220/132KV Substation
 - LILO of one circuit Dhauliganga-Bareilly 400KV D/C (charged at 220KV) at Pithoragarh 220/132KV Substation
 - Establishment of Khichcha/Sitarganj 2*100MVA, 220/132KV Substation
 - LILO of one circuit of Tanakpur-Bareilly 220KV D/C at Khichcha/Sitarganj 220/132KV Substation
- (ii) **Koldam HEP**
- Koldam-Nalagarh 400 KV D/C (Quad conductor)
 - Koldam-Ludhiana 400 KV D/C (Triple Snowbird conductor)
 - Associated 400 KV bays at Ludhiana and Nalagarh
- (iii) **Parbati II HEP**
- 400KV 2xS/C Line from Parbati II to Koldam with Quad Conductor
 - Realignment works at Koldam
- (iv) **Parbati III HEP**
- Creation of 400/220KV, 2X315MVA Parbati Pooling point at down stream of Parbati III HEP.
 - LILO of one 400KV S/C line from Parbati-II to Koldam at Parbati III
 - Parbati Pooling Point-Amritsar 400KV D/C line with twin Moose Conductor
 - LILO of Parbati-Koldam 400KV D/C at Parbati Pooling Station
- (v) **System Strengthening in Singrauli-Vindhyachal Corridor**
- Realignment of Vindhyachal-Kanpur 400 KV S/C line at Singrauli
 - Singrauli-Vindhyachal 2nd 400 KV ckt.
 - 2 x 400 KV line bays and 1x line Reactor bay at Singrauli
 - 400 KV Bus Coupler Bay at Vindhyachal HVDC (North)
- (vi) **Northern Regional Strengthening Scheme-I**
- Kanpur-Auraiya 400 KV D/C
 - LILO of Lucknow -Moradabad 400 KV S/C at Bareilly (PG)
 - LILO of Bareilly -Mandola 400 KV D/C at Bareilly (PG)
 - LILO of Sultanpur-Lucknow 400 KV S/C at Lucknow (PG)
 - Bareilly (PG)-Moradabad 400 KV S/C
 - New 400 KV Switching Station at Bareilly (PG)

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- (vii) **Northern Regional Strengthening Scheme-II**
- Agra-Jaipur 400 KV D/C
 - 40% Fixed Series Compensation on Allahabad –Mainpuri 400 KV D/C at Mainpuri
 - 3rd 400/220 KV, 315 MVA ICT at Wagoora
- (viii) **Northern Regional Strengthening Scheme-III**
- Malerkotla-Ludhiana-Jalandhar 400 KV S/C
 - Establishment of 2x315 MVA, 400/220 KV Substation at Ludhiana
 - Establishment of Fatehabad 2x315 MVA, 400/220 KV Substation alongwith LILO of one ckt of Moga-Hissar 400 KV D/C line
- (ix) **Northern Regional Strengthening Scheme-IV**
- Provision of SVC support in NR system (Total quantum of compensation, their size and location would be subject to the decision by standing committee of CEA after further studies.)
- (x) **Northern Regional Strengthening Scheme-V**
- LILO of Hissar-Jaipur 400KV S/C at Bhiwadi
 - Bhiwadi-Agra 400 KV D/C
 - Bhiwadi-Moga 400 KV D/C
 - 400/220KV Sub Station at Bhiwadi
- (xi) **Sewa-II HEP**
- Sewa II-Hiranagar 132 KV D/C
 - Sewa II- Mahanpur - Kathua 132 KV D/C
 - Stringing of second circuit of Mahanpur - Kathua 132 KV line. (Taking over of Mahanpur-Kathua 132 KV (S/C on D/C towers) from PDD, J&K alongwith 132 KV bays at Mahanpur and Kathua(cost to be reimbursed to PDD)
- (xii) **Barh Transmission System**
- Barh-Balia 400 KV D/C –Quad line
 - Balia-Bhiwadi 2500 MW ± 500 KV HVDC bi-pole
- (xiii) **Kahalgaon stage-II Phase I (2x500MW)**
- Patna-Balia 400 KV D/C (Quad)
 - Biharsharif- Balia 400 KV D/C (Quad)
 - Balia – Mau 400 KV D/C
 - Balia-Lucknow (PG) 400 KV D/C with series capacitor (to be designed with 95deg conductor temperature)
 - Lucknow(PG) – Bareilly (PG) 400 KV D/C (to be designed with 95deg conductor temperature)

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- Agra- Malanpur 765 KV S/C (to be initially charged at 400 KV)
- New 400 KV Switching Station at Balia

(xiv) **Maithon Transmission System**

- Balia – Unnao 765 KV S/C (to be initially operated at 400KV)
- Unnao – Agra 765 KV S/C (to be initially operated at 400KV)
- Meerut – Malerkotla 400 KV D/C

(xv) **RAPP- 5&6 Transmission System**

- RAPP – Kankroli 400 KV D/C
- RAPP – Kota 400 KV S/C
- Establishment of new 400/220 KV S/s at Kota alongwith 2x315 MVA 400/220 KV ICTs
- Establishment of new 3x315 MVA, 400/220 KV S/s at Kankroli
- 1x50 MVAR Bus reactor at Kankroli.

(xvi) **RAPP-7& 8 Transmission System (2x700MW)**

- RAPP-Jaipur 400 KV D/C line of which one circuit to be LILOed at Kota.
- RAPP-Nagda 400 KV D/C line. (WR:NR :: 50:50)

NOTE: All the above lines / sub station schemes will be in accordance with the decisions of the standing committee of CEA.

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PART-III

Name of the Company POWRGRID CORPORATION OF INDIA LTD.

Name of the Project : NORTHERN REGION SYSTEM STRENGTHENING SCHEME-III

Name of the Transmission Element : 50 MVAR BUS REACTOR AT HISSAR SUB STATION

Name of Region: NORTHERN REGION

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

Form No.	Tariff Filing Formats (Transmission)	Tick
Form-1	Summary Sheet	Yes
FORM-1A	Calculation of Return on Equity	Yes
FORM-2	Details of Transmission Lines and Substations	Yes
FORM-3	Normative Parameters considered for tariff calculations	Yes
FORM-4	Details of Foreign loans	NA
FORM-5	Abstract of Admitted Cost for the existing Projects	NA
FORM-5A	Abstract of Project Cost Estimates and Schedule of Commissioning for the new Projects	Yes
FORM-5B	Break-up of Project Cost for Transmission System	As per CERC Order dtd 19.9.2007 in petition no 94/2007
FORM-5C	Break-up of Construction/Supply/Service packages	As per CERC Order dtd 19.9.2007 in petition no 94/2007
FORM-5D	Details of elementwise cost	Yes
FORM-6	Financial Package upto COD	Yes
FORM-7	Details of Project Specific Loans	NA
FORM-8	Details of Allocation of corporate loans to various transmission elements	Loan allocation for all the loans audited upto 31.3.2007 will be submitted shortly
FORM-9	Statement of Additional Capitalisation after COD	Yes
FORM-10	Financing of Additional Capitalisation	Yes
FORM-11	Statement of Depreciation	Yes
FORM-12	Calculation of Depreciation Rate	Yes
FORM-13	Calculation of Weighted Average Rate of Interest on Actual Loans	Yes
FORM-13A	Calculation of Interest on Loans	Yes
FORM-13B	Calculation of Weighted Average Rate of Interest on	Yes
FORM-14	Calculation of Advance Against Depreciation (AAD)	Yes
FORM-15	Calculation of Interest on Working Capital	Yes
FORM-16	Draw Down Schedule for Calculation of IDC & Financing Charges	Yes
Other Information/ Documents		
Sl. No.	Information/Document	Tick
1	Certificate of incorporation, Certificate for Commencement of Business, Memorandum of Association, & Articles of Association (For New Station setup by a company making tariff application for the first time to CERC)	- Not Applicable -
2	Regionwise and Corporate audited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the new Transmission System & for the relevant years.	
3	Copies of relevant loan Agreements	ATTACHED
4	Copies of the approval of Competent Authority for the Capital Cost and Financial package.	ATTACHED
5	Copies of the Equity participation agreements and necessary approval for the foreign equity.	86.36 %Equity contribution only by GOI and 13.64% others
6	Copies of the BPTA/TSA with the beneficiaries, if any	ATTACHED
7	Detailed note giving reasons of time and cost over run, if applicable.	ATTACHED
8	Any other relevant information, (Please specify)	NA