



POWER PURCHASE AGREEMENT

BETWEEN

UTTAR PRADESH STATE ELECTRICITY BOARD

AND

NATIONAL THERMAL POWER CORPORATION LIMITED

THIS POWER PURCHASE AGREEMENT hereinafter called as "Agreement" entered into on the 8th day of July, One thousand nine hundred ninety nine (8.07.1999) between Uttar Pradesh State Electricity Board (a statutory body constituted by the Govt. of Uttar Pradesh under the Electricity(Supply) Act, 1948 having its Head Office at Shakti Bhawan, 14, Ashok Marg, Lucknow - 226 001 (hereinafter referred to as "UPSEB") which expression shall unless repugnant to the context or meaning thereof include its successors and assigns, as party of the first part and National Thermal Power Corporation Limited, a Company incorporated under the Companies Act, 1956 having its registered office at NTPC Bhavan, SCOPE Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003 (hereinafter called "NTPC") which expression shall unless repugnant to the context or meaning thereof include its successors and assigns, as party of the second part.

Redmond

WJ

WHEREAS NTPC is a Generating Company wholly owned by the Government of India and having power stations in Eastern Region namely Farakka Super Thermal Power Station, West Bengal, Kahalgaon Super Thermal Power Station, Bihar and Talcher Super Thermal Power Station, Orissa.

AND WHEREAS UPSEB is desirous of purchasing power from NTPC's power stations in Eastern Region and NTPC have agreed to supply power on mutually agreed terms and conditions mentioned hereunder.

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 ALLOCATION OF POWER TO UPSEB FROM NTPC STATIONS IN ER

1.1 The supply of power to UPSEB shall be as per specific allocation of power made by Central Electricity Authority/ Ministry of Power, Government of India from gross capacity of NTPC's power stations in Eastern Region from time to time.

At present about 60 MW can be transferred to UPSEB from NTPC stations in Eastern Region over the existing transmission system in radial mode. 60 MW power from ER power stations of NTPC shall be supplied to UPSEB subject to corresponding allocation of capacity to UPSEB from unallocated capacity of ER power stations of NTPC by CEA / Ministry of Power, GOI.

Power will be supplied as per allocation and terms and conditions laid down by GOI from time to time.

The supply of power to UPSEB would be co-ordinated by Eastern Regional Electricity Board (EREB)/ Northern Regional Electricity Board (NREB) and the respective Regional Load Despatch Centres (RLDCs).

1.2 Drawal of ER Power by UPSEB

UPSEB shall avail 60MW power from ER through transmission system of POWERGRID, BSEB and UPSEB in radial mode at Sahupuri till the establishment of HVDC back to back link at Sasaram.

2.0 TARIFF AND TERMS AND CONDITIONS

The tariff and terms and conditions as mentioned in this Agreement shall be as per notifications/modifications issued/ to be issued by Government of India/CERC from time to time with respect to the concerned NTPC power stations in Eastern Region. Subject to

Handwritten signature

Handwritten initials

approval of the Government of India/CERC and issuance of tariff notifications/modifications in this regard, the fixed charges for the capacity allocated from the gross capacity of Eastern Region stations of NTPC would be billed in proportion to allocated shares i.e. 60MW. The variable charges would be billed on the energy drawn by UPSEB as reflected in the Regional Energy Accounts of EREB.

Till such time the above is not in force, NTPC will bill UPSEB for the energy supplied from ER stations of NTPC as per Regional Energy Accounts issued by EREB and based on the arrangement evolved by CEA with the mutual consent of the parties concerned as issued vide CEA letter no. 14/X/COM/GM-99/ dated 11.2.1999.

The terms and conditions of the Bulk Power Supply Agreement (hereinafter called as "BPSA") signed between NTPC and various Bulk Power Customer(s) in Eastern Region on 25.5.93 as appended at Annexure-I with this Agreement including its subsequent amendments/ replacements from time to time would also be applicable to UPSEB. The said BPSA along with its Appendix-A shall form an integral part of this Agreement and the applicable provisions thereof shall mutatis mutandis apply to this Agreement. The terminology of "Bulk Power Customer(s)" used in BPSA shall mean and include "UPSEB" also for the purpose of this Agreement. In addition, the terms and conditions as mentioned in this Agreement shall also be applicable. If any of terms and conditions of this Agreement are inconsistent with the corresponding specific provisions of BPSA, then terms and conditions of this Agreement shall prevail.

3.0 REGIONAL ENERGY ACCOUNTS

Energy drawal by UPSEB will be metered at receiving end at Sahupuri. EREB will apply transmission losses for the system as decided by CEA to reflect this energy at the bus bars of NTPC power stations in Eastern Region.

It is specifically agreed between the parties that UPSEB shall accept the Regional Energy Accounts issued by EREB as per the provisions of clause 4.0 of BPSA dated 25.5.1993 and the energy accounts of Northern Region which will reflect the import of ER power to Uttar Pradesh as a first charge against the total drawal of Uttar Pradesh. UPSEB shall accept and make full payments to NTPC in respect of the NTPC bills raised on this basis. The Regional Energy Accounts of EREB will indicate drawals of UPSEB at EHV busbars of various NTPC power stations in ER.

4.0 TRANSMISSION CHARGES/WHEELING CHARGES

UPSEB shall accept the wheeling charges and transmission losses decided mutually along with POWERGRID and other intermediate transmission/wheeling agencies, in respect of the transmission/wheeling charges for power received by them from NTPC's Power Stations in Eastern Region. Accordingly, UPSEB shall directly pay transmission charges/wheeling charges to the concerned agencies including POWERGRID as per the





methodology of EREB and no deduction whatsoever on this account shall be made from the NTPC bills. NTPC shall in no manner be responsible for payment of transmission/wheeling charges to POWERGRID or any other agency (ies).

5.0 LEVIES, TAXES, DUTIES, CESS ETC.

The tariff as mentioned at para 2.0 above is exclusive of any statutory taxes, levies, duties, cess or any other kind of imposition(s) whatsoever imposed/charged by any Government (Central/State) and/or any other local bodies/authorities on generation of electricity including auxiliary consumption or on any other types of consumption, transmission of power, environmental protection, water, sale or on supply of power/energy and/or in respect of any of its installations associated with Generating Stations and/or on Transmission System.

The total amount of such levies/taxes/duties/cess etc. payable by NTPC to the authorities concerned in any month on account of the said taxes/duties/cess/levies etc. as referred to above shall be borne and additionally paid by UPSEB to NTPC and the same shall be charged in the monthly bills raised by NTPC on UPSEB in the proportion of energy drawal by them from NTPC.

Incidence of tax liability on NTPC under Income Tax Act in force from time to time shall be recovered from the UPSEB. The fact of payment of Income Tax shall be certified by Statutory auditors of NTPC. The allocation of the Income Tax liability to the respective Power Stations will be in proportion to the capacity of NTPC in operation at the beginning of the respective financial year. The income tax allocated to beneficiaries will be in proportion to their energy drawals during the year to which income tax pertains.

6.0 a) ESTABLISHMENT OF LC AND PAYMENT OF BILLS

Payment of bills shall be made by UPSEB by opening irrevocable revolving Letter of Credit (LC) established in favour of National Thermal Power Corporation Ltd. before commencement of power supply from Eastern Region power stations of NTPC. The LC shall be opened for an amount to cover UPSEB's 100% obligations for payment in respect of power supplied to them from Eastern Region power stations of NTPC.

The LC shall be opened initially for a minimum period of three months and would be renewed/enhanced by UPSEB subsequently for the validity period of Eastern Region allocation or one year, whichever is less, ensuring that LC remains valid at all times during the entire/extended validity of this Agreement.

LC shall be without any limitation or restriction with regard to the manner and dates when bill(s) can be presented to Bank by NTPC. The bills so presented by NTPC to the bank shall be promptly paid on their presentation. The amount of LC shall be reviewed each quarter commencing April, July, October and January in each financial year and its

Handwritten signature

Handwritten signature

amount shall be enhanced/reduced accordingly. The LC charges shall be borne by UPSEB. The operation of LC shall not depend on the recoupment of the amounts by UPSEB.

b) REBATE ON PAYMENT THROUGH LC

NTPC shall allow a rebate of 2.5% (two and a half per cent) only on the amount paid through LC upon presentation of bills by NTPC to Bank. Thereafter, NTPC shall allow a rebate of 1.5% (one and a half per cent) only on the amount paid through LC upto 20th day from the date of billing. Where payments are made subsequently through LC or otherwise within a period of one month from date of issue of bills by NTPC, a rebate of 1% (one per cent) only will be allowed. The rebate shall be limited to the amount of NTPC bills after excluding wheeling charges, if any, taxes, duties, cess etc. billed therein.

c) SURCHARGE DUE ON LATE PAYMENT

In case payment is made after the last day of the month following the month in which the bill is raised by NTPC, the surcharge @ 2% (two per cent) per month shall be charged on the amounts remained unpaid after the said date in proportion to the number of days of delay after the said date.


7.0 FIRST CHARGE ARRANGEMENT

In addition to LC as provided in clause 6.0 (a) above, NTPC will have First Charge on total revenue being received by UPSEB centrally in its banks.

It is specifically agreed between the parties that UPSEB shall meet all its payment obligations under this Agreement for supply of power by NTPC each month through an Irrevocable Revolving Letter of Credit opened in favour of NTPC. As a back up to the LC Arrangement, UPSEB agrees for the creation of First Charge in favour of NTPC in respect of all its revenues for making payment to NTPC of bill remaining unpaid through the LC Arrangement as aforesaid.

UPSEB hereby undertakes in addition to LC provision, to create First Charge in favour of NTPC on its total collections whether received centrally or otherwise and declares that such charge shall take overriding priority over all the charges whether already created or to be created on the revenues received by UPSEB. First Charge shall be created in favour of NTPC by means of a legally enforceable agreement duly registered with appropriate authority within 3 months of signing of this PPA.

For the purpose of operating First Charge on revenues of UPSEB flowing into different banks, UPSEB shall identify one of its Bankers as Principal Bank. The Principal Bank shall evolve a mechanism for operating the First Charge in consultation with other bankers of UPSEB. The Principal Bank shall enter into a Tripartite Agreement with UPSEB and NTPC regarding the mechanism by which First Charge shall be operated in favour of





NTPC. The Principal Bank shall be the same public sector bank through which UPSEB has opened an irrevocable LC arrangement referred to above.

If UPSEB fails to make full payments through LC in any month or fails to renew, replenish or enhance the LC as required or if the bill amount exceeds the amount of LC, the Principal Bank shall automatically transfer sufficient funds into NTPC Bank Account with the Principal Bank to the extent of shortfall so that 100% payment of NTPC bill is ensured. Such transfer of funds from the Principal Bank shall be unconditional and at no time UPSEB shall restrain, revoke or modify the authority to this effect without the express consent of NTPC.

The automatic transfer of funds by the Bank to NTPC Bank Account with the Principal Bank shall be carried out by the Bank in preference to meeting any cheques or other payment instructions issued by UPSEB from time to time.

Any bank charges or other expenses in respect of this First Charge Arrangement only shall be borne by UPSEB.

8.0 STATE GOVERNMENT GUARANTEE

Notwithstanding the above, UPSEB shall take up with Government of UP to obtain Guarantee from the Government of UP, as per draft enclosed at Annexure-II, (subject to mutually agreed minor modifications) in favour of National Thermal Power Corporation Ltd. to guarantee the performance of the obligations of UPSEB to make regular payments of the energy bills presented by NTPC for power supplied to UPSEB from its various power stations including supply of power to UPSEB from ER power stations.

In case the outstanding dues from all NTPC power stations including ER power increase to more than two (2.0) months of billing (calculated on last 3 months average basis) NTPC shall have right to get the payments inclusive of surcharge directly from GOI through Central Plan Assistance to the Govt. of UP or from the State's RBI account in case of default in payments automatically without referring the matter further to the Government of UP or UPSEB.

The above provision regarding payment out of State's RBI account will be subject to Govt. of UP agreeing for signing of a Tripartite Agreement between Govt. of UP, RBI and NTPC for direct payment out of the State's RBI account in case of default in payments. This issue would be referred by UPSEB to Government of UP pursuant to the minutes of meeting held on 11.11.1998 with Chief Secretary, Government of UP for taking a decision on signing of the said Tripartite Agreement.



9.0 EFFECTIVE DATE AND DURATION OF AGREEMENT

This Agreement shall be deemed to have come into force for all purposes and intents from the date of signing of this Agreement or from the date of establishment of LC as per para 6.0 (a), whichever event occurs later and shall remain operative initially upto completion of five years from the date of commencement of actual supply, provided that this Agreement may be mutually extended, renewed or replaced by another Agreement on such terms and conditions for such further period of time as the parties may mutually agree. In case UPSEB continue to get power even after expiry of this Agreement without further renewal or formal extension thereof, then all the provisions of this Agreement shall continue to operate on provisional basis, subject to retrospective adjustment after this Agreement is formally renewed, extended or replaced.

10.0 In the event of failure to establish/enhance LC as above and/or non-operation of First Charge on revenues of UPSEB or any bill(s) remaining unpaid for a period of two months from the date of the issue of the bill, NTPC shall have the authority to discontinue/regulate supply of power to UPSEB from NTPC stations in Eastern Region.

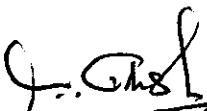
11.0 JURISDICTION

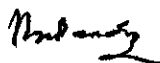
The Courts of Delhi shall have exclusive jurisdiction in all matters under this Agreement.


12.0 This Agreement is subject to ratification by the Boards of NTPC and UPSEB.


IN WITNESS WHEREOF the parties have executed these presents through their Authorised Representatives at Lucknow.

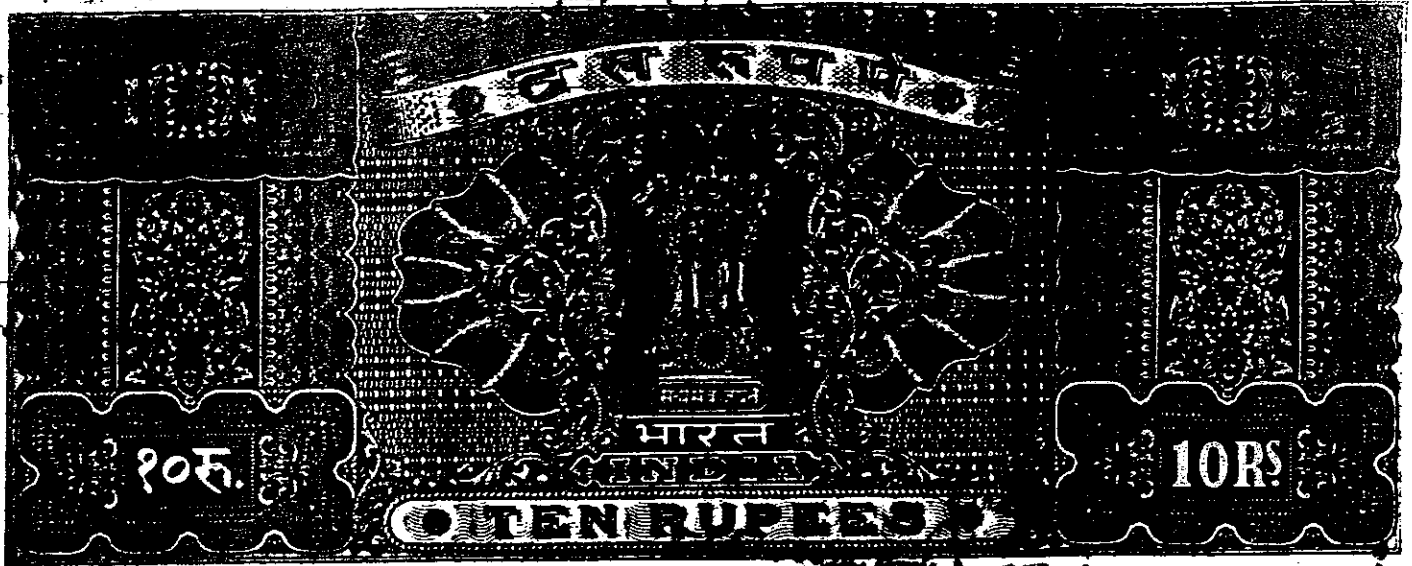
WITNESS

1. 
A. N. GHOSH
S.E. Spl. Power
Agreement & Tariff Circle
UPSEB, Lucknow.


For and on behalf of
Uttar Pradesh State Electricity Board

2. 
G. P. SINGH
EXE DIRECTOR (NR)


For and on behalf of
National Thermal Power Corporation Ltd.



BULK POWER SUPPLY AGREEMENT

BETWEEN

NATIONAL THERMAL POWER CORPORATION LIMITED

AND

WEST BENGAL STATE ELECTRICITY BOARD

BIHAR STATE ELECTRICITY BOARD

ORISSA STATE ELECTRICITY BOARD

DAMODAR VALLEY CORPORATION

POWER DEPARTMENT OF THE GOVERNMENT OF SIKKIM

AND

EASTERN REGIONAL ELECTRICITY BOARD

THIS BULK POWER SUPPLY AGREEMENT hereinafter called "Agreement" entered into between National Thermal Power Corporation Limited, a Company incorporated under the Companies Act, 1956 having its registered office at NTPC Bhawan, SCOPE Complex, 7, Institutional Area, Lodi Road, NEW DELHI-110003 (hereinafter called "NTPC" which expression shall unless repugnant to the context or meaning thereof include its successors and assigns) as party of the first part and West Bengal State Electricity Board, Vidyut Bhawan, Block-DJ, Sector-II, Salt Lake City, Calcutta 700091; Bihar State Electricity Board, Vidyut Bhawan, Jawaharlal Nehru Marg, Patna-800021; Orissa State Electricity Board, Vidyut Bhawan, Bhubaneswar-751007; Damodar Valley Corporation, Bhawani Bhawan, Alipore, Calcutta-700027; Power Department of Government of Sikkim, Gangtok, Sikkim; (Generally referred to as "Bulk Power Customers" and individually referred to as 'WBSEB', 'BSEB', 'OSEB', 'DVC', and 'SIKKIM' and Eastern Regional Electricity Board, 14 Golf Club Road, Tollygunge, Calcutta-700033, (hereinafter referred to as "EREB", which expression shall unless repugnant to the context or meaning thereof include its successors and assigns) as parties of the second, third, fourth, fifth, sixth and seventh part respectively.

A

By

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

WHEREAS NTPC is the Generating Company of the Central Govt. and the Bulk Power Customers have been allocated/yet to be allocated power by Government of India (GOI) from Stage-I (600 MW) of Farakka Super Thermal Power Station at FO Nabarun, Distt. Murshidabad, Pin Code-740075, West Bengal, from Stage-II (2x500 MW) of Farakka Super Thermal Power Station, from Stage-I (4x212 MW) of Kahalgaon Super Thermal Power Station and from Stage-I (2x500 MW) of Talcher Super Thermal Power Station and any other Power Station(s) to be commissioned by NTPC in Eastern Region in future (hereinafter specifically referred to as "Farakka station", "Kahalgaon Station" and "Talcher Station" and generally referred to as "NTPC Stations") owned and operated by NTPC.

AND WHEREAS the Bulk Power Customers are desirous of purchasing energy from NTPC on mutually agreed terms and conditions mentioned hereunder.

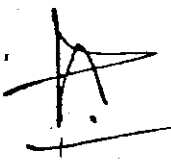
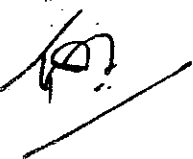
AND WHEREAS WBSEB, BSEB, OSEB, DVC AND SIKKIM have entered into respective Bulk Power Supply Agreements with NTPC for purchase of energy on 13.8.85, 16.7.85, 19.4.85, 27.3.85, 13.8.85 respectively including amendments which are valid upto 31.3.90 or till formal renewal or replacement or extension thereof.


NOW, THEREFORE, in consideration of the premises and mutual agreements, covenants and conditions set forth herein and in the General Provisions governing the Agreement as contained in Appendix-A attached hereto which shall form an integral part of this agreement, it is hereby agreed by and between the parties as follows:-

1. DEFINITIONS

The words/expressions used in this Agreement unless repugnant to the context shall have the same meaning as assigned to them by Indian Electricity Act, 1910 and Electricity (Supply) Act, 1948 as amended from time to time and the Rules framed thereunder. The words/expressions mentioned below shall have the same meanings respectively as assigned hereunder.

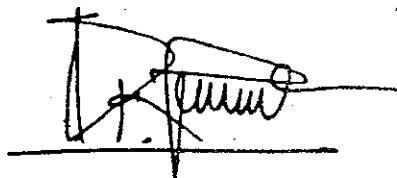

- i) GOI : Shall mean Govt. of India
- ii) CEA : Shall mean Central Electricity Authority which is a Statutory Authority.
- iii) PGCL: Shall mean Power Grid Corporation of India Ltd.
- iv) EREB: Shall mean Eastern Regional Electricity Board duly established by Govt. of India vide Resolution No. EL-II-35(7)/63 dated 06.03.64 and on subsequent amendments/resolution thereof and as defined in the amended E(S) Act.

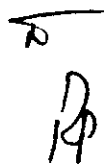





2





ERLDI: Shall mean Eastern Regional Load Dispatch Centre under ERER.

vi) Aux. Power Cons.: Shall mean energy consumed by Auxiliaries of NTPC Station required for generation of power.

vii) Main Import Meter : Shall mean Meter for measurement of active energy import at NTPC Power Station(s) bus bar(s) for energy accounting.

viii) Main Export Meter: Shall mean Meter for measurement of active energy export at NTPC Power Station(s) bus bars for energy accounting.

ix) Check Import/Export Meter: Shall mean Meter for maintaining a check on performance of Main Import/Export meter.

x) TOD : Shall mean Time-of-day for the purpose of metering and tariff.

xi) Regional Energy Account: Shall mean periodic Energy Account including amendment thereof.

xii) Charges for supply of Energy : Shall mean and include all charges to be paid by Bulk Power Customer(s) in respect of supply of power to them by NTPC in accordance with the provisions of this agreement.

xiii) LC : Shall mean Letterhead of Credit.

xiv) Date of Commercial Operation: Date of Commercial Operation shall mean the date mentioned in this Agreement for existing generating units and as declared by NTPC in accordance with the guidelines mentioned in Annexure II, which forms an integral part of this agreement, for generating unit(s) yet to be declared commercial.

2. INSTALLED CAPACITY OF NTPC STATION(S)

Installed capacity of Farakka Station will be 1400 MW (Stage-I - 700 MW, and Stage-II - 700 MW), installed capacity of Farakka station will be 340 MW (4x210 MW under stage I and installed capacity of Talcher Station will be 1000 MW (2x500 MW under Stage-I). The installed

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

capacities are, however, subject to derating/erating of the generating units as determined from time to time after following the prescribed procedure as laid down by Central Electricity Authority and/or additions to generating capacity at the above mentioned or new Power Station(s) of NTPC for supply of power to various Bulk Power Customers.

2.1 Allocation of Power from NTPC Station(s)

Allocation of power from NTPC Stations at Farakka, Kahalgaon and Talcher amongst the Bulk Power Customers shall be made in accordance with the decisions and terms & conditions as laid down by Government of India, Department of Power's decisions from time to time which form an integral part of this Agreement.

2.2 Commercial Operation of generating unit(s)

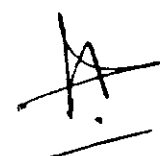
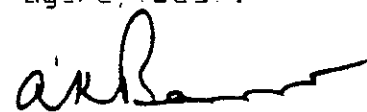
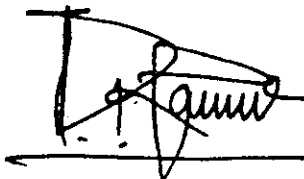

The dates of commercial operation of generating unit(s) as already declared by NTPC are given below:

Generating Units	Dates of Commercial Operation
<u>A) Farakka Station</u>	
Stage I	
Unit (I) 200 MW	1.11.86
Unit (II) 200 MW	1.10.87
Unit (III) 200 MW	1.29.88
Stage II	
Unit (IV) 500 MW	Yet to be declared
Unit (V) 500 MW	-do-
<u>B) Kahalgaon Station</u>	
Unit (I) 210 MW	Yet to be declared
Unit (II) 210 MW	-do-
Unit (III) 210 MW	-do-
Unit (IV) 210 MW	-do-
<u>C) Talcher Station</u>	
Unit (I) 500 MW	Yet to be declared
Unit (II) 500 MW	-do-

2.3 Drawal of Power from NTPC Station(s)

The drawal of Power by the Bulk Power Customer(s) from NTPC Station(s) shall be in accordance with clause A.2 of the Appendix-A of this Agreement. Bulk Power Customer(s) shall draw their share of NTPC power through transmission system of Power Grid Corporation of India Ltd. (PGCIL) and the transmission system(s) of other Bulk Power Customer(s)/other agency(ies).

(Handwritten signatures and initials)

3. TRANSMITTING NTPC POWER THROUGH TRANSMISSION SYSTEM OF PGCL AND/OR TRANSMISSION SYSTEM OWNED BY BULK POWER CUSTOMER(S) AND/OR OTHER AGENCY(IES)

The Bulk Power Customer(s) shall extend their full co-operation in transmission of power from NTPC's Power Station(s) to other Bulk Power Customer(s) through their transmission system(s) subject to technical feasibility. For transmitting NTPC's power the charges, if any, shall be settled amongst concerned Bulk Power Customer(s) and/or other agencies (as applicable) and no deductions on this account shall be made from NTPC Bills by Bulk Power Customer(s), as mentioned in clause 3.6.3 of Appendix-A.

4. ENERGY ACCOUNTING

Regional Energy Accounts prepared by EREB will ensure total accounting of energy sent out at 400KV bus bars of NTPC Station(s). EREB Secretariate shall ensure that Regional Energy Accounts are prepared in accordance with principles and guidelines as decided at EREB forum. Regional Energy Accounts shall be prepared by EREB latest by 8th day of the month (if 8th day is a holiday, the next working day will be applicable) based on the monthly joint energy meter readings furnished by NTPC, Bulk Power Customers and other agencies, to be received by EREB by 6th day of the month. In the event of delay in receiving meter readings or GOI orders for power allocation or any other reason whatsoever, EREB shall issue provisional regional energy accounts by 8th day of the month (if 8th day is a holiday, the next working day will be applicable) indicating the customer-wise draws from NTPC Station(s). The regional energy accounts issued by EREB shall be binding on all the parties to these presents for billing purposes. Any change in the Regional Energy Accounts methodology would be with the consent of all constituents of EREB and no unilateral deductions by Bulk Power Customer(s) shall be made from NTPC bills on this account. The export and import of energy at the metering points shall be computed on Net basis, i.e. by difference between export and import meter readings.

NTPC shall prepare bills for the energy supply to the Bulk Power Customer(s) on the basis of these Regional Energy Accounts prepared by EREB which shall indicate the monthly energy draws from NTPC Station(s). On receipt of final Regional Energy Accounts from EREB necessary adjustments shall be made by NTPC by issuing supplementary bill(s)/credit notes as required. The Regional Energy Account as issued by EREB shall form the basis for billing purpose and shall be binding on NTPC and Bulk Power Customer(s).

A

arban

RSZ

P

S

[Signature]

RP

WLS

Points for Metering for NTPC Station(s)

The main and check meters already installed/to be installed shall be maintained by NTPC at the location(s) mentioned below. Installation and maintenance of main and check meters at all other points shall be the responsibility of the concerned Bulk Power Customer(s) or PGCL or other agencies as the case may be. The meters shall be sealed after calibration by the concerned parties jointly.

400KV LINES	LOCATION OF METERS	PARTIES FOR JOINT METER READING
i) Farakka-Jeerat 400 KV (NTPC) (WBSEB)	Farakka Substation	NTPC, PGCL & WBSEB
ii) Farakka-Durgapur 400 KV (NTPC) (NTPC)	Farakka Substation	NTPC, PGCL & WBSEB
iii) Farakka-Malda 400KV (NTPC) (PGCL)	Farakka Substation	NTPC, PGCL & WBSEB
iv) Farakka-Kahalgaon 400 KV (NTPC) (NTPC)	Farakka Substation Kahalgaon Substation	NTPC, PGCL & WBSEB NTPC, PGCL & BSEB
v) Kahalgaon-Biharsherif 400 KV (NTPC) (NTPC)	Kahalgaon Substation	NTPC, PGCL & BSEB
vi) Kahalgaon-Maitnan 400KV (NTPC) (NTPC)	Kahalgaon Substation	NTPC, PGCL & BSEB
vii) Talcher-Rourkela 400 KV (NTPC) (NTPC)	Talcher Substation	NTPC, PGCL & OSEB
viii) Talcher-Rengali 400 KV (NTPC) (PGCL)	Talcher Substation	NTPC, PGCL & OSEB
ix) Farakka-Lalmatia 220KV (NTPC) (BSEB)	Farakka Substation (400 KV side of 400/ 220 KV transformer)	NTPC, PGCL & WBSEB & BSEB (If desired)
x) Farakka-Malda 220 KV (NTPC) (NHPC)	Farakka Substation	NTPC, PGCL & WBSEB
xi) Kahalgaon-Kahalgaon 132KV (NTPC) (BSEB)	Kahalgaon Substation (400 KV side of 400/132 KV Feeder)	NTPC, PGCL & BSEB

For the purpose of Regional Accounting, the list of metering points, as finalised by EREB, is enclosed at Annexure-I. Any change in the list would be mutually agreed to at EREB forum.

(Handwritten signatures and initials)

4.2
Meter Readings

The readings of the meters shall be taken jointly by the concerned parties. The parties installing meters shall also be responsible for maintaining properly their respective meters.

Joint meter readings of the main as well as check meters at various Regional Energy Accounting points as identified by EREB shall be taken by the concerned parties as mentioned above in clause 4.1 at 12 noon on the 1st day of each month. The readings taken at NTPC Station(s) shall be submitted by NTPC to EREB so as to reach EREB on or before 6th day of the month. The meter readings at other metering points would be submitted by concerned Bulk Power Customer(s) and/or other concerned agencies so as to reach EREB on or before 6th day of the month. In case any of the concerned party(ies) is/are not available for joint meter readings at the specified time, the meter reading taken by the other party(ies) shall be taken into account by EREB for preparation of Regional Energy Accounts.

5. TARIFF

The Tariff and Terms & Conditions for the power supplied/to be supplied by NTPC shall be as per the notification issued by GOI vide letter No. 3/19/92-US(CT) dtd. 17-3-92 and as determined by Govt. of India from time to time, with effect from the date as may be notified by Govt. of India under section 43A of Electricity (Supply) Act, 1948 (as amended) which shall form an integral part of this Agreement.

In case of any difference between the terms & conditions of this Agreement and above Notification(s) of Govt. of India, the provision(s) of GOI Notification shall apply.

In the period between the commissioning of NTPC Station(s) and notification of its tariff by GOI, an interim tariff would be agreed to between NTPC and Bulk Power Customers at EREB forums based on existing principles and methodology which would be subject to adjustment in accordance with GOI Notification.

6. REVISION OF TARIFF

Notwithstanding any revision/adjustment determined by GOI as per Clause 5, the tariff shall be subject to revision on further addition to generation capacity or if required as a result of any guidelines/directives that the Government of India may issue from time to time regarding the terms and conditions and/or tariff and its application. However, pending the revisions, of tariff when due, the energy bills will continue to be raised by

A
arba
ky
[Signature]
[Signature]

NTPC and paid by the Bulk Power Customer(s) to NTPC in accordance with the decision of Govt. of India in force at the time.

The indication of tariff revision on provisional basis would be given by NTPC to Bulk Power Customers as soon as such a proposal is submitted by NTPC to GOI, for advance information of Bulk Power Customers. NTPC's billing would, however, be as per GOI notification issued from time to time.

7. BILLING & PAYMENT

All charges under this Agreement shall be billed by NTPC and shall be paid by the Bulk Power Customer(s) in accordance with the provision of Clause A.7 of Appendix-A.

8. ARBITRATION

- 8.1 All differences or disputes between the parties arising out of or in connection with these presents, save any question or matter of dispute which falls within the scope and purview of the statutory arbitration under the provisions of Electricity (Supply) Act 1948 as amended, shall be settled through arbitration as provided herein.
- 8.2 In the event of such differences or disputes between the parties and failing settlement of the same through mutual discussions amongst parties concerned and/or at EREB forum within 3 months, any party may by a written notice of 30 days to the other Party or parties request for appointment of a sole Arbitrator to be decided mutually by the parties concerned and, in case of disagreement, to be decided by Chairman CEA. The Arbitration shall be conducted in accordance with the provisions of Arbitration Act, 1940 and any statutory modification thereto. The Arbitrator shall give a speaking and reasoned award. The decision of the arbitrator shall be final and binding on the parties. The venue of Arbitration shall be as decided by the Arbitrator.
- 8.3 The Arbitrator shall reasonably decide in what proportion his fee and cost of arbitration proceedings shall be borne by the parties. The Arbitrator, with the consent of the parties may enlarge the time, from time to time, to make and publish the award.
- 8.4 Notwithstanding the existence of any disputes and differences referred to arbitration, the parties hereto shall continue to perform their respective obligations under this Agreement.

A
RO

arban
JPS

8
M

J. Kumar

T
R
W

9. FORCE MAJEURE

The parties shall ensure due compliance with the terms of the this Agreement. However, no party shall be liable for any claim for any loss or damage whatsoever arising out of failure to carry out the terms of the Agreement to the extent that such a failure is due to force majeure events such as war, rebellion, mutiny, civil commotion, riot, strike, lock-out, forces of nature, accident, act of God and any other reason beyond the control of concerned party. But any party claiming the benefit of this clause shall satisfy the other party of the existence of such an event and give written notice within a reasonable time to the other parties to this effect.

10. IMPLEMENTATION OF THE AGREEMENT

All discretions to be exercised and directions, approvals, consents and notices to be given and actions to be taken under these presents unless otherwise expressly provided herein, shall be exercised and given by the signatories to this Agreement or by the authorised representative(s) that each party may nominate in this behalf and notify in writing to the other party by Registered Post. Any other nomination of authorised representative(s) shall be informed likewise in writing to/by the Bulk Power Customer(s) within one month of signing of the Agreement. Notwithstanding any nomination, the Executive Director(E.R.)/NTPC as well as General Manager(Comml)/Executive Director(Comml), NTPC or his authorised representative at its Registered Office first above mentioned, shall be authorised to act for and on behalf of NTPC.

It is expressly agreed that this Agreement shall supersede all previous discussions and meetings held and correspondence exchanged between Bulk Power Customer(s) & NTPC in respect of this Agreement and any decisions arrived at therein in the past and before signing of this Agreement shall have no relevance with reference to matters covered under this Agreement and no reference of such discussions or meetings or past correspondence shall be entertained for interpreting this Agreement or its implementation.

11. NOTICE

All notices required or referred to under this Agreement shall be in writing and signed by the respective authorised signatories of the parties mentioned herein below, unless otherwise notified. Each such notice shall be deemed to have been duly given if delivered or served by registered mail/speed post of Department of Post with an acknowledgement due to the other party(ies) as per authorisation by the parties in terms of clause 10 of the Agreement.

[Handwritten signatures and initials]

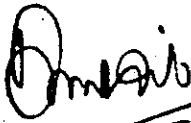
A
ar
12
[Signature]
P
[Signature]
[Signature]

EFFECTIVE DATE AND DURATION OF AGREEMENT

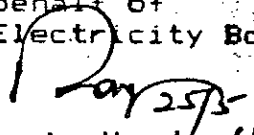
The Agreement shall be deemed to have come into force with effect from 01.01.1993 for all purposes and intent and shall remain operative until it is replaced or amended by mutual agreement between the parties to this Agreement except for the purposes of Tariff which may be revised from time to time in accordance with the provisions of clauses 5 and 6 of this Agreement.


IN WITNESS WHEREOF the parties have executed these presents through their Authorised Representatives at Calcutta on the Twenty fifth day of May, One thousand nine hundred ninety three (25-05-1993).

WITNESS

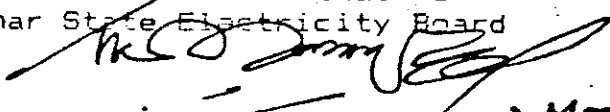
1. 
25.5.93
(AMIT KIRAN DEB)
SPL. SECRETARY, POWER DEPT.
GOVT. OF W.B.

For and on behalf of
West Bengal State Electricity Board



(P. RAY) Member (LMA)/WASEB

2. 
(V. K. SINHA)
ESE (Com), BSEB.

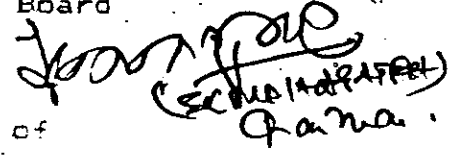
For and on behalf of
Bihar State Electricity Board

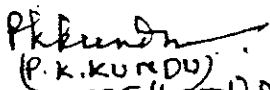


(C. K. MUKHERJEE) Member (Finance)
B.S.E.C.

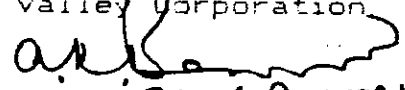
3. 
(P.S. RAO)
SE (COM)
OSEB

For and on behalf of
Orissa State Electricity Board



(S. K. DAS)

4. 
(P. K. KURDU)
SDE (Comm) DVC.

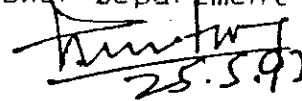
For and on behalf of
Damodar Valley Corporation

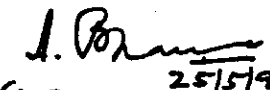


(C. A. K. BARMARJEE) Dy. General Mgr
DVC.

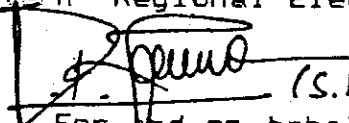
5. 
(K. PAUNTSOG) A.E.
SIKKIM


For and on behalf of
Power Department of Sikkim


25.5.93 (T. PAUNTSOG), S.E.
SIKKIM

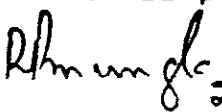
6. 
25/5/93
(A. BHATTACHARYYA)
CE/Genl. BSEB.

For and on behalf of
Eastern Regional Electricity Board


(S. K. DAS GUPTA) Chairman
EREB

7. 
25/5/93
(R. V. SHAHI) 10
Director (Ops)
NTPC.

For and on behalf of
National Thermal Power Corporation Ltd.


25/5
(R. P. MUNGLA)
Director (Finance)





GENERAL PROVISIONS GOVERNING THE AGREEMENT

A.1. INTEGRAL PART

This Appendix shall be an integral part of the Bulk Power Supply Agreement. If any of these general provisions of this Appendix are repugnant to a corresponding specific provision of the Agreement then latter shall prevail to the extent of repugnancy.

POWER SUPPLY PROVISIONS

A.2. DRAWALS OF POWER FROM NTPC STATION(S)

The share of Bulk Power Customer(s) from NTPC Station(s) shall be considered as per regional accounting methodology adopted.

Drawals of power by Bulk Power Customer(s) of their respective shares of power/energy from NTPC Station(s) and the import/export of NTPC power/energy from neighbouring regions shall be regulated as follows:

A.2.1 Computation of Shares

The share of each Bulk Power Customer from the power/energy sent out from NTPC Station(s) at 400 KV Bus-bar of Generating Station(s) shall be computed in proportion to their respective allocation of power specified in the Agreement after allowing for the unallocated power which shall be allocated as follows:

- a) Allocation of Power from the unallocated capacity shall be made by Government of India, Department of Power, or their authorised representative, to such parties and in such manner and on such conditions as they deem fit.
- b) Unallocated capacity not allocated to any of the beneficiaries by the Government of India as above shall be allocated by CEA/EFEP in accordance with the guidelines issued by Government of India from time to time.

(Handwritten signatures and initials)

(Large signature)

(Initials)

(Signature)

(Signature)

(Signature)

(Signature)

c) For some reasons if unallocated capacity is not fully allocated, then such balance unallocated capacity after allowing the specific allocations from this capacity by GOI/CEA/EREB shall be deemed to have been allocated to the Bulk Power Customer(s) in the ratio of their respective allocations specified in the Agreement.

A.2.2 Regulation of Drawals

Each Bulk Power Customer shall make arrangements to draw its share as per clause A.2.1.

A.2.3 Drawal of Shares

NTPC will generate power at its respective Generating Station(s) and inject the same into the grid. EREB shall monitor and co-ordinate as per agreed guidelines regarding the drawals by Bulk Power Customer(s) as per allocated share(s) to various Bulk Power Customer(s). The respective Bulk Power Customer(s) shall so operate their Power System parameters so as to draw their shares of NTPC's power from the Grid. EREB shall monitor and ensure the power system parameters so as to enable the Bulk Power Customer(s) to receive their shares of NTPC's power. In the event of overdrawal or underdrawal by any Bulk Power Customer(s) with respect to its power allocation, the matter shall be settled amongst the Bulk Power Customer(s) themselves with the help of EREB, and suitable remedial action taken. The decision of EREB would be final and binding.

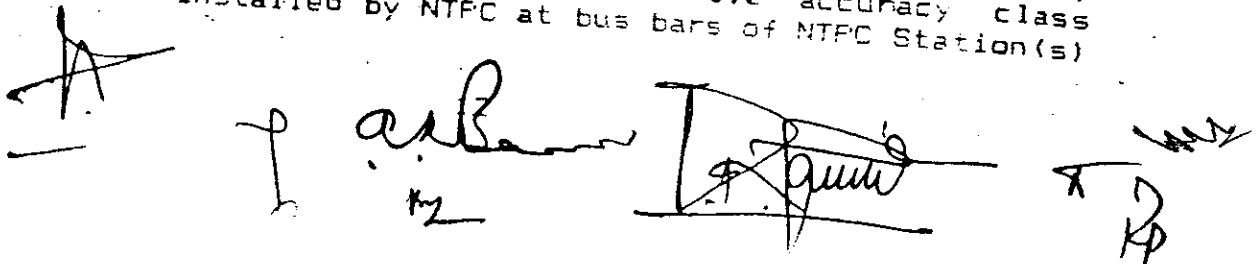
A.3. ROLE OF EREB IN POWER SYSTEM CONTROL

In the context of supply of power from NTPC Station(s) EREB shall have the following role:

EREB shall monitor various Power System parameters such as generation, load, frequency, voltage, power flow, etc., and shall schedule generation and load in the system in accordance with the guidelines issued by CEA and in a manner that the system parameters are maintained within permissible limits and the Bulk Power Customer(s) are able to draw their respective shares as per clause A.2.

A.4 METERING

A.4.1 A set of Main and Check Energy Meters of 0.5 accuracy class and reactive energy meters of 3.0 accuracy class shall be installed by NTPC at bus bars of NTPC Station(s)

Handwritten signatures and initials at the bottom of the page, including a large signature on the left, a signature in the center, and initials on the right.

as per clause 4.1 of the Agreement. Each of the Main and check meters will be a pair of Export and Import meters.

A.4.2 All the meters shall be jointly calibrated, inspected and sealed on behalf of concerned parties and shall not be interfered with except in the presence of other party or for joint testing and calibration of which due notice of 15 days will be given so that this is done in the presence of the authorised representatives of the concerned parties.

A.4.3 All meters shall be checked for accuracy quarterly as per the mutually agreed dates by NTPC and concerned Bulk Power Customer(s) and shall be treated as working satisfactorily so long as the errors are within the limits prescribed in relevant Indian Standard (IS)/British Standard (BS) (where IS is not existing) for meters of the class. If the main/check meters are found to be defective during the quarterly checks, they will be immediately calibrated in presence of the concerned parties. Where the quarterly check indicates error in main meter(s) beyond permissible limit, but no such error is noticed in check meters, billing for the month will be done on the basis of check meter(s) and the main meter(s) will be calibrated immediately. If during the quarterly test checks, both the main and the corresponding check meter are found to be beyond permissible limits of error, both the meters shall be immediately calibrated and the correction applied to the consumption registered by the main meter to arrive at the correct consumption of energy for billing purpose for the period between the previous meter reading and the date and time of such test check. During this period of calibration of Main/Check meter(s) another set of main & check meter(s) duly calibrated and sealed will be installed by NTPC at the NTPC Power Station(s) bus bars in the presence of concerned parties and jointly sealed. The billing during the period of calibration of the original meter(s) would be as per the readings of the substituted main meter.

A.4.4 The quantity of electrical energy supplied to Bulk Power Customer(s) shall be computed from the readings of the main meters. Provided that if in any month(s) the readings of the main energy meter(s) differ from the readings of the corresponding check energy meter(s) by more than plus/minus 1.0(one) per cent, the main and check energy meters shall be jointly tested and errors at various levels as per standard procedure would be tabulated. If on such testing the main energy meter error is found to exceed plus/minus 0.5 (one half) per cent the energy figures recorded by the main energy meters for the above month(s) concerned shall be revised accordingly and the main energy meters shall be recalibrated or replaced by correct meters. Pending results of such testing, billing and payment shall continue to be based on the energy recorded by the check energy meters.

[Handwritten signatures and initials]

17

[Handwritten signature]

[Handwritten signature]

[Handwritten signature]

4.5

All the main and check energy meters shall be calibrated once in every six months jointly by both parties i.e. January and July irrespective of the calibrations that might have been done, where necessary, during the quarterly check. If the error found at the time of half yearly calibration are beyond permissible limits the same procedures applicable to the quarterly test checks shall be followed. All the tests during quarterly checks and calibration on the main and check energy meters shall be conducted in the presence of authorised representatives of NTPC and Bulk Power Customer(s) and the results/correction so arrived at shall be applicable and binding on the concerned parties.

A.4.6 Corrections in billing, whenever necessary, shall be applicable for the period between the previous meter reading and the date and time of the test/check in the month when the error is observed and this correction shall be for the full value of the absolute error. For the purpose of the correction to be applied, the meter shall be tested as per the IS (BS where IS is not existing). The error at the load and power factor nearest the average monthly load served at the point during the period shall be taken as the error factor to be applied for correction.

A.4.7 During the period of calibration of the defective meter(s) another export and import meter(s) duly calibrated would be installed by NTPC at the Power Station(s) bus bars in the presence of concerned parties and jointly sealed.

If both the main and check meters fail to record or if any of the FT fuses are blown out, then the energy will be computed on a mutually agreeable basis for that period of defect. In case there is no mutual agreement the decision of Member Secretary, EREB would be final and binding.

A.4.8 For the purpose of test and calibration, the Rotating Substandard (RSS) meter calibrated and sealed by Govt. Authorised Meter testing House/laboratory shall be utilised. This RSS meter shall be got calibrated once in every six months at the Govt. Authorised Meter testing House/laboratory.

A.4.9 Monthly meters reading shall be taken by the authorised representatives of concerned parties as mentioned in this Agreement.

A.4.10 Testing after notice

If at any time any party to the Agreement feels that a meter is not recording correctly it shall give notice to the other party under intimation to Member Secretary,

Handwritten signatures and initials at the bottom of the page, including a large signature on the left, a signature in the center with the number '14' above it, and several other initials and signatures on the right.

EREB, NTPC shall then undertake testing and calibration in coordination with the other party(ies) concerned. If error on such testing is found to exceed the error limits specified in the relevant IS/BS (where IS is not existing) for this class of meters, necessary adjustments in the bills shall be made from the date of notice or from such other date as can be satisfactorily established to be proper for such adjustment not exceeding 30 days prior to the notice.

While regular tests shall be the responsibility of NTPC in respect of the meters installed and maintained by NTPC, testing after notice from Bulk Power Customer(s) in respect of meters installed and maintained by NTPC would be done by NTPC provided if on such testing errors are found to be within limits, NTPC shall be compensated by the payment of actual cost of every such test by the concerned Bulk Power Customer(s).

A.5. LOSSES OF NTPC ENERGY IN TRANSMISSION SYSTEM

Regional Energy accounts so prepared by EREB will ensure total accounting of energy sent out at 400 KV bus-bars of NTPC Station(s). The losses in Transmission System(s) beyond 400KV bus bars of NTPC Power Station(s) would be shared amongst Bulk Power Customers as per methodology decided by EREB from time to time. No unilateral deduction shall be made from NTPC bills by Bulk Power Customer(s).

A.6. TRANSMITTING CHARGES AND TRANSMISSION LOSSES APPLICABLE FOR SUPPLY OF NTPC POWER

The Bulk Power Customer(s) shall extend their full cooperation in transmission of power from NTPC's power station(s) to other Bulk Power Customer(s) through their Transmission System(s) subject to technical feasibility. For transmitting NTPC's power the charges, if any, shall be settled amongst concerned Bulk Power Customer(s) and/or other agencies (as applicable) and no deductions on this account shall be made from NTPC bills by Bulk Power Customer(s).

The transmitting charges and transmission losses, if any, will be payable directly by the Bulk Power Customer(s), receiving energy to the Bulk Power Customer(s), PGCL or other agencies transmitting energy. The payments of NTPC bills in any case shall not be affected as a result of any dispute amongst Bulk Power Customer(s), PGCL, or other agency(ies) and no deductions from NTPC bills would be permissible on this account.

~~A~~
15
[Signature]
[Signature]
[Signature]
[Signature]
[Signature]

BILLING AND PAYMENT

NTPC shall present a bill for Energy supplied to Bulk Power Customer(s) as per Regional energy account described in clause 4 of the Agreement. If EREB gives provisional account in the first instance, NTPC shall raise the bill on such provisional account and Bulk Power Customer(s) shall pay the same as provided hereunder. In the event of any revision in energy account, NTPC shall adjust the difference between the energy already billed and the revised figure of energy supplied by raising a supplementary bill in case of increase in the quantum of energy supplied or through a credit note in case of reduction in the quantum of energy supplied.

NTPC's billing centres shall carry out billing and associated functions. The authority of the Bulk Power Customer(s) to whom the bills have to be submitted would be informed by Bulk Power Customer(s) to NTPC within a month of signing of this Agreement failing which NTPC would submit the bills to the Chief of the Commercial Wing of the Bulk Power Customer(s) who will arrange to issue a formal receipt of the bill.

NTPC shall after the end of each calendar month present a bill of energy supplied as per Regional Energy Accounts to Bulk Power Customer(s).

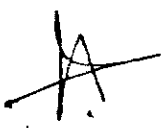
A.7.1 Bill Amount and Acceptance of Bill

The monthly bill for NTPC Station(s) shall be aggregate of charges in accordance with the provisions of this Agreement. If for certain reasons some of the charges cannot be included in the monthly bills, such charges shall be billed as soon as possible either through supplementary bill(s) or through inclusion in the subsequent monthly bill(s).

The bill shall be deemed to have been accepted in full unless the concerned Bulk Power Customer(s) file(s) written objection with NTPC within one month of receipt of the bill, giving following particulars:

- a) Items disputed, with full details/data and reasons of dispute.
- b) Amount disputed against each item.

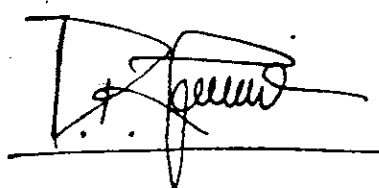
EREB/NTPC shall resolve the above disputes with the concerned Bulk Power Customer(s) as soon as possible preferably within three months. However, notwithstanding the pendency of such disputes, the Bulk Power Customer(s) shall pay the bill in full giving reference to the objection filed.

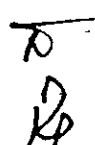




16











7.2 Establishment of LCs & Payment of Bills

LC would be multiple entry where during same month bills for power supplied from various NTPC Station(s) can be presented through same LC.

A.7.3 Direct Payments

In case the bill for the balance amount (referred to above) is not paid through LC, the payment for the same shall be made on or before the "last date" i.e. 30 days from the date of its issue of the bills. Unless the payments are earmarked by the Bulk Power Customer(s) against any specific bill(s), the same shall be appropriated by NTPC against the outstanding bills for the oldest dues including surcharge.

A.7.4 Rebate on Payments through LC

NTPC shall allow a rebate of 2.5% (two and a half per cent) only on the amount paid through LC upon presentation of the bills by NTPC to Bank. Where payments are made subsequently through LC or otherwise within a period of one month from date of issue of bills by NTPC, a rebate of 1% (one per cent) only will be allowed. The rebate shall be limited to the amount of NTPC bills after excluding wheeling charges, if any, taxes, duties, cess etc. billed therein.

A.7.5 Non-Payment of Bills and Non-Establishment of LC

In the event of failure to establish/enhance LC as above, or any bill(s) remaining unpaid for a period exceeding two months from the date of issue of the bill, NTPC shall have the authority to discontinue supply of power from NTPC Station(s) to such Bulk Power Customer(s) and advise EREB to exclude its allocation from scheduling and energy accounting and treat its share in the same manner as unallocated power under clause A.2 till restored by NTPC. In case of outstanding dues against any Bulk Power Customer(s) amount to two months of average monthly billing the Govt. of India or NTPC shall have the authority to issue necessary directions for reallocating the share of such customer among other Bulk Power Customers.

~~A~~ *arham*
17
gm ~~I. J. J. J.~~ *RP*
WJ

Locations for metering points (Central sector system)

Lines	Location of meters
1. Farakka (NTPC)-Jeerat (WBSEB) 400 KV	Farakka S/S
2. Farakka (NTPC)-Jeerat (WBSEB) 400 KV	Jeerat S/S
3. Farakka (NTPC)-Durgapur (NTPC) 400 KV	Farakka S/S
4. Parulia (PGCL)-Waria (DVC) 220 KV	Parulia S/S
5. Parulia (PGCL)-B'Nagar (WBSEB) 220 KV	Parulia S/S
6. Farakka (NTPC)-Lalmatia (BSEB) 220 KV	Farakka S/S (400KV side)
7. Farakka (NTPC)-K'Gaon (NTPC) 400 KV	Farakka S/S
8. Farakka (NTPC)-Malda (PGCL) 400 KV	Farakka S/S
9. Farakka (NTPC)-Malda (PGCL) 220 KV	Farakka S/S
10. Birpara (PGCL)-Chukha (CHPS) 220 KV	Birpara S/S
11. Birpara (PGCL)-Bongaigaon (ASEB) 220 KV	Birpara S/S
12. Birpara (PGCL)-Birpara (WBSEB) 132 KV	Birpara S/S (PGCL)
13. Siliguri (PGCL)-Siliguri (WBSEB) 132 KV	Siliguri S/S (PGCL)
14. Malda (PGCL)-Malda (WBSEB) 132 KV	Malda S/S
15. Purnea (PGCL)-Purnea (BSEB) 132 KV	Purnea S/S (PGCL)
16. Farakka (NTPC)-K'Gaon (NTPC) 132 KV	K'Gaon S/S
17. K'Gaon (NTPC)-Maithon (PGCL) 400 KV	K'Gaon S/S
18. K'Gaon (NTPC)-B'Sariff (NTPC) 400 KV	K'Gaon S/S
19. K'Gaon (NTPC)-K'Gaon (BSEB) 132 KV	K'Gaon S/S (400 KV side)
20. K'Gaon (NTPC)-Sabour (BSEB) 132 KV	K'Gaon S/S
21. K'Gaon (NTPC)-Lalmatia (BSEB) 132 KV	K'Gaon S/S
22. K'Gaon 132 KV Stn. Consumption	K'Gaon S/S
23. B'Sariff (PGCL)-B'Sariff (BSEB) 220 KV	B'Sariff S/S
24. Pithakari-Kalyaneswari 220 KV (Maithon, PGCL)	Pithakari S/S
25. Jamshedpur (PGCL)-Chandil (BSEB) 220 KV	Jamshedpur S/S
26. Jamshedpur (PGCL)-Joda (OSEB) 220 KV	Jamshedpur S/S
27. Terkera (OSEB)-Rourkela (PGCL) 220 KV	Rourkela S/S
28. Talcher (NTPC)-Rengali (PGCL) 400 KV	Talcher S/S
29. Talcher (NTPC)-Rourkela (PGCL) 400 KV	Talcher S/S

A *arban*

h

l

T. J. J.

202

Rp

10/11

GUIDELINES FOR DECLARING A UNIT COMMERCIAL

1. All main equipment and auxiliary systems including fuel oil plant, coal handling plant, water treatment plant and ash disposal system have been commissioned to give adequate capacity to operate the unit.
2. All safety measures including segregating unit in operation from units in construction and fire protection systems have been put into service.
3. All permanent electrical supply systems including emergency supplies and instrumentation control and protection systems for operating the unit have been put into service.
4. Trial operation of the unit has been performed with the contractor and the 'Trial Operation Report' has been jointly prepared with the contractor and signed without absolving the contractor of his obligations under the contract. Trial operation of the unit shall be considered successful if a unit has operated continuously for 14 days out of which at least 72 hours should be within $\pm 10\%$ of the unit rating.
5. The unit has been in operation for a period at least 1000 hours giving generation not less than 2500 kwh/kw/year and shall cover the whole range of operation including full load for a minimum period of 72 hours.
6. Even if it had not been possible to fulfil the conditions as mentioned above, the unit will be deemed to have been placed under commercial operation after a period not exceeding six months from the date of synchronisation or four months from the date of synchronising after bearing inspection whichever is earlier.
7. In case some major shortcomings have been noticed by the generating company, because of which it had not been possible to carry out the trial operation of the unit as given above or to run the unit on stable load in view of force majeure conditions such as nonavailability of coal, noncompletion of MGR or other sub systems, lack of system demand and reduction in generation imposed by REBs etc. the period mentioned in para 6 above could be extended by the Generating Company.

However, in case of any dispute the matter would be referred to CEA for a final decision.







