



National Electric Power Regulatory Authority
Islamic Republic of Pakistan

2nd Floor, OPF Building, G-5/2, Islamabad.
Ph: 9206500, 9207200 Fax : 9210215
E-mail: office@nepra.org.pk

Registrar

No. NEPRA/R/LAG-03/195

15-01-2007

Chief Executive Officer,
Northern Power Generation Company Ltd.
Thermal Power Station
Muzaffargarh

**Subject: Modification to Generation Licence No. GL/03/2002 dated July 1, 2002
Northern Power Generation Company Ltd. (NPGCL)**


Reference: Your letter no. CEO/FD/NPGCL/TRF/4639-44 dated 30.11.2006.

It is intimated that the Authority has approved "Licensee Proposed Modification" in Generation Licence No. GL/03/2002 in respect of Northern Power Generation Co. Ltd. (NPGCL) pursuant to Regulation 10(11) of the NEPRA Licensing (Application & Modification Procedure) Regulations, 1999.

2. Enclosed herewith is Modification to Generation Licence No. GL/03/2002 alongwith modified Section E & F of Schedule-I and Schedule-II as approved by the Authority.


DA:

i) **Modification to Generation Licence**


15.1.07.
(Mahjoob Ahmad Mirza)

No. NEPRA/R/LAG-03

Forwarded for information, please.

2007

15.1.07.
Registrar

Director Licensing (G) - I

CC:

1. Chairman
2. Member (L)

**National Electric Power Regulatory Authority
(NEPRA)
Islamabad – Pakistan**

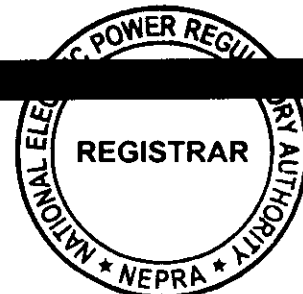
**Modification to Generation Licence
No. GL/03/2002**

In pursuance of Regulation 10(11) of (Application and Modification Procedure) Regulation 1999, the National Electric Power Regulatory Authority (NEPRA) hereby approves the Licensee's proposed modification of Northern Power Generation Company Limited by modifying page 3 of Schedule-I of the Licence for addition of following capacities and plants after serial no. 4:

- (5) 150 MW Sharaqpur power plant rented for three years from Commercial Operation Date. Plant details attached as Section E to Schedule-I.
- (6) 136 MW Bhikki power plant rented for three years from Commercial Operation Date. Plant details attached as Section F to Schedule-I.
- Further the Plant capacities of Schedule-II of the Licence are modified by adding the capacities of these plants as detailed in page 3 of 3.

Given under my hand this 4th day of JAN. two thousand and seven and expires after completing three years from the Commercial Operation Date of the plants.


Registrar



First Modification to

Generation Licence No. GL/03/2002

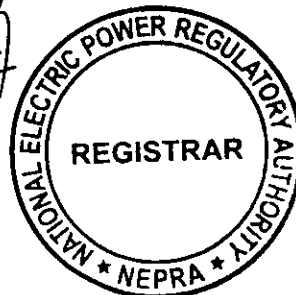
In the name of

**Northern Power Generation
Company Limited**

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Plant Details
150 MW Rental Power Station
at 500 KV Grid Station Sharaqpur

1. General Information.

i.	Name of Applicant	Northern Power Generation Company Limited
ii.	Registered Office	Thermal Power Station, Muzaffargarh
iii.	Business Office	-do-
iv.	Plant Location	500 KV Grid Station, Sharaqpur, Sheikhpura
v.	Type of Generation Facility	Thermal Power Generation (Gas Turbines)

2. Plant Configuration

i.	Plant size installed capacity Gross ISO	150 MW
ii.	Type of Technology	Gas Turbine LM 2500
iii.	No. of units/size	7 Nos., 21.5 MW each
iv.	Unit make & Model	GE LM 2500
v.	De-rated Capacity at site condition	134.2 MW
vi.	Auxiliary Consumption	1.2%
vii.	Commissioning and commercial operation date	15.01.2007
viii.	Expected life of the facility from commercial operation date.	3 years as per contract agreement.

3. Fuel Details

i.	Primary Fuel	Natural Gas
ii.	Alternative Fuel	Nil
iii.	Back-up fuel	Nil
iv.	Fuel Source (Imported/indigenous)	Nil
v.	Fuel Supplier	SNGPL
vi.	Supply arrangement	Purchaser to make arrangements
vii.	No. of storage tanks	Nil
viii.	Storage capacity of each tank	Nil

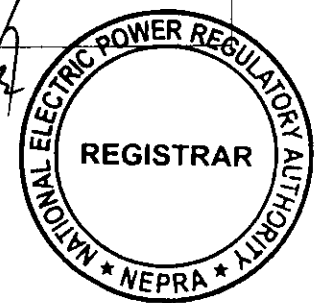
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17/12/07

Director (M/S)

17/12/07
10:00 AM

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 DIRECTOR (M/S)
 TPO, WAPDA,
 MUZAFFARGARH



ix.	Gross storage <ul style="list-style-type: none"> • Primary Fuel • Back-up Fuel 	Nil Nil
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4. Emission Values

i.	SO _x	As per Pakistan environment standards
ii.	NO _x	-do-
iii.	PM ₁₀	-do-

5. Cooling System

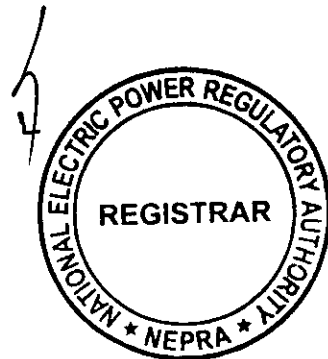
i.	Cooling Water source/Cycle	Not applicable (air cooled)
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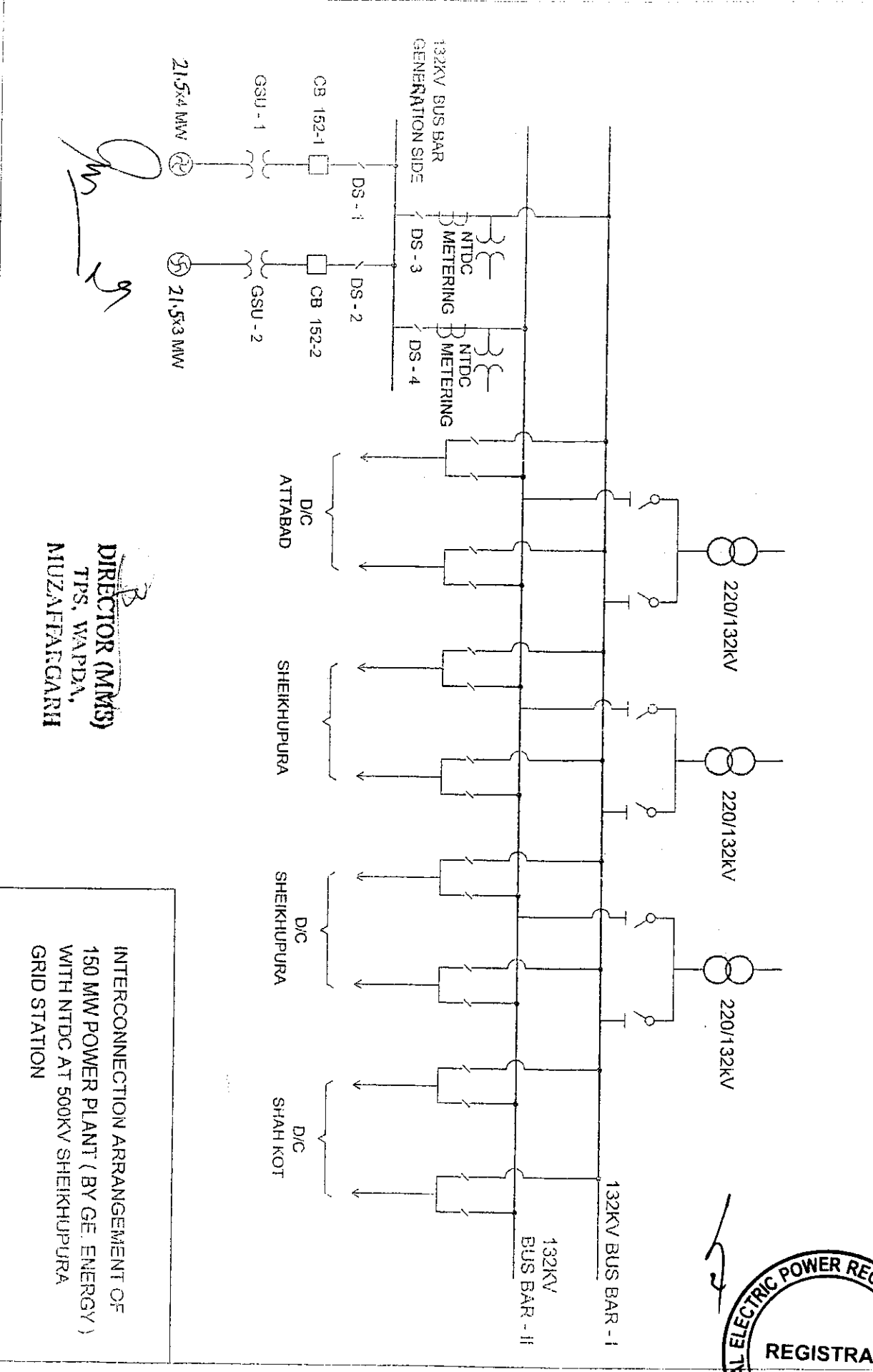
6. Plant Characteristics.

i.	Generation Voltage	11 KV
ii.	Frequency	50 Hz
iii.	Power Factor	0.85
iv.	Automatic Generation Control	Not applicable
v.	Ramping Rate	3 MW/minute (each unit)
vi.	Time required to synchronized to Grid and loading the plant to full load.	30 minutes (complex)

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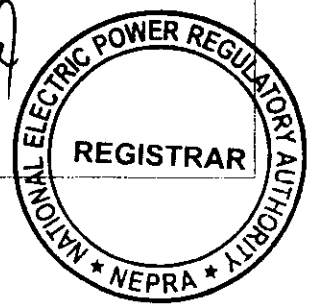
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DIRECTOR (GEN)
TPS, WAPDA,
MUZAFFARGARH





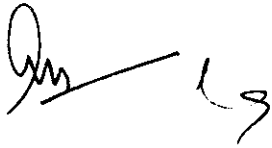
DIRECTOR (MMS)
 TPS, WAPDA,
 MUZAFFARGARH


INTERCONNECTION ARRANGEMENT OF
 150 MW POWER PLANT (BY GE. ENERGY)
 WITH NTDC AT 500KV SHEIKHUPURA
 GRID STATION

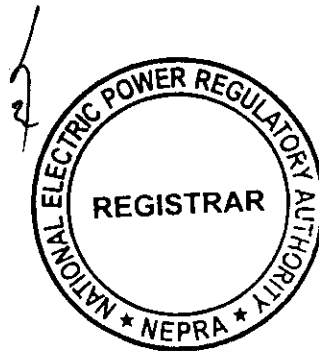


INTERCONNECTION SCHEME FOR THE POWER DISPERSAL OF 150 MW
SHARQPUR POWER PLANT ON RENTAL BASIS

The power generated from the power plant shall be dispersed to the load centres of LESCO & FESCO by construction of 132 KV Double Circuit Link having a length of about 200 meter by making a direct feeding arrangement with the existing 132 kV switchyard of 500/220/132 kV Substation, Lahore.




DIRECTOR (MMS)
TPS, WAPDA,
MUZAFFARGARH



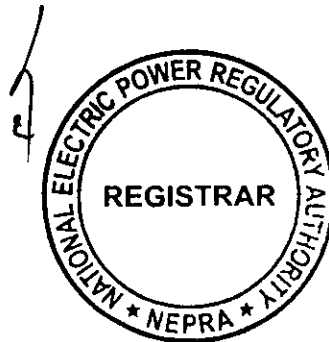
First Modification to

Generation Licence No. GL/03/2002

In the name of

**Northern Power Generation
Company Limited**

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Plant Details
136 MW Rental Power Station
at 132 KV Grid Station Bhikki

1. General Information.

i.	Name of Applicant	Northern Power Generation Company Limited
ii.	Registered Office	Thermal Power Station, Muzaffargarh
iii.	Business Office	-do-
iv.	Plant Location	132 KV Grid Station, Bhikki, Sheikhpura
v.	Type of Generation Facility	Thermal Power Generation (Gas Turbines)

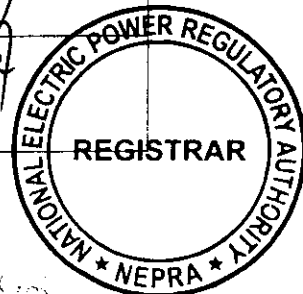
2. Plant Configuration

i.	Plant size installed capacity Gross ISO	136 MW
ii.	Type of Technology	Gas Turbine LM 6000 (GE)
iii.	No. of units/size	3 Nos., 45.5 MW each
iv.	Unit make & Model	GE LM 6000
v.	De-rated Capacity at site condition	125 MW
vi.	Auxiliary Consumption	1.3%
vii.	Commissioning and commercial operation date	120 days from effective date of the contract agreement.
viii.	Expected life of the facility from commercial operation date.	3 years as per contract agreement.

3. Fuel Details

i.	Primary Fuel	Natural Gas
ii.	Alternative Fuel	Nil
iii.	Back-up fuel	Nil
iv.	Fuel Source (Imported/indigenous)	Nil
v.	Fuel Supplier	SNGPL
vi.	Supply arrangement	Purchaser to make arrangements
vii.	No. of storage tanks	Nil
viii.	Storage capacity of each tank	Nil
ix.	Gross storage <ul style="list-style-type: none"> • Primary Fuel • Back-up Fuel 	Nil Nil

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 REGISTRAR (MS)
 P.O. NEPRA,
 MUZAFFARGARH

4. Emission Values

i.	SO _x	As per Pakistan environment standards
ii.	NO _x	-do-
iii.	PM ₁₀	-do-

5. Cooling System

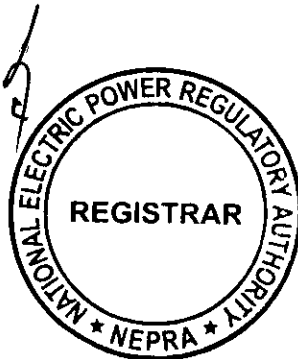
i.	Cooling Water source/Cycle	Not applicable (air cooled)
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6. Plant Characteristics.

i.	Generation Voltage	11 KV
ii.	Frequency	50 Hz
iii.	Power Factor	0.85
iv.	Automatic Generation Control	Not applicable
v.	Ramping Rate	3 MW/minute (each unit)
vi.	Time required to synchronized to Grid and loading the plant to full load.	30 minutes (complex)

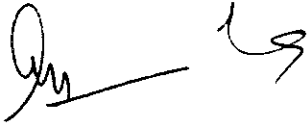
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DIRECTOR (GMS)
TPO, WAPDA,
MUZAFFARGARH

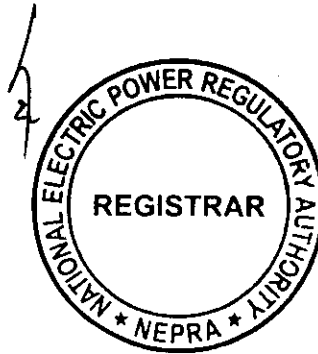


INTERCONNECTION SCHEME FOR THE POWER DISPERSAL OF 135 MW
BHIKKI POWER PLANT ON RENTAL BASIS

The power generated from the power plant shall be dispersed to the load centres of LESCO & FESCO by construction of 132 KV Direct Link having a length of about 200 meter with the existing 132 kV Busbar of 132 kV Grid Station Bhikki, Distt. Sheikhupura.




DIRECTOR (MMS)
TFS, WAPDA,
MUZAFFARGARH



Schedule-II

1. Sharaqpur Power Station

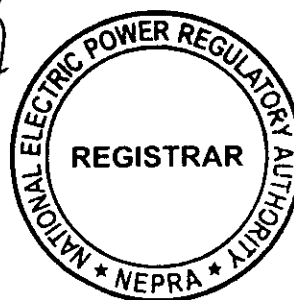
Installed Capacity	150 MW
De-rated Capacity at site conditions	136 MW
Auxiliary Consumption	1.2 %
Net Capacity of the plant at site conditions	134.2 MW

2. Bhikki Power Station

Installed Capacity	136 MW
De-rated Capacity at site conditions	125 MW
Auxiliary Consumption	1.3 %
Net Capacity of the plant at site conditions	123.5 MW

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National Electric Power Regulatory Authority

NEPRA

Determination of the Authority in the matter of Application for Licensee Proposed Modification by Northern Power Generation Company Limited (NPGCL) - in respect of its Generation Licence # GL/03/2002 for addition of one, 150 MW power plant at Sharqpur and one, 136 MW power plant at Bhikki on Rental Basis for a Period of Three Years (i.e. 2007-2009)

1. The impending country wide crisis of power generation capacity shortage during peak demand months, expected in the years 2007 and 2008, due to inadequate additions in the recent past (2002-2006), has compelled the adoption of desperate short term measures with-in the policy and planning scenario. The hesitance of the intending investors to invest in Power Generation in the given environment resulted in the delay of commissioning of Power projects attracted by the Federal Government Policy to meet the demand for the year 2006-07. None of the projects being facilitated by PPIB was expected to commission before December 2007. Therefore avenues were explored to avail of an immediate provision of Generation Capacity for availability to meet the Peak Summer demand of the Calendar Year 2007. Such measures included the proposal of Northern Power Generation Company Limited (NPGCL) to rent power plants for installation of 150MW power plant at Sharqpur Grid Station and 136 MW power plant at Bhikki Grid station, which could be put in operation in hundred days. The Economic Coordination Committee (ECC) in its decision of 16.08.2006, in case number:ECC-135/9/2006 has approved the summary dated 12th August 2006, submitted by Ministry of Water and Power (MoW&P) requesting approval of the above said project(s).

2. The Planning and Development Division (P&D), while supporting the summary/ proposal submitted by the Ministry of Water and Power to ECC, has shown concern regarding the high price and low efficiency of the plant(s). However, P&D has also expressed its apprehension about the expected power shortages and its adverse impact on the economy and has, therefore, concurred with the proposal. We have been informed that NPGCL has already initiated the procurement of equipment from GE in accordance with the ECC decision including the rates proposed by GE Energy, through negotiation of unsolicited bids and that accordingly the plant equipment has been ordered, shipped by the supplier and is presently docked at Karachi port. We have also been informed that CPPA, acting within NTDC, has agreed to purchase power. Further, we have not been provided the details of the adequacy of gas allocation for the plant usage over the three year period.

3. In the absence of concrete and adequate information on which an informed decision can be made and the fact that NPGCL is still owned and controlled by the Federal Government which in turn is directly affected by its loss or profit, the Authority is constrained to rely on the justification and grounds put forwarded by the MoW&P in para 5&6 of the summary dated 12.08.2006 submitted to ECC for approval, the comments and concurrence of P&D in this context and CPPA/NTDC having agreed to the proposed arrangement and Term.

4. The Authority considers that the Project has proceeded to a stage where not ratifying or denying the Licensee Proposed Modification would result in stalling the process of provision of adequate generation capacity on a "Fast Track basis" initiated by the Federal Government in accordance with the overall power Planning at the National level. The ensuing shortage in generating capacity and its effect on industry, manufacturing, commerce and residential consumer



service would adversely affect the economy and will therefore not be in the public interest. On the afore mentioned grounds the Authority has already approved the rental arrangements and allowed NTDC to procure power from NPGCL on account of the enhanced rented capacity at the terms and rates already decided by the ECC.

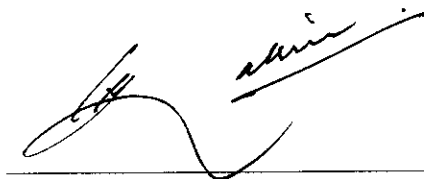
5. In view of the above, the interest of consumers of electricity, the public interest at large and in deference to the desire of the Federal Government to avoid Load Shedding and the decisions already taken in this context; the Authority agrees with Licensee Proposed Modification in the Generation Licence of NPGCL to the extent of addition of one 150 MW plant at 500 KV Grid Station Sharqpur (Sharqpur Power Station) and 136 MW plant at 132 KV Grid Station Bhikki (Bhikki Power Station) on rental basis for a period of three years starting from the date of commercial operation of these plants.

ORDER:

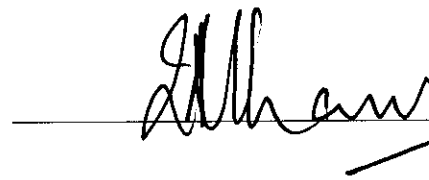
6. The Authority hereby approves the Licensee Proposed Modification, in the Generation Licence of NPGCL to the extent of addition of one 150 MW plant at 500 KV Grid Station Sharqpur (called Sharqpur Power Station) and one 136 MW plant at 132 KV Grid Station Bhikki (called Bhikki Power Station) on rental basis for a period of three years starting from the date of Commercial Operation of these plants. The already granted Generation Licence # GL/03/2002 in the name of Northern Power Generation Limited is hereby modified to the extent of attached Section E to Schedule-I and page 3 of 3 to Schedule-II for 150 MW Sharaqpur and Section F to Schedule-I and page 3 of 3 to Schedule-II for 136 MW Bhikki rental power plants.

Authority

Abdul Rahim Khan
VC/Member

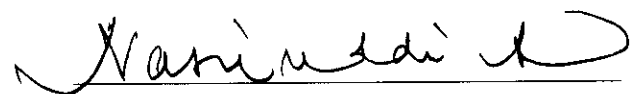


Zafar Ali Khan
Member




9/1/07

Nasiruddin Ahmed
Member



Lt. Gen. (R) Saeed uz Zafar
Chairman



National Electric Power Regulatory Authority

NEPRA

Determination of the Authority in the matter of Application for Licensee Proposed Modification by Northern Power Generation Company Limited (NPGCL) - in respect of its Generation Licence # GL/03/2002 for addition of one, 150 MW power plant at Sharqpur and one, 136 MW power plant at Bhikki on Rental Basis for a Period of Three Years (i.e. 2007-2009)

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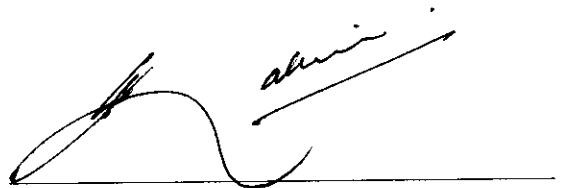
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ORDER:

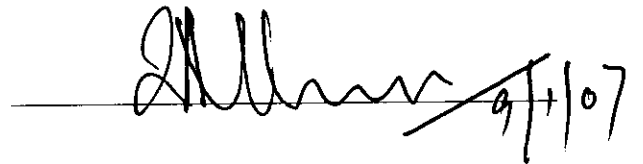
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Authority

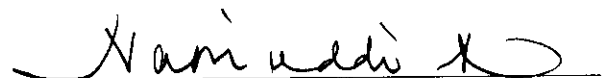
Abdul Rahim Khan
VC/Member



Zafar Ali Khan
Member



Nasiruddin Ahmed
Member



Lt. Gen. (R) Saeed uz Zafar
Chairman

