



# Northern Power Generation Company Limited

425 MW Combined Cycle Power Plant Nandipur, Gujranwala



Office of the  
Plant Manager  
CCPP, Nandipur

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email:- naved.athar@yahoo.com

No. NPGCL/PM/NP/GL/ 2553

The Registrar,  
National Electric Power Regulatory Authority.  
NEPRA Tower, Attaturk Avenue (East),  
G-5/1, Islamabad.

**Subject: APPLICATION FOR GRANT OF GENERATION LICENSE ON BEHALF OF NORTHERN POWER GENERATION COMPANY LIMITED IN RELATION TO ITS COMBINED CYCLE POWER PLANT, NANDIPUR TO BE LOCATED AT DISTRICT GUJRANWALA-PUNJAB.**

I, Naveed Athar, Plant Manager, CCPP Nandipur being the duly authorized representative of CCPP Nandipur of Northern Power Generation Company Limited by virtue of BOARD RESOLUTION No. NPGCL/BoD-131/14-18 Dated:- 11-01-2022, hereby apply to the National Electric Power Regulatory Authority (NEPRA) for the grant of a GENERATION LICENSE to the **CCPP Nandipur** of Northern Power Generation Company Limited (NPGCL) pursuant to Section 14 (b) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (2000).

I hereby certify that the documents-in-support attached with this application are prepared and submitted in conformity with the provisions of the National Electric Power Regulatory Authority Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021, and undertake to abide by the terms and provisions of the above-said regulations. I further undertake and confirm that the information provided in the attached documents-in-support is true and correct to the best of my knowledge and no material omission has been made.

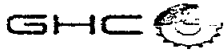
An amount of PKR 1,502,759 on account of license application fee has already been submitted and balance amount of PKR 166,752/- (Rupees One Hundred Sixty Six Thousand Seven Hundred Fifty Two only), calculated in accordance with Schedule II to the National Electric Power Regulatory Authority Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021, is submitting now. BANK DRAFT No. BBB 14595845 Dated:-05-06-2022 is attached herewith.

Sincerely,

For and on behalf of **CCPP Nandipur**.of NPGCL

**Naveed Athar**  
Plant Manager and authorized Representative

RECEIVED  
6858  
7.9.2022  
with reference of R. 166-457



**Northern Power Generation Company Limited**  
Thermal Power Complex, Mehmood Kot Road, Muzaffargarh



*Company Secretary Office*

Phone: 066-9200296-Fax-066-9200166

No. NPGCL/BoD-131/08/14-18

January 11, 2022

**OFFICE MEMORANDUM**

**To: The Chief Executive Officer NPGCL, TPS Muzaffargarh**

**Subject: Matter of Carving Out CCPP Nandipur from NPGCL**

The Board of Directors of NPGCL has taken up the subject matter in its meeting No.131 held on January 10, 2022.

The Board has passed the following resolution:

**“Resolved that the a separate power generation license be obtained for CCPP Nandipur from NEPRA in the light of direction conveyed by Ministry of Energy (Power Division) vide Office Order No. 1(33)GP-I/2021 dated 31<sup>st</sup> December 2021 and the CEO NPGCL and Plant Manager CCPP Nandipur be and are hereby authorized jointly and individually to take all measures for the purpose including but not limited to signing of prescribed applications and payment of requisite license fee(s) to NEPRA.”**

This is for your information and necessary action please.

Ahmed Noman  
Company Secretary

Copy for Information and necessary action please:

1. Chief Financial Officer, TPS Muzaffargarh
2. Plant Manager, CCPP Nandipur
3. Chief Engineer/TD, NPGCL, TPS Muzaffargarh

Copy for Record:

4. Master File

## PROSPECTUS

<b>Project Name:</b>	425-525 MW, Combined Cycle Power Plant, Nandipur. On the left bank of Upper Chenab Canal (within the premises of the existing small Hydel Power Station, Nandipur, Gujranwala).	
<b>Location of the Project:</b>		
<b>Commencement Date:</b>	Oct-16, 2008	
<b>Initial Completion Date</b>	Apr 16, 2011	
<b>Work Suspension Period</b>	April-2010 to October-2013 owing to financial & legal reasons. (Non-issuance of legal opinion to Foreign lenders by Ministry of Law, Justice and parliamentary affairs and subsequent withholding of Original Bills of Lading by the Letter of Credit (L/C) opening local Banks'.	
<b>Re-commencement Date</b>	21-10-2013	
<b>COD of 1<sup>st</sup> Gas turbine</b>	06-12-2014	
<b>COD of 2<sup>nd</sup> Gas turbine</b>	27-03-2015	
<b>COD of 3<sup>rd</sup> Gas turbine</b>	20-05-2015	
<b>Power Plant achieved COD on</b>	23-07-2015	
<b>Project Cost as per PC-1</b>	Original 22,335 Millions	Revised Rs. 58,416 Millions
<b>Tariff approved by NEPRA (levelized)</b>	Rs. 11.6361/KWH on HSFO	Rs. 10.3157/KWH on Gas
<b>Conversion to Gas Fuel</b>	<ul style="list-style-type: none"><li>• 100 MMCFD gas quota has been allocated for Nandipur Plant.</li><li>• M/S SNGPL has commissioned the pipeline with metering station against deposit work.</li><li>• M/S General Electric (GE) has completed the works whereas regarding the BoP Works, the EPC contract has been signed with M/S Amcorp-Gasco(JV) on <b>13.02.2017</b>. M/S Amcorp-Gasco (JV) has completed all the works including installation of Gas Booster Compressors and Performance Testing of the Complex..</li><li>• The Plant is operating on gas fuel after successful gas conversion works since <b>26.04.2017</b></li></ul>	

Nandipur Combined Cycle Power Plant 525 MW Capacity comprises of three Gas Turbines, each of 110 MW Capacity, one Steam Turbine of 195 MW Capacity and three HRSGs supplying steam to the Steam Turbine along-with associated BOP. The plant is capable of operating on Gas (RLNG) and Liquid (HSD) Fuels.

Location	Nandipur- Gujranwala. (Map attached as <b>Annex-I</b> )
Size (Capacity in MW)	525 MW-Gross Capacity at site conditions. (Detail attached as <b>Annex-II</b> )
Fuel Type	Gas (RLNG) by SNGPL through pipeline and HSD by PSO (Detail Attached as <b>Annex-III</b> )
Emission Values	Detail attached as <b>Annex-IV</b> .
Cooling Water Source	Canal/Tube wells (Detail attached as <b>Annex-V</b> )
Interconnection with NGC	NTDC, Scheme & Single-Line Diagram (Attached as <b>Annex-VI</b> )

## **Plant**

### **Characteristics:**

Generation Voltage	15 kV
Frequency	50Hz, $\pm 2.5\%$
Power Factor	0.85 (Lagging)
Auxiliary Consumption	2.536 %
Efficiency of Gas Turbines	30%
Combined Cycle Efficiency	49%
Project Cost	Rs. 57,380 Million
Unit Cost	Rs. 109,296/kW



# **ANNEXURE-I**

**Location Maps, Site Maps, Land**

# PAKISTAN

CHINA

TURKMENISTAN

Northwest Frontier Province

K2 (8611m)

Kalasha Valleys

Chitral

Nanga Parbat (8125m)

Kabul

Azad Jammu & Kashmir

Peshawar

Islamabad

Rawalpindi

AFGHANISTAN

Gujrat

\* Project Location

Kandahar

Lahore

Punjab

Zahedan

Quetta

Multan

Bahawalpur

Uch Sharif

Delhi

IRAN

Rohtak

INDIA

Hingol National Park

Kashmir National Park

Hyderabad

Arabian Sea

Karachi



0 200 km

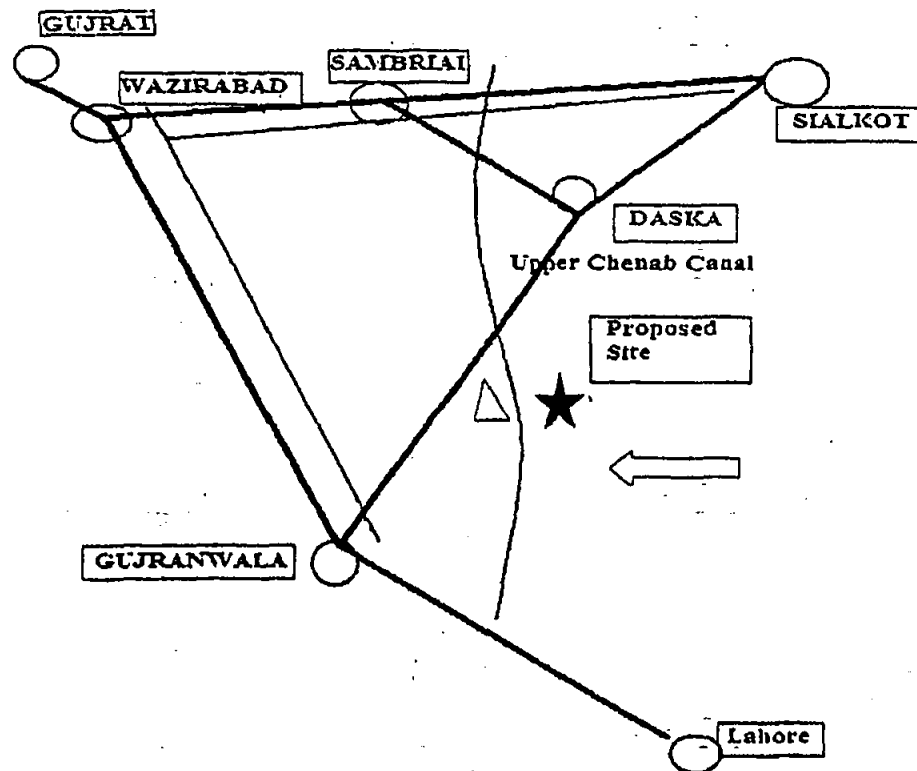
0 120 miles

Tropic of Cancer








PROPOSED SITE FOR NANDIPUR 425 MW THERMAL  
COMBINED CYCLE PROJECT

(Sketch Not To Scale)



LEGEND

	Existing Hydel Power Station Nandipur.
	Road.
	Rail
	Upper Chenab Canal
	Proposed Site Of CCPP, Nandipur.

## **ANNEXURE-II**

**Technology, Size of Plant, No. of Units**

## Technology, Size of Plant, No. of Units

1	Type of Technology	Combined Cycle Power Plant (CCPP)		
2	Number of Units	3 x Gas Turbine		
		1 x Steam Turbine		
Plant Capacity/Size MW		On HSFO	On Gas (RLNG)	On HSD
3	474.0	474.0	565.65 MW	474.0
4	425.0	425.0	513.51 MW	425.0
5	411.0	411.0	500.49 MW	411.0
6	14.0 MW (3.29 %)	14.0 MW (3.29 %)	13.02 MW (2.536 %)	14.0 MW (3.29 %)

## **ANNEXURE-III**

### **Fuel**

**Type, Imported/Indigenous, Supplier, Logistics, Pipelines etc.**

## **FUEL DETAILS**

1	Primary Fuel	Gas (RLNG)
2	Alternative / Back-up Fuel	HSD
3	Primary Fuel Source (Imported/Indigenous)	Imported
4	Fuel Supplier	SNGPL & PSO
5	Supply Arrangement	Gas by SNGPL through Pipe-Line. HSD by PSO through Oil Tankers.
6	No. of Storage Tanks	02
7	Storage Capacity of Each Tank	10,000 M Ton
8	Total Gross Storage	20,000 M Ton



**ANNEXURE-IV**

**Emission Values**

## **EMISSION VALUES**

Sr. No.	Description	GAS	HSD
1	SO <sub>x</sub> (SO <sub>2</sub> )	< 1% Very Low	Later
2	NO <sub>x</sub> @ 15% O <sub>2</sub> )	Very Low	Later
3	CO	Very Low	Later
4	PM	Very Low	Later

- Within permissible limits of World Bank.

## **ANNEXURE-V**

**Cooling Water Source  
Tube-Wells, Sea/River/Canal, Distance from  
Source etc.**

## **COOLING WATER SOURCE**

### **Upper Chenab Canal (UCC):**

Cooling water for the Plant shall be supplied from UCC passing through the Plant virtually having no distance. Average flow of canal-water is 8,000 Cusecs. Raw water from Canal shall be pumped and passed through the condenser of Steam Turbine in Open-cycle mode.

### **Tube-Wells & Cooling Towers:**

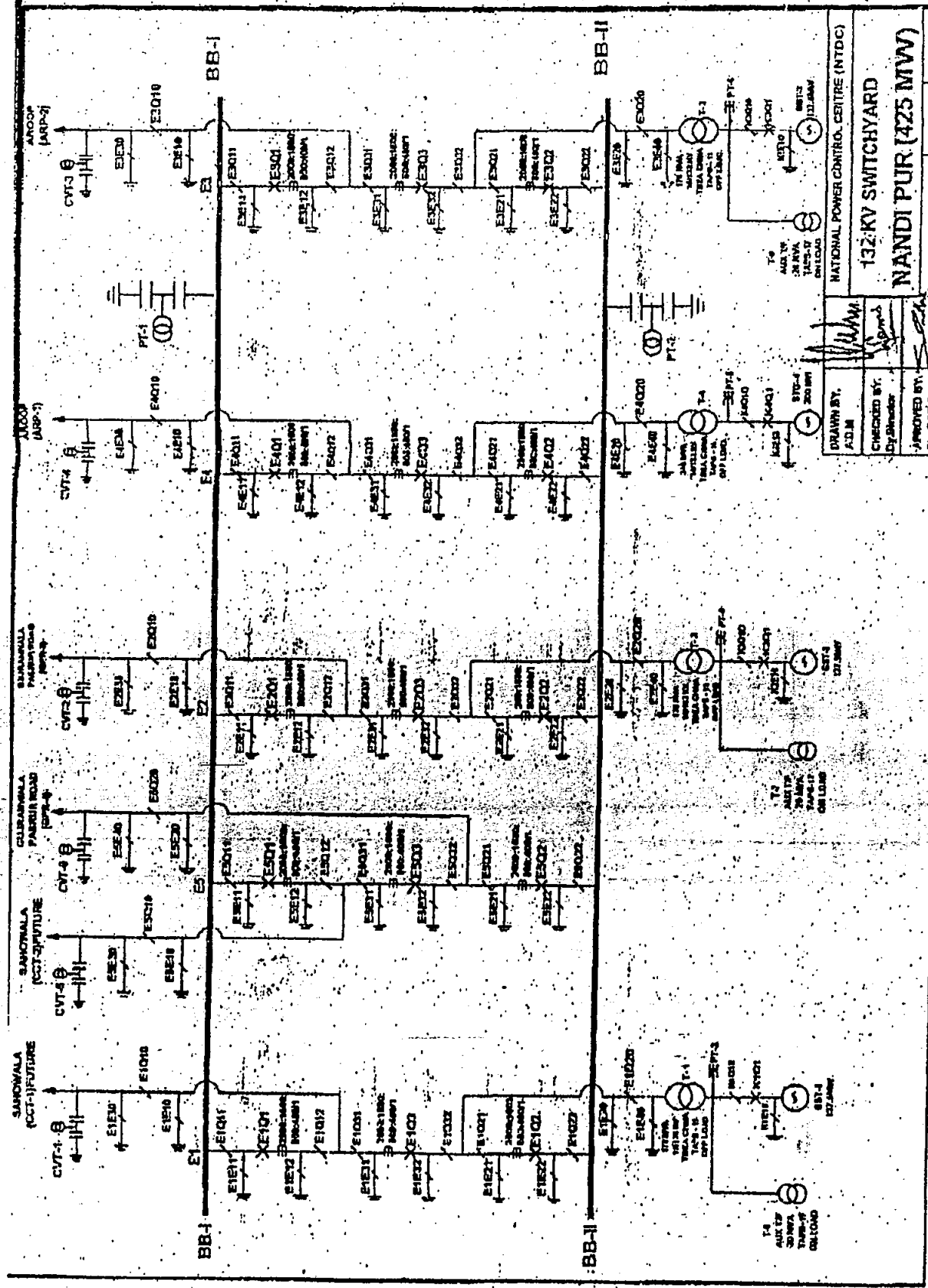
During canal closure which is normally less than one month in a year, tube wells installed inside the boundary of the plant, shall supply make-up water to the Cooling Towers for cooling of the Plant in Closed-Cycle mode.

## **Interconnection with National Grid**

The Power generated from the Power Plant shall be dispersed to power system directly within GEPCO load center at 132kV voltage level through six circuits comprising three D/C transmission lines as follows:

- 132 kV D/C T/Line with twin bundle Rail Conductor (on 220 KV Towers) from Nandipur CCPP to Sahowala 220/132 kV Substation (33 Km).
- Two 132kV D/C T/Lines on AASC Greely Conductor for looping In/Out of 132 KV D/C T/Lines from Gujranwala Pasrur Road - Gujranwala Sialkot Road (Aroop) at Nandipur CCPP (7.0 + 6.5=13.5 Km)





NATIONAL POWER CONTROL CENTRE (NTDC)	
132 KV SWITCHYARD	
NANDI PUR (425 MW)	
DATE: 04.09.2011	NTDC
REV: 0	
DRAWN BY: A.S.M.	CHECKED BY: Dy. Engineer
APPROVED BY: [Signature]	DATE: 04.09.2011

# **Detail of installed Capacity**

**CCPP, Nandipur**



## Detail of installed Capacity CCPP, Nandipur

	On HSFO		On Gas Fuel		On HSD	
	ISO 15 °C	Site Condition 30 °C	ISO 15 °C	Site Condition 30 °C	ISO 15 °C	Site Condition 30 °C
03 no. Gas Turbines (MW)	3 x 106.7 = 320.1 MW	3 x 95.4 = 286.2 MW	3 x 122.1 = 366.3 MW	3 x 110.5 = 331.8 MW	3 x 106.7 = 320.1 MW	3 x 95.4 = 286.2 MW
01 No. Steam Turbine (MW)	1 x 153.89 = 153.89 MW	1 x 138.80 = 138.80 MW	1 x 199.35 = 199.35 MW	1 x 182 = 182.0 MW	1 x 153.89 = 153.89 MW	1 x 138.80 = 138.80 MW
Gross Capacity of complete CCPP (MW)	474.0 MW	425.0 MW	565.65 MW	513.51 MW	474.0 MW	425.0 MW
Net output of complete CCPP (MW)	460.0 MW	411.0 MW	550.00 MW	500.49 MW	460.0 MW	411.0 MW
Auxiliary consumption	13.99 MW (2.95 %)	14.0 MW (3.29 %)	15.65 MW (2.766 %)	13.02 MW (2.536 %)	13.99 MW (2.95 %)	14.0 MW (3.29 %)

**THE COMPANIES ORDINANCE, 1984**

**Company Limited by Shares**

**Memorandum**

**and**

**Articles of Association**

**NORTHERN POWER GENERATION COMPANY LIMITED**

GOVERNMENT OF PAKISTAN



CERTIFICATE OF INCORPORATION

(Under section 32 of the Companies Ordinance, 1984 (XLVII of 1984))

Company Registration No. L 09667 of 1998-99

I hereby certify that "NORTHERN POWER GENERATION COMPANY LTD."

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is this day incorporated under the Companies Ordinance, 1984 (XLVII of 1984) and that

Shares.

the company is limited by

Lahore.

Given under my hand at

15th

October

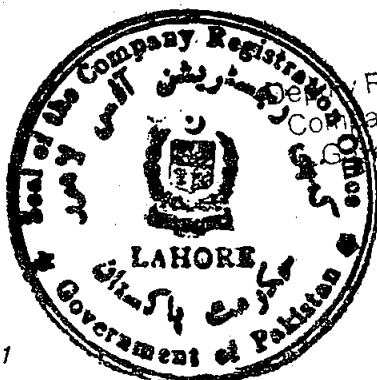
this day of

one thousand nine hundred and

Ninety eight.

Fee Rs. =5,000,200

Certified to be true Copy



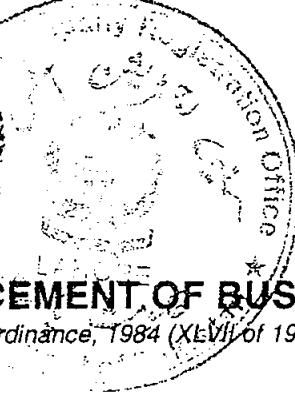
CRO-1

Registrar of Companies  
Company Registration Office  
Government of Pakistan  
Lahore. AKBAR  
JOINT

SHAH  
REGISTRAR  
OF COMPANIES

No-JRL/2747 dt 15/10/98

# GOVERNMENT OF PAKISTAN



## CERTIFICATE FOR COMMENCEMENT OF BUSINESS

[Under section 146 (2) of the Companies Ordinance, 1984 (XLVII of 1984)]

I hereby certify that the "NORTHERN POWER GENERATION COMPANY LTD.

//

which was incorporated under the Companies Ordinance, 1984 (XLVII of 1984), on the 15th day of October 1998 and which has filed a duly verified declaration in the prescribed form that the conditions of clauses (a) to (e) of sub-section (1) of Section 146 of the said Ordinance have been complied with, is entitled to commence business.

Given under my hand at

Lahore

this 23rd

day of November

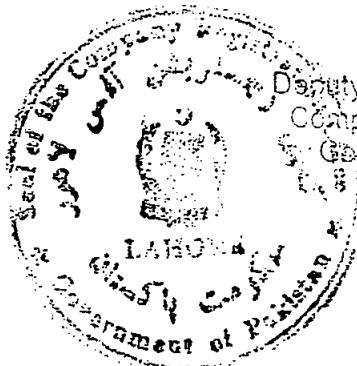
one thousand nine hundred and

Ninety eight.

Fee Rs. =200/-

Certified to be true Copy

C.R.O.-4



Deputy Registrar of Companies  
Company Registration Office  
Government of Pakistan  
Lahore Joint Registrar of Companies

(AKBAR SHAH)

No-ORL/3662 #23/11/98

# NORTHERN POWER GENERATION COMPANY LIMITED

## INDEX

### MEMORANDUM OF ASSOCIATION

Sr. No.	Contents	Page No.
1.	Name	1
2.	Registered Office	1
3.	Objects	1
4.	Liability of Members	8
5.	Authorized Capital	8

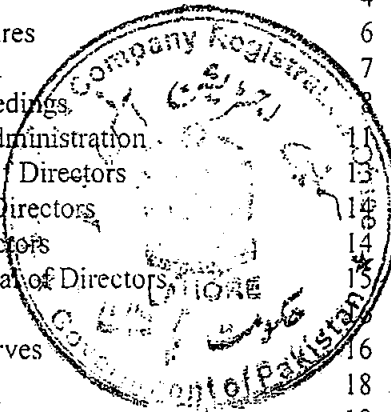


# NORTHERN POWER GENERATION COMPANY LIMITED

## INDEX

### ARTICLES OF ASSOCIATION

Sr. No.	Contents	Page No.
1.	Preliminary	1
2.	Business	2
3.	Shares	3
4.	Transfer of Shares	4
5.	Transmission of Shares	6
6.	Alteration of Capital	7
7.	Meetings and Proceedings	8
8.	Management and Administration	11
9.	Powers and Duties of Directors	13
10.	Disqualification of Directors	14
11.	Proceedings of Directors	14
12.	Election and Removal of Directors	15
13.	The Seal	16
14.	Dividends and Reserves	16
15.	Accounts	18
16.	Notices	19
17.	Confidentiality	19
18.	Reconstruction	20
19.	Winding Up	20
20.	Indemnity	20
21.	Arbitration	21



# THE COMPANIES ORDINANCE 1984

## PUBLIC COMPANY LIMITED BY SHARES

### MEMORANDUM OF ASSOCIATION

-of-

#### NORTHERN POWER GENERATION COMPANY LIMITED

- I. The name of the Company is "Northern Power Generation Company Limited".
- II. The registered office of the Company will be situated in the Province of Punjab, Pakistan.
- III. The objects for which the Company is established are to undertake any or all of the following businesses in and outside Pakistan:
  1. Muzaffargarh, Multan, Multan Cantt, Faisalabad and Shahdara Power Facilities. - To acquire or purchase from the Pakistan Water and Power Development Authority ("WAPDA") the business, properties, assets, and undertakings of WAPDA's blended fuel oil, high speed diesel, natural gas, and combined cycle power stations, having a combined nominal generation capacity of 2111.5 MW, consisting of twenty nine (29) thermal power generation units situated in the Districts of Muzaffargarh, Multan, Faisalabad and Lahore respectively, all in the Province of Punjab, together with related facilities (collectively, the "Facilities") and to take over any or all of the belongings, funds, assets, rights, privileges, liabilities, obligations and contracts related to or in respect of the Facilities.
  2. Power Generation. - To carry on the businesses of generating, purchasing, importing, transforming, converting, distributing, supplying, exporting and dealing in electricity and all other forms of energy and products or services associated therewith and of promoting the conservation and efficient use of electricity and all other forms of energy, and all other powers necessary or incidental to the business of electricity generation, transmission, distribution and supply.
  3. Electrification. - To do anything which a public electricity generation licensee is empowered or required to do under or by virtue of or under a license or other authorization granted according to law and its implementing rules and regulations or any statutory instrument made thereunder or any statutory modification or re-enactment thereof and to plan, survey, design, supply equipment, and carry out the electrification of cities, towns, villages, gas and oil refineries, workshops, buildings, highways, bridges, ports, air terminals, and other premises within or outside Pakistan.
  4. Dealer in Electrical Equipment. - To carry on all or any of the businesses of wholesalers, retailers, traders, importers, exporters, suppliers, distributors, designers, developers, manufacturers, installers, fitters, testers, repairers, maintainers, contractors, constructors, operators, users, inspectors, reconditioners,

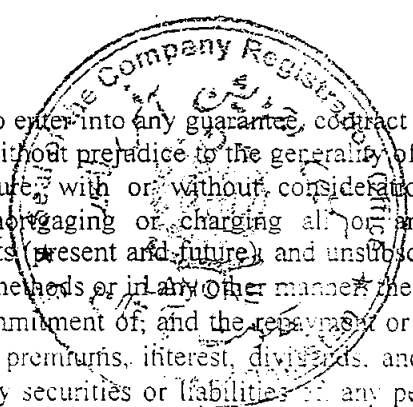
servicers, improvers, alterers, protectors, removers, hirers, replacers, importers and exporters of, and dealers in, electrical appliances, systems products and services used for energy conservation, domestic, commercial, agricultural, industrial, household and general equipment, furniture, fixtures, fittings and devices, and all other kinds of goods, equipment, machinery, materials and installations, including but not limited to cables, wires, meters, pylons, tracks, rails, pipelines and any other plant, apparatus, equipment, systems and things incidental to the efficient generation, procurement, transformation, supply, and distribution of electricity.

5. Determination of Bulk Supply Tariff Rates. - To ascertain the bulk supply tariff rates that will secure recovery of operating costs, interest charges and depreciation of assets, redemption at due time of loans other than those covered by depreciation, expansion projects, payment of taxes, and a reasonable return on investment, and to petition the appropriate government body for the adoption of or increase in its schedule of bulk supply tariff rates.
6. Facilities and Installations. - To locate, establish, construct, equip, operate, use, manage and maintain thermal power plants, power grid stations, transforming, switching, conversion, and distribution facilities, grid stations, cables, overhead lines, substations, switching stations, tunnels, cable bridges, link boxes, telecommunications stations, masts, aerials and dishes, fiber optic circuits, satellites and satellite microwave connections, heat pumps, plant and equipment for combined heat and power schemes, offices, computer centers, shops, dispensing machines, for pre-payment cards and other devices, showrooms, depots, factories, workshops, plants, printing facilities, warehouses and other storage facilities (including but not limited to facilities for storage and disposal of products and waste), training, education and display centers, stands and show-houses, testing premises, laboratories, research stations, compressor stations, vehicle parks, terminals, transport facilities, roads, and other electrical installations and infrastructure it may deem beneficial to its business.
7. Acquisition and Conveyance of Assets. - To acquire or convey, whether by purchase, lease, concession, grant, hire or otherwise, establish, develop, exploit, operate and maintain real or personal properties including but not limited to land, any estates in land, claims, licenses, concessions, easements, exploration and production rights, and rights or interests of all descriptions in or relating to the same, which may seem to the Company capable or possibly capable of affording or facilitating the generation purchase, transformation, conversion, supply, distribution, and development of electricity or any other form of energy, and for the accomplishment of all the purposes of the Company herein stated.
8. Site Development. - To build, construct, maintain, alter, enlarge, pull down, and remove or replace structures, factories, offices, works, wharves, roads, railways, tramways, machinery, engines, walls, fences, banks, dams, sluices or water courses and to clear sites for the same and to work, manage and control the same and to carry on any other business which may seem to the Company capable of being conveniently carried on in connection with the above or calculated directly or indirectly to enhance the value of or render more profitable the Company's properties, but not to engage in the business of a real estate developer.



9. Intellectual Property Rights. - To apply for and take out, purchase or otherwise acquire any patents, patent rights, inventions, secret processes, designs, copyrights, trademarks, service marks, commercial names and designations, technological know-how, formulae, licenses, concessions and the like (and any interest in any of them), and exclusive or non-exclusive or limited rights to use any secret or other information as to any invention or secret process of any kind, and to use, exercise, develop, and grant licenses in respect of, and otherwise turn to account and deal with, the property, rights and information so acquired.
10. Metering. - For the purposes of electricity generation and supply, distribution and communication, to install in, on, above or under any premises or place and to operate, use, inspect, maintain, repair, replace and remove cables, lines, ducts, transformers, switchgear (remotely controlled and otherwise, and including time switches), fuses, circuit breakers, electricity service equipment, meters and other devices for measuring or controlling the quantity or quality of electricity supplied, prepayment and debt payment devices, items provided to afford access to, support, encase, insulate, and protect from damage or tampering, the above-mentioned gadgets, or to protect people and property from injury or damage, or to comply with any legal obligation and for other purposes associated with the generation and supply of electricity and to install all such things and apparatus and items for the purposes of generating, supplying, measuring and controlling light, heat, steam, hot water, air-conditioning and refrigeration, and for associated purposes, including payment for these facilities.
11. Demand Forecasting. - To provide or procure the provision of such facilities and services as may be necessary or desirable to forecast electricity/energy demand and to satisfy such demand.
12. Transportation. - To acquire, (whether by purchase, lease, concession, grant, hire or otherwise), charter, lease, take or let on hire, operate, use, employ or turn to account, build, equip, service, repair, maintain, and supply motor vehicles, railway locomotives, wagons, trucks, vessels, and craft of any description, engineering plants and machinery, and parts and accessories of all kinds, and to carry on the businesses of storage contractors, freight contractors, carriers by land, water and air, of freight and passengers, forwarding agents, shipping agents and agents of any other kind, in so far as such activities are incidental to or necessary for the generation, transformation, supply and distribution of electricity.
13. Audio-Visual System. - To carry on as principal, agent, contractor or sub-contractor all or any of the businesses of running, operating, managing, supplying and dealing in systems for the conveyance by any means of sounds, visual images, signals, and services, facilities and equipment ancillary to or for use in connection with such systems.
14. Management Information System. - To carry on all or any of the businesses of running, operating, managing, supplying and dealing in data processing and information retrieval systems, computers, computer programmes and software, computer bureau and data bases, meter reading and credit checking and to provide services, facilities and equipment ancillary to or for use in connection with the same.

15. Research and Development. - To carry on business as inventors, researchers and developers, to conduct, promote and commission research and development in connection with the businesses and activities of the Company and its subsidiaries, to establish and maintain research stations, laboratories, workshops, testing and proving grounds and sites, facilities and establishments and installations, and to exploit and turn to account the results of any research and development carried out by or for it.
16. Labour Contracting. - To carry on all or any of the businesses of consultants, advisers and suppliers of management, personnel and training services, whether generally or in respect of one or more of the types of business or activity which the Company has power to carry on, and to provide training and educational courses, instruction and materials, of every description for workers of the Company and for other persons.
17. Contracts. - To enter into agreement with any individual, firm, cooperative or other society, company, corporate body, Government or local authority or other legal entity necessary or expedient for the purpose of carrying on any business of the Company.
18. Engineering Services. - To carry on all or any of the businesses of and provide services associated with engineers (including without limitation electrical, mechanical, heating, ventilation, civil, chemical, sanitation, telecommunications and gas engineers), mechanics, technicians, draftsmen, designers, surveyors, architects, builders, installers and shopfitters.
19. Advertisement. - To adopt such means of making known the products of the Company as may seem expedient and, in particular, by advertising in the press, by circulars, by purchase and exhibition of works of art or interests, by publication of books and periodicals, and by granting prizes, rewards and donations.
20. Other Businesses. - To carry on all or any of the businesses of manufacturers, wholesalers, retailers, and traders, whether generally or in relation to particular goods or commodities, and to carry on all or any of the businesses of factors, debt collectors, and developers of and dealers in property, so far as incidental to or necessary for the generation, transformation, distribution and supply of electricity.
21. Borrowing. - To borrow or raise money or secure or discharge any debt or obligation (whether of the Company or any other person) in such manner as the Company thinks fit and in particular (but without prejudice to the generality of the foregoing) by the creation or issue, upon such terms as to priority or otherwise as the Company thinks fit, of securities of any kind or mortgages or discharges founded or based upon all or any part of the undertaking, property, assets and rights (present and future) of the Company, or, without any such security, and advance payments with or without allowance of mark-up thereon.
22. Bank Accounts. - To open, operate, transfer, and close banking accounts of the Company with any bank or banks and to draw, make, accept, endorse, discount, execute, and issue promissory notes, bills of exchange, bills of lading, warrants, debentures, and other negotiable/non-negotiable or transferable/non-transferable instruments, but not to act as a finance or banking company.

- 
23. Guaranty and Suretyship. - To enter into any guarantee, contract of indemnity or suretyship and, in particular (without prejudice to the generality of the foregoing), to guarantee, support or secure, with or without consideration, whether by personal obligation or by mortgaging or charging all or any part of the undertaking, property and assets (present and future) and unsubscribed capital of the Company or by both such methods or in any other manner the performance of any contract, obligation or commitment of, and the repayment or payment of the principal amounts of and any premiums, interest, dividends, and other moneys payable on or in respect of any securities or liabilities of any person, including (without prejudice to the generality of the foregoing) any company which is a subsidiary, an affiliate or a holding company of the Company or otherwise associated with the Company, whether or not any valuable consideration or advantage is received by the Company.
24. Partnerships. - To enter into partnership, joint venture or cooperation arrangements with any person or company or other legal entity, local or foreign, carrying on or engaged in any business or transaction which the Company is authorized to carry on or engage in, or otherwise seek assistance from or assist any such person, company or legal entity.
25. Related Businesses. - To acquire by any means the whole or any part of the assets, and to undertake the whole or any part of the liabilities, of any person, natural or juridical, carrying on or proposing to carry on any business which the Company is authorized to carry on or which can be carried on in connection therewith, to acquire an interest in, amalgamate or enter into partnership or into any arrangement for sharing profits, cooperation, or mutual assistance, with any such person, to promote, form and sponsor any company or companies in furtherance of the objects herein stated, and to give or accept, for any of the acts or things aforesaid or property acquired, such consideration as the Company thinks fit, including without limitation, any shares, debentures, or other securities or rights.
26. Equity Investment. - To invest the surplus moneys of the Company not immediately required in any manner to subscribe for, purchase or otherwise acquire, and to hold, and deal with, any shares, debentures, bonds, notes, and other securities, obligations and investments of any nature whatsoever, including any options or rights in respect of them, and otherwise to invest and deal with the money and assets of the Company, but not to act as an investment company.
27. Lending. - To advance money or give credit to such persons or companies and on such terms as may seem expedient and, in particular, to customers and others having dealings with the Company, to guarantee the performance of any contract or obligation and the payment of money by the Company, and to accept securities of any person or any property or interest therein of whatever nature in payment or partial payment for any services rendered or for any sale or supply made to, or debt owing from, any such person, but not to act as a finance or banking company.
28. Trusts. - To vest any real or personal property, rights or interests acquired by or belonging to the Company in any person or company on behalf of or for the benefit of the Company, with or without any declared trust in favour of the Company, and to undertake and execute any trust the undertaking whereof may seem desirable, either gratuitously or otherwise.

29. Portfolio Investments. - Subject to such terms and conditions as may be thought advantageous, to trade its shares and to undertake markup and currency swaps, options (including traded options), swap option contracts, forward exchange contracts, futures contracts or other financial instruments allowed by law, including hedging agreements of any kind, all or any of which may be on a fixed and/or floating rate basis and/or in respect of local or foreign currency or commodities of any kind, but not to engage in the business of a stockbroker.
30. Government Permissions. - To apply for and obtain necessary consents, permissions and licenses from any Government, Provincial, Local, Foreign, Multilateral or other authorities or entities for enabling the Company to carry any of its objects into affect or for extending any of the powers of the Company or for effecting any modification of the constitution of the Company or for any other purpose which may seem expedient, and to enter into arrangements with any Government or authorities, foreign, federal, provincial, municipal, local or otherwise, public or quasi-public bodies, or with any other persons, in any place where the Company may have interests that may seem conducive to the objects of the Company or any of them and to obtain from any such Government, authorities or persons any rights, privileges and concessions which the Company may think fit to obtain, and to carry out, exercise and comply therewith.
31. Dispute Resolution. - To resolve disputes by negotiation, conciliation, mediation, arbitration, litigation or other means, judicial or extra-judicial, and to enter into compromise agreement with creditors, members and any other persons in respect of any difference or dispute with them and to exercise the power to sue and be sued and to initiate or oppose all actions, steps, proceedings or applications which may seem calculated directly or indirectly to benefit or prejudice, as the case may be, the interests of the Company or of its members.
32. Employees' Funds. - To establish and maintain or procure the establishment and maintenance of any contributory or non-contributory pension or superannuation funds for the benefit of, and give or procure the giving of donations, gratuities, pensions, allowances or emoluments to such persons who are or were at any time in the employ or service of the Company, or of any company which is a holding company or a subsidiary of the Company or is allied to or associated with the Company or with any such subsidiary or affiliate company, or who are or were at any time directors or officers of the Company or of any such other company as aforesaid, and the wives, widows, families and qualified dependents of any such persons, and also to establish, subsidize and subscribe to institutions, associations, clubs or funds calculated to be for the benefit of or to advance the interests and well-being of the Company or of any such other company as aforesaid, and make payments to or towards the insurance of any such person as aforesaid and do any of the matters aforesaid, either alone or in conjunction with any such other company as aforesaid.
33. Remuneration. - To enter into contracts with its salaried employees, including a chief executive who, prior to his appointment as such, was not a director of the Company or of its subsidiary or holding Company, and to provide for such other financial assistance to said employees or workers under personnel rules and regulations that the Company may subsequently adopt.

34. Commissions. - To pay and discharge all or any expenses, costs and disbursements, and to pay commissions and to remunerate any person for services rendered or to be rendered in connection with the formation, registration, promotion and flotation of the Company and any company formed, sponsored, registered, and promoted by the Company or incidental to any negotiations between promoters preliminary to the formation of the Company, and the underwriting, placing or issue at any time of securities of the Company or of any other person plus all costs and expenses incurred in the acquisition of any property or assets, including the accomplishment of all or any formalities which the Company may think necessary or proper in connection with any of the matters aforesaid.
35. Charitable Contributions. - To subscribe or contribute (in cash or in kind) surplus properties to, and to promote or sponsor, any charitable, eleemosynary, scientific, educational, benevolent or useful object of a public character or any object which may in the opinion of the Company be likely, directly or indirectly, to further the interests of the Company, its employees and workers or its members, and to receive donations and grants, in cash or in kind, whether absolutely gratuitous or otherwise, which it may deem beneficial to its business, employees or shareholders.
36. Dissolution and Winding Up. - To cease carrying on or wind up any business or activity of the Company and to cancel any registration of and to wind up or procure the dissolution of the Company in any state or territory.
37. Equity Conversion. - To issue, allot and grant ~~options over securities of the Company towards the satisfaction of any liability or obligation undertaken or agreed to be undertaken by or for the benefit of the Company, or in consideration of any obligation or for any other similar purpose.~~
38. International Operations. - To procure the Company to be registered or recognized in any part of the world and to do all or any of the above things in any part of the world, either as principal, agent, trustee, contractor or otherwise, alone or in collaboration with another, and either by or ~~through agents, trustees, sub-contractors, subsidiaries or otherwise.~~
39. Disposal of Assets and Declaration of Dividends. - To dispose by any means of the whole or any part of the assets of the Company or of any interest therein and to distribute in specie or otherwise by way of dividends or bonus or reduction of capital all or any of the property or assets of the Company among its members, and particularly, but without prejudice to the generality of the foregoing, securities of any other company formed to take over the whole or any part of the assets or liabilities of the Company or any proceeds of sale or other disposal of any property or assets of the Company.
40. Insurance. - To insure the property, assets, and employees of the Company in any manner deemed fit by the Company, and to create any reserve fund, sinking fund, insurance fund or any other special fund whether for depreciation or for repairing, insuring, improving, extending or maintaining any of the properties of the Company or for any other purpose conducive to the interests of the Company, but not to act as an insurance company.

41. Regulations. - To make rules or regulations not inconsistent with this Memorandum and to provide for all matters for which provision is necessary or expedient for the purpose of giving effect to the provisions of this Memorandum and the efficient conduct of the affairs of the Company.
42. General Power. - To carry on any other businesses or activities which the Directors consider capable of being carried on directly or indirectly for the benefit of the Company and to do all such other things as may be deemed incidental or conducive to the attainment of the above objects or any of them.

Declaration. It is hereby declared that:

- (a) the word "company" in this Memorandum of Association, except where used in reference to this Company, shall be deemed to include any partnership or other body of persons, whether corporate or unincorporated, and whether domiciled in Pakistan or elsewhere;
- (b) the objects specified in each of the paragraphs of this clause shall be regarded as independent objects and, accordingly, shall in no way be limited or restricted (except where otherwise expressed in such paragraphs) by reference to or inference from the terms of any other paragraph or the name of the Company, but may be carried out in as full and ample a manner and construed in as wide a sense as if each of the said paragraphs defined the objects of a separate and distinct company;
- (c) the headings used in each of the paragraphs of this clause are for convenience only and are not intended to affect the construction thereof in any way; and,
- (d) notwithstanding anything contained in the foregoing object clauses of this Memorandum of Association, nothing herein shall be construed as empowering the Company to undertake or indulge in the business of managing agency, banking or financing institution, leasing, investment, or real estate brokerage or insurance, directly or indirectly, as restricted by law or in any unlawful operations.

IV. The liability of the members is limited.

V. The authorized share capital of the Company shall be Rs. 50,000,000,000 (Rupees Fifty billion) divided into 5,000,000,000 (five billion) ordinary shares of Rs. 10 (Rupees Ten) each with power to increase or reduce the capital and to divide the shares in the capital for the time being into several classes and to attach thereto respectively such rights, privileges or conditions as may be determined by or in accordance with the regulations of the Company, and to vary, modify or abrogate any such rights, privileges or conditions in such manner as may for the time being be provided by the regulations of the Company in accordance with law; provided, however, that rights as between various classes of ordinary shares, if any, as to profits, votes and other benefits shall be strictly proportionate to the paid-up value of shares.

We, the several persons whose names and addresses are subscribed below, are desirous of being formed into a company in pursuance of this Memorandum of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

Name and surname (Present and former) in full (in Block Letters)	Father's/ Husband's Name in Full	Nationality	Occupation	Residential Address in Full	Number of Shares taken by each Subscriber	Signature
1. Ch.Arshad Zaman	Ch.Sher Zaman	Pakistani	Wapda Service	75, Babar Block, New Garden Town, Lahore.	1	
2. Mr. Muhammad Qasim Shaikh	Haji Noor Muhammad Shaikh	Pakistani	Wapda Service	Bachelor Officers Hostel, Thermal Colony, Nishatabad, Faisalabad.	1	
3. Mr. Muhammad Maqbool Anjum	Ch. Imam Din	Pakistani	Wapda Service	54-Nishtar Block, Allama Iqbal Town, Lahore.	1	
4. Mr Mansoor Ali Sheikh	Muhammad Ali Sheikh	Pakistani	Wapda Service	2-C. Audit Officers Colony, Gumbeg- III, Lahore.	1	
5. Mr. Akhtar Pervez Akhtar	Ch.Muhammad Ibrahim	Pakistani	Wapda Service	13. Daoud Street No.21, Wasanpura, Lahore.	1	
6. Brig. Saeed Ahmad Rafi	Muhammad Ajaib	Pakistani	Wapda Service	B-33, Upper Mall, Wapda Colony, Lahore.	1	
7. Mr. Noor Elahi Baig	M.Fazal Elahi Baig	Pakistani	Wapda Service	B-2, Shakumar Grid Station, Wapda Colony, Lahore.	1	

Total number of shares taken 7 (Seven)

Dated the \_\_\_\_\_ day of \_\_\_\_\_, 199

Witness to the above signatures

(Full Name, Father's/Husband's Name)

(in Block Letters) \_\_\_\_\_

**Certified to be true Copy**

Signature \_\_\_\_\_

Occupation \_\_\_\_\_

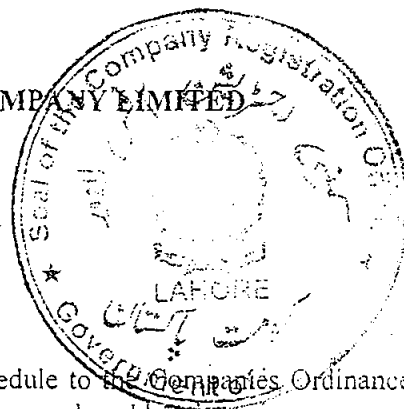
Full Address \_\_\_\_\_

Deputy Registrar of Companies  
Company Registration Office  
Government of Pakistan  
Lahore.

THE COMPANIES ORDINANCE 1984  
PUBLIC COMPANY LIMITED BY SHARES  
ARTICLES OF ASSOCIATION

-of-

NORTHERN POWER GENERATION COMPANY LIMITED



I. PRELIMINARY

1. TABLE "A" Not to Apply

The regulations in Table 'A' in the First Schedule to the Companies Ordinance, 1984 shall not apply to the Company except as reproduced herein.

2. Definitions

Unless the context otherwise requires, capitalized terms used in these Articles shall have the meanings set out below:-

- (a) "Articles" mean these Articles as originally framed or as from time to time altered in accordance with law.
- (b) "Board" means the group of Directors in a meeting duly called and constituted or, as the case may be, the Directors assembled at a board.
- (c) "Company" means Northern Power Generation Company Limited.
- (d) "Directors" means the Directors for the time being of the Company as named in Article 49 and, subsequently, such members duly elected and registered pursuant to Sections 178 and 205, respectively.
- (e) "Month" means calendar month according to the Gregorian calendar.
- (f) "Office" means the registered office for the time being of the Company.
- (g) "Ordinance" means the Companies Ordinance, 1984, or any modification or re-enactment thereof for the time being in force.
- (h) "Ordinary Resolution" means a resolution passed at a general meeting of the Company when the votes cast (whether *viva voce*, by show of hands or by poll) in favour of a resolution by members who, being entitled to vote in person or by proxy, do so vote, exceed the number of votes, if any, cast against the resolution by members so entitled and voting.



- (i) **"Register"** means, unless the context otherwise requires, the register of members to be kept pursuant to Section 147 of the Ordinance.
- (j) **"Seal"** means the common or official seal of the Company.
- (k) **"Section"** means a Section of the Ordinance.
- (l) **"Special Resolution"** means the special resolution of the Company as defined in Section 2(1)(36) of the Ordinance.

### 3. Interpretation

In these Articles, unless the context otherwise requires:-

- (a) provisions bearing on transfer or transmission of shares, meetings, voting in person or by proxy, management, and the appointment, powers and removal of Directors and employees of the Company shall be read subject to the provisions of Section 183 relating to the power of control by a holding company over its subsidiary;  
the headings are for convenience only and do not constitute part of these Articles and shall not be used in construing these Articles;
- (b) the singular includes the plural and vice versa and words denoting any gender shall include all genders;
- (c) references to any Act, Ordinance, legislation, Rules or Regulations or any provision of the same shall be a reference to that Act, Ordinance, legislation, Rules or Regulations or provision, as amended, re-promulgated or superseded from time to time;
- (d) the terms "include" or "including" shall mean include or including without limitation;
- (e) expressions referring to writing shall, unless the contrary intention appears, be construed as including references to printing, lithography, photography, and other modes of representing or reproducing words in a visible form;
- (f) words importing persons shall include bodies corporate; and
- (g) words and expressions contained in these Articles shall bear the same meaning as in the Ordinance.

## II. BUSINESS

### 4. Public Company

The Directors shall have regard to the restrictions on the commencement of business imposed by Section 146 if, and so far as, those restrictions are binding upon the Company.

### III. SHARES

#### A. General

#### 5. Shares Under Directors' Control

Subject to Section 183 and these Articles, the shares of the Company shall be under the control of the Directors who may allot or otherwise dispose of the same to such persons, on such terms and conditions as the Directors think prudent.

#### 6. Amount Payable on Application

No shares shall be offered to the public for subscription except upon the term that the amount payable on application shall not be less than the full amount of the nominal amount of the share.

#### 7. Allotment of Shares

No share shall be issued at a discount except in accordance with the provisions of the Ordinance. The Directors shall, as regards any allotment of shares, duly comply with such of the provisions of Sections 68 to 73, as may be applicable to the Company. The minimum subscription upon which the Company may proceed to allot the shares shall be Rs 500,000.

#### 8. Share Certificates

Every person whose name is entered as a member in the Register shall, free of charge, be entitled to receive within ninety (90) days after allotment or within forty-five (45) days of the application for registration of transfer, a certificate under Seal specifying the share or shares held by him and the amount paid-up thereon, including in particular and without limitation, such legends as the Company shall be obliged to affix to certain classes of share certificates as provided by law or as the Company shall have agreed to affix pursuant to any contractual arrangement in this respect; Provided, that in respect of share or shares held jointly by several persons, the Company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all.

#### 9. Certificate under Seal

The certificate of title to shares may be issued under the authority of a Director or of a committee of Directors duly authorized thereto by the Board in such manner and form as the Directors may from time to time prescribe. The Seal shall be duly affixed to every share certificate issued by the Company.

#### 10. Issuance of Replacement Certificate

If a share certificate is defaced, lost or destroyed, it may be renewed on payment by the requesting shareholder or his representative of such fee and stamp taxes, if any, and compliance with such terms prescribed by the Directors as to evidence and indemnity and payment of expenses incurred by the Company in investigating title.

11. Joint Holders

The Company shall not be bound to register more than four persons as joint holders of any share.

12. Trusts Not Recognized

Except as required by law, no person shall be recognized by the Company as holding any share/s upon any trust, and the Company shall not be bound by or be compelled in any way to recognize (even when having notice thereof) any equitable, contingent, future or partial interest in any share or any interest in any fractional part of a share or (except only as by these Articles or by law otherwise provided) any other rights in respect of any share except an absolute right to the entirety thereof in the registered holder.

13. Payment of Commission

The Company may at any time pay a commission to any person for subscribing or agreeing to subscribe (whether absolutely or conditionally) for any shares, debentures or debenture stock in the Company or procuring or agreeing to procure subscriptions (whether absolutely or conditionally) for any shares, debentures or debenture stock in the Company; Provided, that, if the commission in respect of shares shall be paid or payable out of capital, the statutory requirements and conditions shall be observed and complied with, and the amount or rate of commission shall not exceed such percentage on the shares, debentures or debenture stock in each case subscribed or to be subscribed, as may be determined by the Board subject to any limits required by law. The commission may be paid or satisfied, either wholly or partly, in cash or in shares, debentures or debenture stock. The Company may also on any issue of shares pay such brokerage fees as may be lawful; Provided that such brokerage fees shall not exceed such percentage of the shares, debentures or debenture stock paid-up as may be determined by the Board, subject to any limits required by law.

14. Bar on Use of Company Funds

Except to the extent and in the manner allowed by Section 95, no part of the funds of the Company shall be employed in the purchase of, or in loans upon the security of, the Company's shares.

B. TRANSFER OF SHARES

15. Transfer

The instrument of transfer of any share in the Company shall be executed both by the transferor and transferee, and the transferor shall be deemed to remain the holder of the share until the name of the transferee is entered in the Register in respect thereof.

16. Form of Transfer

Shares in the Company shall be transferred in the following form, or in any usual or common form which the Directors shall approve:-

## Northern Power Generation Company Limited

I/We, \_\_\_\_\_, of \_\_\_\_\_, in consideration of the sum of Rupees \_\_\_\_\_ paid to me by \_\_\_\_\_, of \_\_\_\_\_, (hereinafter called the "Transferee/s", for brevity), do hereby transfer to the Transferee/s the Ordinary/Preferred Share(s) numbered \_\_\_\_\_ to \_\_\_\_\_ inclusive, standing in my/our name in the books of the Northern Power Generation Company Limited; to hold unto the said Transferee, his/her their executors, administrators and assigns, subject to the several conditions on which I/We held the same at the time of the execution hereof, and I/We, the Transferee/s, do hereby agree to take the said share (s) subject to the conditions aforesaid.

Witness our hands this \_\_\_\_\_ day of \_\_\_\_\_, 1998.

Transferor

Transferee

Signature

Signature

Signed by the above-named Transferor/s and Transferee/s in the presence of

Witnesses

Full Name, Father's/  
Husband's Name

(1) \_\_\_\_\_  
Signature

Nationality \_\_\_\_\_

Full Address:

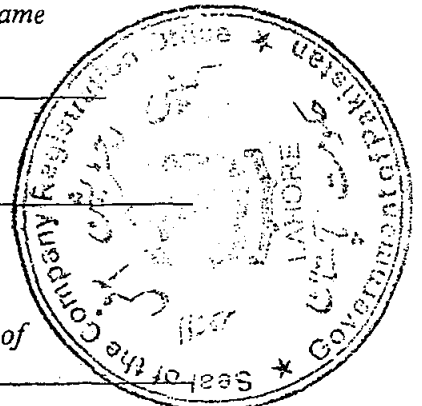
Occupation \_\_\_\_\_

Full Address of  
Transferee: \_\_\_\_\_

(2) \_\_\_\_\_  
Signature

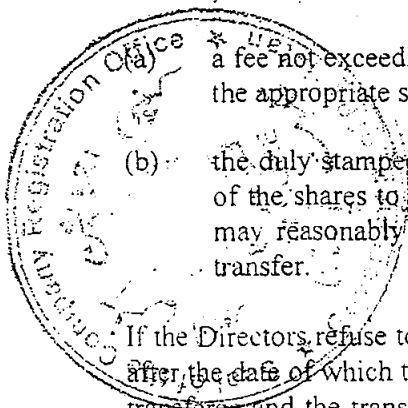
Full Address:

Occupation \_\_\_\_\_



17. Non- Refusal of Transfer of Shares

The Directors shall not transfer any fully paid shares if the transfer deed is defective or invalid. The Director may decline to recognize any instrument of transfer, unless-



(a) a fee not exceeding two rupees as may be determined by the Directors and the appropriate stamp tax is paid to the Company in respect thereof; and

(b) the duly stamped instrument of transfer is accompanied by the certificate of the shares to which it relates, and such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer.

If the Directors refuse to register a transfer of shares, they shall within one Month after the date of which the transfer deed was lodged with the Company send to the transferee and the transferor notice of the refusal indicating the defect, invalidity or any ground for objection to the transferee, who shall, after removal of such defect or invalidity be entitled to re-lodge the transfer deed with the Company.

18. Closure of Register

On giving seven days' prior notice in the manner provided by the Ordinance, the Register may be closed for such period or periods not exceeding forty-five (45) days in any one year as the Directors may from time to time determine; however, the Register shall not be closed for a period longer than thirty (30) days at any given time.

C. TRANSMISSION OF SHARES

19. Transmission

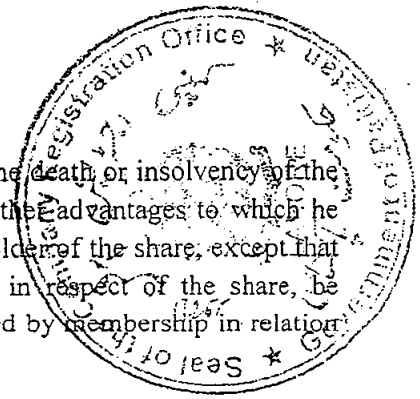
The executors, administrators, heirs or nominees, as the case may be, of a deceased sole holder of a share shall be the only persons recognized by the Company as having any title to the share. In the case of a share registered in the names of two or more holders, the survivor or survivors shall upon proof of his right of succession be the only person or persons recognized by the Company as having any title to the share.

20. Election to Register or Transfer

Any person becoming entitled to a share in consequence of the death or insolvency of a member shall, upon such evidence being produced as may from time to time be required by the Directors, have the right, either to be registered as a member in respect of the share or, instead of being registered himself, to make such transfer of the share as the deceased or insolvent person could have made. The Directors shall, in either case, have the same right to decline or suspend registration as they would have had in the case of a transfer of the share by the deceased or insolvent person before the death or insolvency.

21. Rights of Person Entitled by Transmission

A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would have been entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share, be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the Company.



D. ALTERATION OF CAPITAL

22. Power to Increase Capital

The Company may, from time to time, by ordinary resolution, increase the share capital by such sum to be divided into shares of such amount as the resolution shall prescribe.

23. Further Issue of Capital

All further issue of share capital shall be subject to the applicable provisions of Section 86. Thereafter, the Directors may dispose of the same in such manner as they think most beneficial to the Company.

24. Provisions Applicable to New Shares

The new shares capital shall be subject to the same provisions with reference to transfer and transmission as the original share capital.

25. Consolidation and Subdivision

The Company may, by ordinary resolution:-

- (a) consolidate and divide its share capital into shares of larger amount than its existing shares;
- (b) subdivide its existing shares or any of them into shares of smaller amount than that fixed by the Company's Memorandum of Association, subject to the provisos to Section 92, sub-section (1), clause (d); or
- (c) cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.

26. Reduction of Share Capital

The Company may, by Special Resolution, reduce its share capital in any manner, with and subject to any incident authorized and consent required by law.

#### IV. MEETINGS AND PROCEEDINGS

##### A. GENERAL MEETINGS

###### 27. Statutory Meeting

The statutory meeting of the Company shall be held within the period required by Section 157.

###### 28. Annual General Meeting

The annual general meeting shall be held in accordance with the provisions of Section 158, within eighteen (18) Months from the date of incorporation of the Company and, thereafter, once at least in every year within a period of six Months following the close of its financial year and not later than fifteen Months after the holding of its last preceding annual general meeting, as may be determined by the Directors.

###### 29. Other Meetings

All general meetings of the Company other than the statutory meeting or an annual general meeting shall be called extraordinary general meetings.

###### 30. Extraordinary Meetings

The Directors may whenever they think necessary, call an extraordinary general meeting. Extraordinary general meetings may also be called on such requisition, or in default, may be called by such requisition, as provided under Section 159. If at any time there are not within Pakistan sufficient Directors capable of acting to form a quorum, any Director of the Company may call an extraordinary general meeting in the same manner as nearly as possible as that in which meetings may be called by the Directors.

##### B. Notice and Proceedings

###### 31. Notice of Meetings

Twenty-one days' notice at the least (exclusive of the day on which the notice is served or deemed to be served, but inclusive of the day for which notice is given) specifying the place, the date and the hour of meeting and, in case of special business, the general nature of that business, shall be given in the manner provided by the Ordinance for the general meeting to such persons as are, under the Ordinance or the regulations of the Company, entitled to receive such notices from the Company.

###### 32. Special Business

All business shall be deemed special that is transacted in an extraordinary general meeting and those transacted in an annual general meeting, with the exception of declaration dividends, the consideration of the accounts, balance sheet and the reports of the Directors and auditors, the election of Directors, and the appointment and fixing of the remuneration of auditors.

33. Quorum

No business shall be transacted at any general meeting unless a quorum of members is present at that time when the meeting proceeds to business. Three members present personally who represent not less than twenty-five percent of the total voting power either on their own account or as proxies shall be a quorum.

34. Effect of Quorum Not Being Present

If within half an hour from the time appointed for the meeting a quorum is not present, the meeting, if called upon the requisition of members, shall be dissolved; In any other case, it shall stand adjourned to the same day in the next week at the same time and place, and, if at the adjourned meeting a quorum is not present within half an hour from the time appointed for the meeting, the members present, being not less than three, shall be a quorum.

35. Chairman of Meeting

The Chairman of the Board of Directors, if any, shall preside as chairman at every general meeting of the Company, but if there is no such Chairman, or if at any meeting he is not present within fifteen minutes after the time appointed for the meeting, or is unwilling to act as chairman, any one of the Directors present may be elected to be the chairman, and if none of the Directors is present, or willing to act as chairman, the members present shall choose one of their number to be the chairman.

36. Adjournment

The Chairman may, with the consent of any meeting at which a quorum is present (and shall if so directed by the majority of members present), adjourn the meeting from time to time but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place. When a meeting is adjourned for ten days or more, notice of the adjourned meeting shall be given as in the case of an original meeting. Save as aforesaid, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

37. Voting

A resolution put to the vote in any general meeting shall be decided on a show of hands unless a poll is (before or on the declaration of the result of the show of hands) demanded. Unless a poll is so demanded, a declaration by the Chairman that a resolution has, on a show of hands, been carried, or carried unanimously, or by a particular majority, or lost, and an entry to that effect in the minutes of the proceedings of the Company shall be conclusive evidence of the fact, without proof of the number or proportion of the votes recorded in favor of, or against, that resolution.

38. Demand for a Poll

A poll may be demanded only in accordance with the provisions of Section 167.



39. Manner of Taking a Poll

If a poll is duly demanded, it shall be taken in accordance with the manner laid down in Section 168 and the result of the poll shall be deemed to be the resolution of the meeting at which the poll was demanded.

40. Time of Taking a Poll

A poll demanded on the election of Chairman or on a question of adjournment shall be taken at once.

41. Casting Vote

In the case of an equality of votes, whether on a show of hands or on a poll, the chairman of the meeting at which the show of hands takes place, or at which the poll is demanded, shall have and exercise a second or casting vote.

C. Votes of Members

42. Right to Vote

Subject to any rights or restrictions for the time being attached to any class or classes of shares, on a show of hands every member present in person shall have one vote except for election of Directors in which case the provisions of Section 178 shall apply. On a poll, every member shall have voting rights as laid down in Section 169.

43. Voting By Joint Holders

In case of joint-holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint-holders. For this purpose, seniority shall be determined by the order in which the names stand in the Register.

44. Voting: Corporation Representatives

On a poll, votes may be given either personally or by proxy; Provided, that, no body corporate shall vote by proxy as long as a resolution of its directors in accordance with the provisions of Section 162 of the Ordinance is in force.

45. Proxy to be in Writing

The instrument appointing a proxy shall be in writing under the hand of the principal to his attorney duly authorized in writing. A proxy must be a member of the Company.

46. Instrument Appointing Proxy to be Deposited

The instrument appointing a proxy and the power-of-attorney or other authority (if any) under which it is signed, or a notarially certified copy of that power or authority, shall be deposited at the Office of the Company not less than forty-eight (48) hours before the time for holding the meeting at which the person named in the instrument proposes to vote and in default the instrument of proxy shall not be treated as valid.

47. Form of Proxy

An instrument appointing a proxy may be in the following form, or a form as near thereto as may be:

**NORTHERN POWER GENERATION COMPANY LIMITED**

I, \_\_\_\_\_, of \_\_\_\_\_, in the District of \_\_\_\_\_, being a member of Northern Power Generation Company Limited, hereby appoint \_\_\_\_\_ of \_\_\_\_\_, as my proxy to vote for me and on my behalf at the (annual/extraordinary as the case may be) general meeting of the Company to be held on the \_\_\_\_\_ day of \_\_\_\_\_ and at any adjournment thereof.

48. Revocation of Authority

A vote given in accordance with the terms of an instrument of proxy shall be valid notwithstanding the previous death or insanity of the principal or revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the share in respect of which the proxy is given; Provided, that, no intimation in writing of such death, insanity, revocation or transfer as aforesaid shall have been received by the Company at its Office before the commencement of the meeting or adjourned meeting at which the proxy is used.

V. MANAGEMENT AND ADMINISTRATION

A. Board of Directors

49. Number of Directors

The number of Directors shall not be less than seven. The first Directors, to hold office until the first annual general meeting, shall be:-

- (1) Ch. Arshad Zaman
- (2) Mr. Muhammad Qasim Shaikh
- (3) Mr. Muhammad Maqbool Anjum
- (4) Mr. Mansoor Ali Sheikh
- (5) Mr. Akhtar Pervez Akhtar
- (6) Brig. Saeed Ahmad Rafi
- (7) Mr. Noor Elahi Baig

50. Qualification of Directors

Save as provided in Section 187, no person shall be appointed as a Director unless he is a member of the Company.

51. Chairman of the Board

The Directors may elect one of their number as the Chairman of the Board and vest in him such powers and functions as they may deem fit in relation to the management and administration of the affairs of the Company subject to their general supervision and control.

52. Chief Executive

The Directors may elect one of their number to be the Chief Executive of the Company in accordance with the provisions of Sections 198 and 199 and vest in him such powers and functions as they deem fit in relation to the management and administration of the affairs of the Company subject to their general supervision and control. The Chief Executive of the Company shall be the *ex-officio* Vice-Chairman of the Board. The provisions of the Ordinance shall be observed regarding other matters relating to the Chief Executive.

53. Remuneration

Subject to any approval or limits required by law, the terms and conditions and remuneration of:-

- (a) Director for performing extra services, including the holding of the office of Chairman;
- (b) the Chief Executive; and
- (c) any Director for attending the meetings of the Directors or a Committee of Directors shall be determined by the Board of Directors.

54. Alternate Director

A Director may, with the approval of the Board, appoint any person (including another Director) to be his alternate Director and such an alternate Director shall be entitled to notice of meetings of the Directors and to attend and vote thereat accordingly and, generally, to exercise all the rights of such absent Director subject to any limitations in the instrument appointing him. For the purposes of the proceedings at such meetings, the provisions of these Articles shall apply as if any alternate Director (instead of his appointer) were a Director. An alternate Director shall not require any share qualification and he shall *ipso facto* vacate office as and when his appointer (a) vacates office as a Director; (b) removes the appointee from office; or (c) returns to Pakistan; Provided, that, upon each occasion upon which the appointer thereafter leaves Pakistan again, and unless the appointer shall have informed the Company to the contrary, he shall be deemed to have re-appointed the appointee as his alternate Director and no further approval of the Board shall be required unless the appointer desires to approve another person not previously approved by the Board as his alternate. If an alternate Director shall be himself a Director, his voting rights shall be cumulative but he shall not be counted as more than one for quorum purposes. Any appointment or removal under this Article shall be reflected by notice in writing under the hand of the Director making the same.

B. POWERS AND DUTIES OF DIRECTORS

55. General Management Powers

The business of the Company shall be managed by the Directors, who may exercise all such powers of the Company as are not by the Ordinance or by these regulations, required to be exercised by the Company in general meeting, subject nevertheless to the provisions of the Ordinance or to any of these Articles, and such regulations being not inconsistent with the aforesaid provisions, as may be prescribed by the Company in a general meeting; but no regulation made by the Company in general meeting shall invalidate any prior act of the Directors which would have been valid if that regulation had not been made.

56. Borrowing Powers

The Directors may exercise all the powers of the Company to raise money otherwise than by issue of shares and to mortgage, charge, pledge, hypothecate or otherwise create an encumbrance on its undertaking or any part thereof and to issue debentures and other securities whether outright or as security for any obligation, liability or debt of the Company or of any third party. In exercising the aforesaid powers of the Company the Directors may, from time to time and on such terms and conditions as they think fit, raise money from banks and financial institutions and from other persons under any permitted system of financing, whether providing for payment of interest or some other form of return, and in particular the Directors may raise money on the basis of mark-up price, musharika, modaraba or any other permitted mode of financing, and without prejudice to the generality of the foregoing, the Directors may exercise all or any of the powers of the Company under Section 196(2) of the Ordinance. In particular, the Directors may issue any security as defined in Section 2(1)(34) of the Ordinance or may issue any instrument or certificate representing redeemable capital as defined in 2(1)(30A) of the Ordinance or participatory redeemable capital as defined in Section 2(1)(25) of the Ordinance.

57. Duties of Directors

The Directors shall duly comply with the provisions of the Ordinance.

58. Minute Books

The Directors shall cause minutes to be made in books provided for the purpose of:-

- (a) all appointments of officers made by the Directors;
- (b) the names of the Directors present at each meeting of the Directors and of any committee of the Directors; and
- (c) all resolutions and proceedings at all meetings of the Company and of the Directors and of committees of Directors; and every Director present at any meeting of Directors or committee of Directors shall sign his name in a book to be kept for that purpose.

## C. DISQUALIFICATION OF DIRECTORS

### 59. Disqualification of Directors

No person shall become a Director of the Company if he suffers from any of the disabilities or disqualifications mentioned in Section 187 of the Ordinance and, if already a Director, shall cease to hold such office from the date he so becomes disqualified or disabled or:-

- (a) if removed by general or special order of the holding company;
- (b) if removed by a resolution of members as hereinafter provided; or
- (c) if by notice in writing given to the Company he resigns his office;

Provided, however, that no Director shall vacate his office by reason only of his being a member of any company which has entered into contracts with, or done any work for, the Company but such Director shall not vote in respect of any such contract or work, and if he does so vote, his vote shall not be counted.

## D. PROCEEDINGS OF DIRECTORS

### 60. Meetings of Directors

- (a) The Directors may meet together for the dispatch of business, adjourn and otherwise regulate their meetings, as they deem proper. Questions arising at any meeting shall be decided by a majority of votes. In case of an equality of votes, the Chairman shall have and exercise a second or casting vote. A Director may, and the secretary on the requisition of a Director shall, at any time, summon a meeting of Directors. Seven (7) days' notice at the least, exclusive of the day on which the notice is served or deemed to be served, but inclusive of the day for which notice is given, shall be given for a meeting of Directors; Provided, that, if all the Directors entitled to attend and vote at any such meeting so agree, in writing, a meeting may be held of which less than seven (7) days' notice has been given.
- (b) The quorum for the meeting of directors shall not be less than one third of their number or four, whichever is greater.
- (c) A meeting of the Directors may consist of a conference between Directors, some or all of whom are in different places; Provided, that, each Director who participates is able to hear each of the other participating Directors addressing the meeting and, if he so wishes, to address each of the other participating Directors simultaneously, whether directly, by conference telephone or by any other form of communications equipment (whether in use when this Article 60(c) is adopted or developed subsequently) or by a combination of methods. A quorum shall be deemed to be present if those conditions are satisfied in respect of the minimum number and designation of Directors required to form a quorum. A meeting held in this way shall be deemed to take place at the place where the largest group of Directors is assembled or, if no such group is readily identifiable, at the place from where the Chairman participates. Any Director may, by prior notice to the Secretary, indicate that he wishes to participate in the meeting in such manner, in which event, the Directors shall procure that an appropriate conference facility is arranged.

69. Election in Accordance with the Ordinance

The Directors shall comply with the provisions of Sections 174 to 178 and Sections 180 and 184 relating to the election of Directors and matters ancillary thereto.

70. Filling of Casual Vacancy

Any casual vacancy occurring in the Board of Directors may be filled by the Directors, but the person so chosen shall be subject to retirement at the same time as if he had become a Director on the day on which the Director in whose place he is chosen was last elected as Director.

71. Removal of Director

The Company may remove a Director but only in accordance with the provisions of the Ordinance.

**VI. THE SEAL**

72. Common Seal

The Directors shall provide a common seal of the Company which shall not be affixed to any instrument except by the authority of a resolution of the Board or by a committee of Directors authorized in that behalf by the Board. Two (2) Directors or one Director and the secretary of the Company shall sign every instrument to which the common seal is affixed.

73. Official Seal

The Directors may provide for the use in any territory, district or place not situated in Pakistan, of an official seal which shall be a facsimile of the common seal of the Company, with the addition on its face of the name of every territory, district or place where it is to be used. The provisions of Section 213 shall apply to the use of the official seal.

**VII. DIVIDENDS AND RESERVE**

74. Declaration of Dividends

The Company in general meeting may declare dividends but no dividend shall exceed the amount recommended by the Board.

75. Interim Dividends

The Board may from time to time direct payment to the members or to the holding company such interim dividends as appear to be justified by the distributable profits of the Company.

76. Dividends Payable Out of Profits

No dividends shall be paid otherwise than out of distributable profits of the year or any other undistributed profits. No unpaid dividend shall bear interest against the Company.

77. Dividends Payable on Amount Paid on Shares

All dividends shall be declared and paid according to the amounts paid on the shares.

78. Reserve Fund

The Directors may, before recommending any dividend, set aside out of the profits available for distribution of the Company such sums as they think proper as a reserve or reserves which shall, at the discretion of the Directors, be applicable for meeting contingencies, or for equalizing dividends, or for any other purpose to which the profits of the Company may be properly applied, and pending such application may either be employed in the business of the Company or be invested in such investments (other than shares of the Company) as the Directors may, subject to the provisions of the Ordinance, from time to time think fit.

79. Profit Carried Forward

The Directors may carry forward any profits which they may think prudent not to distribute, without setting them aside as a reserve.

80. Payment of Dividends Specie

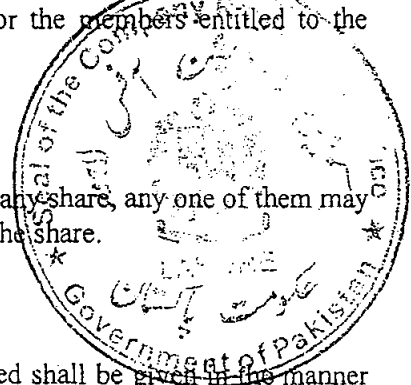
With the sanction of a resolution in a general meeting, any dividend may be paid wholly or in part by the distribution of specific assets and in particular of paid-up shares or debentures of any other company or in any one or more of such ways. The Directors may fix the value for distribution of such specific assets or any part thereof and may determine that cash payments shall be made to any members upon the footing of the value so fixed, in order to adjust the rights of all members, and may vest any such specific assets in trust for the members entitled to the dividend as may seem expedient to the Directors.

81. Dividends to Joint Holders

If several persons are registered as joint holders of any share, any one of them may give effectual receipt for any dividend payable on the share.

82. Notice of dividend

Notice of any dividend that may have been declared shall be given in the manner hereinafter mentioned to the persons entitled thereto. The Company may give such notice by publication in a newspaper of general circulation in the Province where the Office is situated.



83. Period for Payment of Dividends

Dividends shall be paid within the period specified in Section 251.

**VIII. ACCOUNTS**

84. Books of Account

The Directors shall cause to be kept proper books of account as required under Section 230.

85. Place Where Accounts Kept

The books of account shall be kept at the Office or at such other place as the Directors shall think fit and shall be open to inspection by the Directors during business hours.

86. Inspection by Members

The Directors, or their representatives, shall from time to time determine whether and to what extent and at what time and place/s and under what conditions or regulations the accounts and books or papers of the Company or any of them shall be open to the inspection of members not being Directors. No member (not being a Director) shall have any right of inspecting of any account and book or papers of the Company, except as conferred by law or authorized by the Directors or by the Company in general meeting.

87. Annual Accounts

The Directors shall as required by Sections 233 and 236 cause to be prepared and to be laid before the Company in general meeting such profit and loss accounts and balance sheets duly audited and reports as are referred to in those sections.

88. Balance Sheet and Profit and Loss Account

A balance sheet, profit and loss account, and other reports referred to in the preceding Article shall be made out every year and laid before the Company in the annual general meeting made up to a date not earlier than six months before such meeting. The balance sheet and profit and loss account shall be accompanied by a report of the auditors of the Company and the report of Directors.

89. Copy of Accounts to be Sent to Members

A copy of the balance sheet and profit and loss account and reports of Directors and auditors shall, at least twenty-one days preceding the meeting, be sent to the persons entitled to receive notices of general meetings in the manner in which notices are to be given as hereinafter provided.

90. Compliance with the Ordinance

The Directors shall in all respects comply with the provisions of Sections 230 to 236.



91. Capitalization of Profits

The Company in general meeting may, upon the recommendation of the Directors, resolve that it is desirable to capitalize any part of the amount for the time being standing to the credit of any of the Company's reserve accounts or to the credit of the profit and loss accounts or otherwise available for distribution. The Company may then set free such sum for distribution among the members who would have been entitled thereto if distributed by way of dividend and in the same proportions, on condition that the same be not paid in cash but be applied in or towards paying up in full un-issued shares or debenture of the Company to be allotted and distributed, credited as fully paid up to and amongst such members in the proportion aforesaid. The Board of Directors shall give effect to such distribution by resolution.

92. Audit

Auditors shall be appointed and their duties regulated in accordance with Sections 252 to 255 of the Ordinance.

**IX. NOTICES**

93. Notice to Members, etc.

Notice shall be given by the Company to members and auditors of the Company and other persons entitled to receive notice in accordance with law.

**X. CONFIDENTIALITY**

94. Confidentiality Undertaking

Every director, manager, adviser, auditor, trustee, member of a committee, officer, agent, accountant, or other employees of the Company shall, if so required by the Directors, before entering upon his duties, sign a confidentiality undertaking in relation to all transactions of the Company with its customers and the state of accounts with individuals and in matters relating thereto, and shall undertake not to reveal any of the matters which may come to his knowledge in the discharge of his duties, except when required to do so by the Directors or by any general meeting or by any court of law of competent jurisdiction and except so far as may be necessary in order to comply with any of the provisions in these presents.

95. Members' Access to Company Premises

No member or other person (not being a Director) shall be entitled to enter upon the property of the Company or examine the Company's premises or properties without the permission of a Director, subject to Article 94, to require discovery of or any information respecting any detail of the Company's trading or any matter which is or may be in the nature of a trade secret, mystery of trade, or secret process or of any matter whatsoever which may relate to the conduct of the business of the Company and which in the opinion of the Directors will be inexpedient, in the interest of the Company and its members, to communicate.

## **XI. RECONSTRUCTION**

### **96. Reconstruction**

On any sale of the undertakings of the Company, the Directors or the liquidators on a winding up may, if authorized by a Special Resolution, accept fully paid shares, debentures or securities of any other company, either then existing or to be formed for the purchase in whole or in part of the property of the Company. The Directors (if the profits of the Company permit), or the liquidators (in a winding up), may distribute such shares or securities, or any other properties of the Company amongst the members without realization, or vest the same in trustees for them. A Special Resolution may provide for the distribution or appropriation of the cash, shares or other securities, benefits or property, and for the valuation of any such securities or property at such price and in such manner as the meeting may approve. All shareholders shall be bound by any valuation or distribution so authorized, and waive all rights in relation thereto save only such statutory rights (if any) as are, in case the Company is proposed to be or is in the course of being wound up, incapable of being varied or excluded by these Articles.

## **XII. WINDING UP**

### **97. Division and distribution of Assets Upon Dissolution**

If the Company is wound up, the liquidator may, with the sanction of a Special Resolution of the Company and any other sanction required by law, divide amongst the members in specie or kind the whole or any part of the assets of the Company (whether they shall consist of property of same kind or not) and may, for such purpose, set such value as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the members or different classes of members. The liquidator may, with like sanction, vest the whole or any part of such assets in trustees upon such trust for the benefit of the contributors, as the liquidator with like sanction, shall think fit; Provided, that, no member shall be compelled to accept any shares or other securities whereon there is any liability.

## **XIII. INDEMNITY**

### **98. Indemnification**

Every officer or agent of the Company may be indemnified out of the assets of the Company for any liability incurred by him in defending any proceedings, whether civil or criminal, arising out of his dealings in relation to the affairs of the Company, except those brought by the Company against him, in which judgement is given in his favour or in which he is acquitted, or in connection with any application under Section 488 in which relief is granted him by a court of competent jurisdiction.

#### XIV. ARBITRATION

##### 99. Differences to be Referred to Arbitrator

Every intra-corporate dispute shall, as a condition precedent to any other action at law be referred, in conformity with the Arbitration Act, 1940, as amended, and its implementing rules, to the decision of an arbitrator to be appointed by the parties in dispute or, if they cannot agree upon a single arbitrator, to the decision of two arbitrators of whom one shall be appointed by each of the parties in dispute or, in the event of the two arbitrators not agreeing, then of an umpire to be appointed by the two arbitrators, in writing, before proceeding on the reference. Such decision and arbitral award shall be final and binding on the parties. Intra-corporate disputes shall include any dispute that may arise between the Company on the one hand and any of the members, their executors, administrators or assigns on the other hand, or between members, their executors, administrators or assigns, relating to these Articles or the statutes, or anything then or thereafter done, executed, omitted or suffered in pursuance of these Articles or of the statutes or any breach or alleged breach, or otherwise relating to these Articles or to any statute affecting the Company or to any of the affairs of the Company.

We, the several persons whose names and addresses are subscribed below, are desirous of being formed into a company in pursuance of these Articles of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

Name and surname (Present and former) in full (in Block Letters)	Father's/ Husband's Name in Full	Nationality	Occupation	Residential Address in Full	Number of Shares taken by each Subscriber	Signature
1. Ch.Arshad Zaman	Ch.Sher Zaman	Pakistani	Wapda Service	75, Babar Block, New Garden Town, Lahore.	1	
2. Mr. Muhammad Qasim Shaikh	Haji Noor Muhammad Shaikh	Pakistani	Wapda Service	Bachelor Officers Hostel, Thermal Colony, Nishatabad, Faisalabad.	1	
3. Mr. Muhammad Maqbool Anjum	Ch. Imam Din	Pakistani	Wapda Service	54-Nishtar Block, Allama Iqbal Town, Lahore.	1	
4. Mr.Mansoor Ali Sheikh	Muhammad Ali Sheikh	Pakistani	Wapda Service	2-C, Audit Officers Colony, Gulberg- III, Lahore.	1	
5. Mr. Akhtar Pervez Akhtar	Ch.Muhammad Ibrahim	Pakistani	Wapda Service	13, Daood Street No.21, Wasanpura, Lahore.	1	
6. Brig. Saeed Ahmad Rafi	Muhammad Ajaib	Pakistani	Wapda Service	B-33, Upper Mall, Wapda Colony, Lahore.	1	
7. Mr. Noor Elahi Baig	M.Fazal Elahi Baig	Pakistani	Wapda Service	B-2, Shalamar Grid Station, Wapda Colony, Lahore.	1	

Total number of shares taken 7 (Seven)

Dated the \_\_\_\_\_ day of \_\_\_\_\_, 199

Witness to the above signatures

**Certified to be true Copy**

(Full Name, Father's/Husband's Name)

(in Block Letters)

Deputy Registrar of Companies  
Company Registrar  
Government of Pakistan  
Lahore.

Signature \_\_\_\_\_

Occupation \_\_\_\_\_

Full Address \_\_\_\_\_

# FEASIBILITY REPORT

(of the project as per PCH)

## FEASIBILITY OF PROJECT

### Background:

As per directive of GOP, issued in view of 3<sup>rd</sup> meeting of the committee of power demand/ supply position held on 01-09-2005, PC-1 for installation of 450 MW Combined Cycle Power Plant at Nandipur was submitted to GOP on 15-09-2005 which was cleared by CDWP on 24-10-2005. However, due to prospects of power generation of IPP's, the proposal for installation of 450 MW CCPP by public sector was not approved in the meeting held on 02-12-2005, chaired by the then Prime Minister.

Consequently, to cater for the ever-growing electric energy requirements & deficit particularly within the load centers of LESCO and GEPCO, it was envisaged to embark upon installation of 3x200 MW Diesel Engine Based Combined Cycle Power Plants at Faisalabad, Chichoki Mallian & Nandipur on fast track basis as per directives of the then Prime Minister of Pakistan. International tenders for the said power plants were invited and publically opened on 08-11-2006. Upon the evaluation of the tenders, the prices of 3x200 MW Diesel Engine Based Combined Cycle Power Plants were found to be on higher side. Recommendations/proposal to abandon the Project of Diesel Engines Combined Cycle Power Plants and for installation of 450-500 MW RFO based Gas Turbine Combined Cycle Power Plant at Nandipur in lieu of Diesel Engines, was submitted to Ministry of Water & Power Islamabad on 23-02-2007. ECC in its meeting held on 10-05-2007 approved WAPDA proposal and was decided to abandon Diesel Engines Project and to install 450 MW RFO based Gas Turbine Combined Cycle Power Plant at Nandipur.

In view of the above decision of ECC, Proforma PC-1 already prepared/ submitted in September-2005 was updated for obtaining the approval of ECNEC as the original PC-1 for Nandipur Project was prepared considering Natural Gas as main fuel & furnace oil as backup fuel and the cost of the Plant equipment for CCPP was estimated on the basis of prices indicated in "Gas Turbine World 2004 GTW Hand Book". The same PC-1 was updated by escalating the base cost @ 6.5% per annum for ECC & FCC and brought to the year 2007-08 and also considering furnace oil as main fuel and HSD for starting & stopping only. However, in anticipation of the availability of gas fuel in future, the conversion to gas fuel has been made part of the revised PC-1. On gas firing, the gross capacity of the Nandipur CCPP will be enhanced from 425 MW to 525 MW.

### Site Selection:

The proposed site for the Power Plant is on the left side of Upper Chenab Canal inside the premises of the WAPDA existing Hydel Power Station. The site can be reached from the Gujranwala-Sialkot road link of the G.T road. The site is also approachable by railway line via Gujranwala Railway Station at a distance of about 12-15 km. The site proves to be the most suitable. Key environmental and safety advantages for the site are that the land for the proposed Power Plant is already owned by WAPDA, thus no issues relating to resettlement and potential loss of livelihood can arise. Moreover, The least number of people are residing in the surroundings of the proposed site.

Existing site of Nandipur Hydel Power Station having communication facilities, potable water source and convenient connectivity with National Grid System, has been selected at existing infrastructure to ensure its economics for installation of 425 MW Combined Cycle Power Plant for its Power Supply to GEPCO/LESCO Load Centers.

**Justification of the Project:**

The increasing trend of power demand leads to shortfall in generating capability, which causes load-shedding in the country. By installing the proposed Combined Cycle Power Plant of 425-525 MW Capacity at Nandipur, will be added in the system which will help bridging the gap between demand and supply. As a result, load-shedding will be reduced.

**Water Requirement and Availability:**

The proposed Power Plant site is located near the Upper Chenab Canal. The maximum discharge of this canal is approximately 8,000 cusecs at Nandipur Hydel Power Plant. It is perennial canal and water is available throughout the year except during canal closure. The underground water in the area is of acceptable/ potable quality. So ground water can be used during canal closure, unforeseen drought period and or unexpected canal breaches by installing tube wells of suitable capacity.

**Fuel Availability:****Furnace Oil:**

The Combined Cycle Power Plant has been proposed to be operated on Furnace Oil which will be provided by the furnace oil supply companies through oil tankers. However, HSD Oil will be used as secondary fuel for only starting/stopping the Gas Turbines as well as during commissioning. Daily Furnace Oil requirement of the Plant is in the range of 1500-2000 MTons.

**Gas Fuel:**

In anticipation of the availability of gas fuel in future, provision of gas fuel firing system at the Nandipur Gas Turbines has been included in the current scheme. On gas fuel, the capacity of the same plant will be enhanced from 425 MW to 525 MW. The Gas requirement of the Plant on daily basis is in the range of 60-90 MMCFD. For gas firing, the fuel will be arranged by SNGPL through Pipeline.

**Calorific Value, Cost of Fuel and Generation Cost:****Furnace Oil:**

Calorific Value of Furnace Oil:	38857 BTU/kg
Market Rate of Furnace Oil: (Without GST)	Rs.67,804/Ton.
Gross Efficiency of CC Plant:	45.96%
Heat Rate (at 100% efficiency):	3412 BTU/kWh
Fuel Consumption:	0.191Kg/kWh
Generation Cost (Fuel Component)	Rs. 12.95kWh

**Gas Fuel:**

Calorific Value of Gas:	912 BTU/CFT
Market Rate of Gas:	Rs.460/MMBTU
Gross Efficiency of CC Plant:	50%
Heat Rate (at 100% efficiency):	3412 BTU/kWh
Fuel Consumption:	7.30 CFT/kWh
Generation Cost (Fuel Component)	Rs. 3.13/kWh

**Selection of Plant & Unit Size:**

425-525 MW Combined Cycle Power Plant with suitable capacity of Gas Turbines is considered the most appropriate size for new a Power Generation Plants in view of the following advantages:

- It would be in line with the existing units already in operation in Pakistan.
- It offers advantages of effective international competitive bidding.
- Maintenance cost would be less as the spare parts inventory could be shared with the existing similar turbines.
- Availability of experienced O&M Staff for 425-525 MW Combined Cycle Power Plant will reduce training cost.
- The capital cost is within optimum range.

#### **Annual Plant Factor:**

Average Annual Plant Factor for the proposed Combined Cycle Power Plant has been assumed as 60% per annum in view of energy sharing of existing Combined Cycle Power Plants of NTDC system. However, if required volumes of Gas are made available by SNGPL, the Plant Factor shall be quite high, thereby reducing the Cost of Generation.

#### **Project Capital Cost and Unit Cost:**

In the Revised PC-I, the overall project cost has been estimated as Rs.54,788.20 million (without gas conversion equipment) and Rs.57,380.20 million (with gas conversion equipment), the specific cost has been determined as under:

- On Furnace Oil: **Rs.129,817/KW (Capacity=425 MW)**

Annual Energy available for Sale	2,160 MkWh
Annual Recurring Charges	Rs.31,935 Million
Generation Cost	Rs.14.78/kWh

- On Gas Fuel: **Rs.109,296/KW (Capacity=525 MW)**

Annual Energy available for Sale	2,630 MkWh
Annual Recurring Charges	Rs.16,659 Million
Generation Cost	Rs.6.50/kWh

#### **Plant/Machinery/Equipment, Physical Facilities and Civil Works.**

- Three heavy industrial type combustion Gas Turbine Generator Units.
- Three non-fired Heat Recovery Steam Generators.
- One Steam Turbine generator unit of suitable capacity.
- Four 15/132 kV unit transformer of suitable capacity.
- Auxiliary transformers of suitable capacity.
- One lot of electrical protection and control equipment.



- One lot of batteries, rectifier and inverters.
- One lot of Earthing System and lightning protection.
- One lot of 132 kV switchyard equipment including breakers, C.Ts, P.Ts. Isolators, post insulators, lightning arrestors, PLC equipment & gantries etc.
- Main Structure for machine hall, exhaust stack, control building and other associated buildings.
- Electrical station and control room equipment and accessories.
- Structure for outdoor switch yard.
- Cooling water supply system with cooling towers.
- Other miscellaneous items to make the plant operationally complete.
- Ten (10) Oil Storage Tanks each of 10,000 M.Ton Capacity with Fuel-Oil Treatment Plant, Fuel Oil Piping and Fire-Fighting System etc.

#### **Social Benefits:**

The power demand in the country is continuously rising due to increase in economic activities in the agricultural and industrial sectors. The fast urbanization has also increased the demand for electricity in the households. The households are using a greater number of electrical gadgets and appliances than ever before vis-à-vis increase in standard of living, an indicator of well-being resulting from higher per- capita disposable income.

The increased quantum of Electricity from the Plant will be used for farm mechanization. The much needed requirements for tube wells electrification will be adequately met which will not only provide additional water for irrigation but as well as reduce the ground water reservoir level. The reclamation of land will increase the cropped areas and also production. The availability of motive power will provide incentive for the establishment of industries based on local raw materials, creating gainful employment opportunities to increasing the work force. This is envisaged to considerably alleviate disguised unemployment on the farms. Provision of the basic infrastructure facility of electricity in rural areas will go a long way to check large scale migration of rural labor force to urban centers. The requirements of power demand for accelerated villages/ rural electrification program will also be adequately met. In the overall analysis, the improvement in ecological environments coupled with higher production is envisaged to bring about substantial economic gains for the people living around the project area.

EXPERIMENTAL APPROACHES TO THE STUDY OF

THE PSYCHOLOGY OF THE

CHILD

COMMITTEE ON THE STUDY OF THE

PSYCHOLOGY OF THE CHILD



**Northern Power Generation Company Limited**  
425 MW Combined Cycle Power Plant Nandipur, Gujranwala



Office of the  
Plant Manager  
CCPP, Nandipur

Phone: 055 3400552  
Fax : 055 3493761  
email:- naveed.athar@yahoo.com

No. NPGCL/PM/NP/GL/ 2553

Dated:-06-07-2022

The Registrar,  
National Electric Power Regulatory Authority.  
NEPRA Tower, Attaturk Avenue (East),  
G-5/1, Islamabad.

**Subject: APPLICATION FOR GRANT OF GENERATION LICENSE ON BEHALF OF NORTHERN POWER GENERATION COMPANY LIMITED IN RELATION TO ITS COMBINED CYCLE POWER PLANT, NANDIPUR TO BE LOCATED AT DISTRICT GUJRANWALA-PUNJAB.**

I, Naveed Athar, Plant Manager, CCPP Nandipur being the duly authorized representative of CCPP Nandipur of Northern Power Generation Company Limited by virtue of BOARD RESOLUTION No. NPGCL/BoD-131/14-18 Dated:- 11-01-2022, hereby apply to the National Electric Power Regulatory Authority (NEPRA) for the grant of a GENERATION LICENSE to the CCPP Nandipur of Northern Power Generation Company Limited (NPGCL) pursuant to Section 14 (b) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (2000).

I hereby certify that the documents-in-support attached with this application are prepared and submitted in conformity with the provisions of the National Electric Power Regulatory Authority Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021, and undertake to abide by the terms and provisions of the above-said regulations. I further undertake and confirm that the information provided in the attached documents-in-support is true and correct to the best of my knowledge and no material omission has been made.

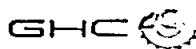
An amount of PKR 1,502,759 on account of license application fee has already been submitted and balance amount of PKR 166,752/- (Rupees One Hundred Sixty Six Thousand Seven Hundred Fifty Two only), calculated in accordance with Schedule II to the National Electric Power Regulatory Authority Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021, is submitting now. BANK DRAFT No. BBB 14595845 Dated:-05-06-2022 is attached herewith.

Sincerely,

For and on behalf of CCPP Nandipur.of NPGCL

  
Naveed Athar  
Plant Manager and authorized Representative

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**Northern Power Generation Company Limited**  
Thermal Power Complex, Mahmood Kot Road, Muzaffargarh



Company Secretary Office

Phone: 066-9200296-Fax-066-9200166

No. NPGCL/BoD-131/08/14-18

January 11, 2022

**OFFICE MEMORANDUM**

**To:** The Chief Executive Officer NPGCL, TPS Muzaffargarh

**Subject:** Matter of Carving Out CCPP Nandipur from NPGCL

The Board of Directors of NPGCL has taken up the subject matter in its meeting No.131 held on January 10, 2022.

The Board has passed the following resolution:

"Resolved that the a separate power generation license be obtained for CCPP Nandipur from NEPRA in the light of direction conveyed by Ministry of Energy (Power Division) vide Office Order No. 1(33)GP-I/2021 dated 31<sup>st</sup> December 2021 and the CEO NPGCL and Plant Manager CCPP Nandipur be and are hereby authorized jointly and individually to take all measures for the purpose including but not limited to signing of prescribed applications and payment of requisite license fee(s) to NEPRA."

This is for your information and necessary action please.

Ahmed Noman  
Company Secretary

Copy for Information and necessary action please:

1. Chief Financial Officer, TPS Muzaffargarh
2. Plant Manager, CCPP Nandipur
3. Chief Engineer/TD, NPGCL, TPS Muzaffargarh

Copy for Record:

4. Master File

ORIGINAL

E-STAMP



ID: PM GRW-A07D7C18710D10B1  
Stamp Type: Low Denomination  
Amount: Rs 100/-  
Description: AT (HAST) 4  
Applicant: NAVEED ATHAR CHAUDHARY (NAGP) 3-101/AM-3  
CHAUDHARY HASSAN ALI  
Address: GUJRANWALA  
Issue Date: 4-Jul-2022 3:07:47 PM  
De-stamped/Validity: 11-Jul-2022  
Amount in Words: One Hundred Rupees Only  
Reason: FOR NEPRA  
Vendor Information: Ahsan Ali | PB-GRW-156b | District Courts

Register No: 48  
Ahsan Ali E-Stamping Vendor  
Lic. No. PB-GRW-156  
Dist. Courts Gujranwala City

نوٹ: یہ لوائزیشن تاریخ اجرا سے سات دنوں تک کے لیے قابل استعمال ہے۔

## AFFIDAVIT

### BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

I, Naveed Athar, Plant Manager, CCPP Nandipur of Northern Power Generation Company Limited being duly authorized representative / attorney of CCPP Nandipur of Northern Power Generation Company Limited, hereby solemnly affirm and declare that the contents of the accompanying application No. PM/NP/GL/2553, Dated:- 06-07-2022 including all supporting documents are true and correct to the best of my knowledge and belief and that nothing has been cancelled. I also affirm that all further documentation and information to be provided by me in connection with the accompanying shall be true to the best of my knowledge and belief.

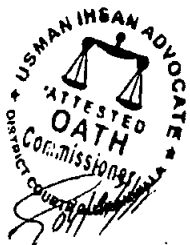
DEPONENT

(Naveed Athar)  
Plant Manager CCPP Nandipur  
NPGCL

Verified on oath this 14th day of January 2022 that the contents hereof are true and correct to the best of my knowledge and belief and nothing has been cancelled.

DEPONENT

(Naveed Athar)  
Plant Manager CCPP Nandipur  
NPGCL



ORIGINAL

E-STAMP



ID : PB-GRW-AA27AFEE53BAED4  
Stamp Type : Low Denomination  
Amount : Rs 100/-  
Description : AFFIDAVIT - 4  
Applicant : NAVEED ATHAR (ELECTRICITY BOARD) (NPGL)  
S/o : CHAUDHARY HASSAN ALI  
Address : GHIPRAWALA  
Issue Date : 4-Jul-2022 3:07:47 PM  
Delisted On/Validity : 11-Jul-2022  
Amount in Words : One Hundred Rupees Only  
Reason : FOR NEPRA  
Vendor Information : Ahsan Ali | PB-GRW-156b | District Courts



Register No: 45  
Ahsan Ali E-Stamping Vendor  
Lic. No. PB-GRW-156  
Distt. Courts Ghiprawala City

نوٹ: یہ برقی نوٹیشن تاریخ اجرا سے سات دنوں تک کے لیے قابل استعمال ہے۔

## AFFIDAVIT

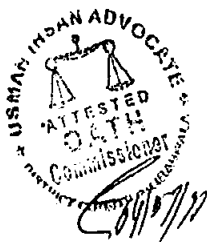
### BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

I, Naveed Athar, Plant Manager, CCPP Nandipur of Northern Power Generation Company Limited being duly authorized representative / attorney of CCPP Nandipur of Northern Power Generation Company Limited, hereby solemnly affirm and declare that no license under the Act has been granted separately to CCPP Nandipur.

DEPONENT

(Naveed Athar)

Plant Manager CCPP Nandipur  
NPGCL



ORIGINAL

E-STAMP



ID: PB-GRW-A654621FE8CCEBF3  
Stamp Type: Low Denomination  
Amount: Rs 100/-  
Description: AFFIDAVIT - 4  
Applicant: NAVEED ATHAR CHAUDHARY (16/10/1991/704 S)  
S: CHAUDHARY HASSAN ALI  
Address: GUJRATWALA  
Issue Date: 4-Jul-2022 3:07:47 PM  
Delisted On/Validity: 11-Jul-2022  
Amount in Words: One Hundred Rupees Only  
Reason: FOR NEPRA  
Vendor Information: Ahsan Ali | PB-GRW-156b | District Courts

Register No: 46  
Ahsan Ali - Pending Vendor  
Lic. No. E-GRW-156  
Dist. Courts, Gujranwala City

نوٹ: یہ نوٹریکشن تاریخ اجرا سے سات دنوں تک کے لیے قابل استعمال ہے۔

## AFFIDAVIT

### BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

I, Naveed Athar, Plant Manager, CCPP Nandipur of Northern Power Generation Company Limited being duly authorized representative / attorney of CCPP Nandipur of Northern Power Generation Company Limited, hereby solemnly affirm and declare that the grant of license under the Act has not been refused by NEPRA.

DEPONENT

(Naveed Athar)

Plant Manager CCPP Nandipur  
NPGCL







Waqas Ahmad

Snr. Customer Services Manager  
Power Services

Level 12, ARFA Software Technology Park,  
346-B, Ferozepur Road, Lahore, Pakistan

T +92 300 8478589  
Waqas.ahmad@ge.com

Dated: 20-12-2021

Ref: NPGCL letter No. PM/NP/GE/997-98 (Dated:17-12-2021)

This refers to the above-mentioned letter, it is categorically confirmed that GE units installed at Nandipur can run on HSD. However, the engineering comments on operation of units on Liquid fuel are as under.

"In addition Mark review and comments about detail of FMI for gas fuel capability, I can see all three units software has relevant codes for liquid fuel operation, if the liquid fuel system was out of service for long time, please perform all lineup and flushing as per P&ID and also perform all devices function checks if the Liquid to gas and gas to liquid changeover was not tested before please perform these test under supervision on GE mechanical and control TA's".

In the context, prior to operate the GTs on liquid Fuel i.e., HSD, the GE Engineering Comments need to be addressed.

Best Regards,

Waqas Ahmad  
Senior Customer Services Manager  
Power Services  
GE Pakistan

PROCEED

## PROSPECTUS

**Project Name:** 425-525 MW, Combined Cycle Power Plant, Nandipur.  
On the left bank of Upper Chenab Canal (within the  
**Location of the Project:** premises of the existing small Hydel Power Station,  
Nandipur, Gujranwala).

**Commencement Date:** Oct-16, 2008

**Initial Completion Date** Apr 16, 2011

**Work Suspension Period** April-2010 to October-2013 owing to financial & legal reasons. (Non-issuance of legal opinion to Foreign lenders by Ministry of Law, Justice and parliamentary affairs and subsequent withholding of Original Bills of Lading by the Letter of Credit (L/C) opening local Banks'.

**Re-commencement Date** 21-10-2013

**COD of 1<sup>st</sup> Gas turbine** 06-12-2014

**COD of 2<sup>nd</sup> Gas turbine** 27-03-2015

**COD of 3<sup>rd</sup> Gas turbine** 20-05-2015

**Power Plant achieved COD on** 23-07-2015

**Project Cost as per PC-1** Original 22,335 Millions    Revised Rs. 58,416 Millions

**Tariff approved by NEPRA (levelized)** Rs. 11.6361/KWH on HSFO    Rs. 10.3157/KWH on Gas

**Conversion to Gas Fuel**

- 100 MMCFD gas quota has been allocated for Nandipur Plant.
- M/S SNGPL has commissioned the pipeline with metering station against deposit work.
- M/S General Electric (GE) has completed the works whereas regarding the BoP Works, the EPC contract has been signed with M/S Amcorp-Gasco(JV) on **13.02.2017**. M/S Amcorp-Gasco (JV) has completed all the works including installation of Gas Booster Compressors and Performance Testing of the Complex..
- The Plant is operating on gas fuel after successful gas conversion works since **26.04.2017**

Nandipur Combined Cycle Power Plant 525 MW Capacity comprises of three Gas Turbines, each of 110 MW Capacity, one Steam Turbine of 195 MW Capacity and three HRSGs supplying steam to the Steam Turbine along-with associated BOP. The plant is capable of operating on Gas (RLNG) and Liquid (HSD) Fuels.

Location	Nandipur- Gujranwala. (Map attached as <b>Annex-I</b> )
Size (Capacity in MW)	525 MW-Gross Capacity at site conditions. (Detail attached as <b>Annex-II</b> )
Fuel Type	Gas (RLNG) by SNGPL through pipeline and HSD by PSO (Detail Attached as <b>Annex-III</b> )
Emission Values	Detail attached as <b>Annex-IV</b> .
Cooling Water Source	Canal/Tube wells (Detail attached as <b>Annex-V</b> )
Interconnection with NGC	NTDC, Scheme & Single-Line Diagram (Attached as <b>Annex-VI</b> )

#### Plant

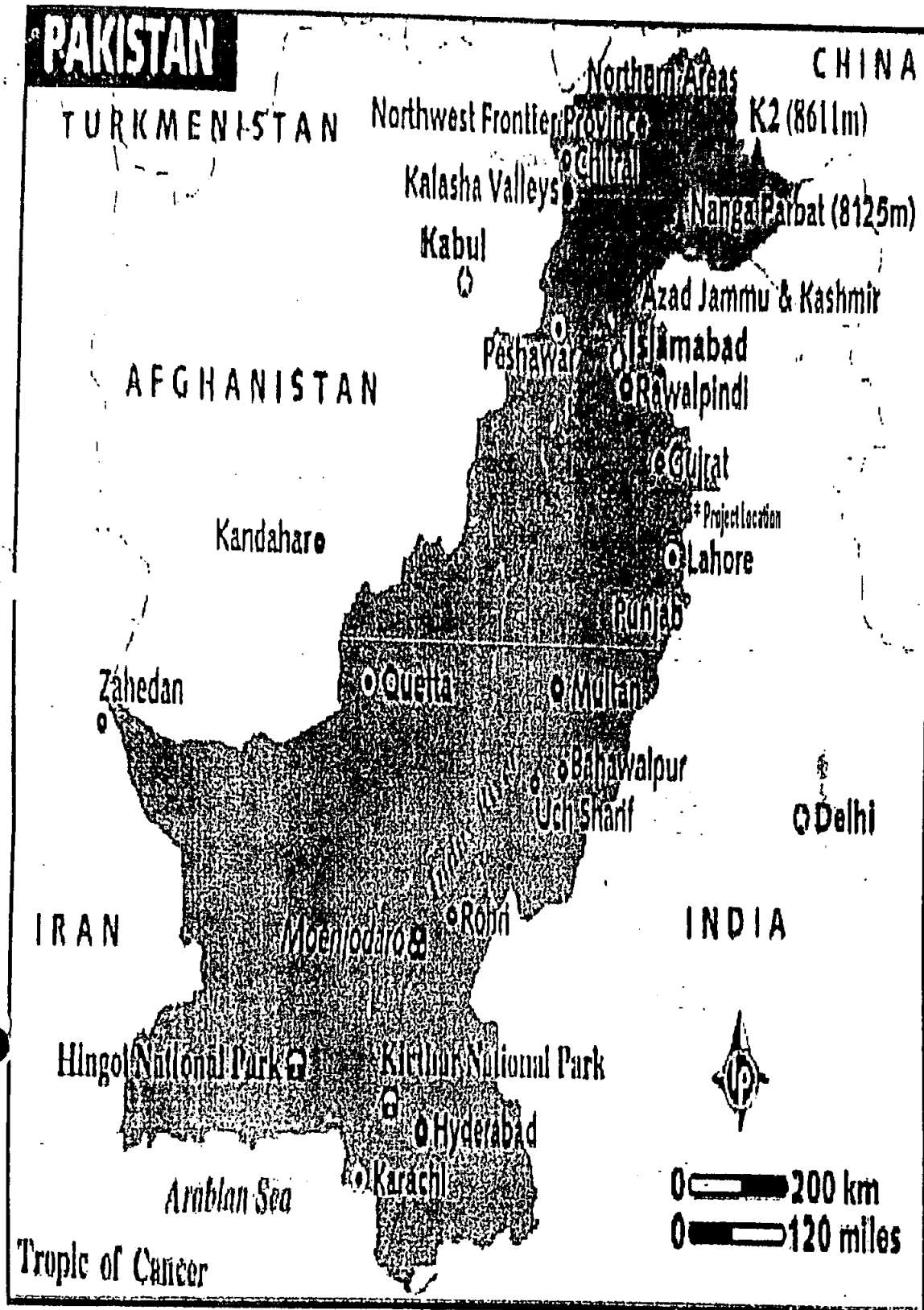
##### Characteristics:

Generation Voltage	15 kV
Frequency	50Hz, $\pm 2.5\%$
Power Factor	0.85 (Lagging)
Auxiliary Consumption	2.536 %
Efficiency of Gas Turbines	30%
Combined Cycle Efficiency	49%
Project Cost	Rs. 57,380 Million
Unit Cost	Rs. 109,296/kW

## **ANNEXURE-I**

**Location Maps, Site Maps, Land**

# PAKISTAN



Sialkot



Shuttle



Topi

Harpu

de-USA  
Kangpu

Harpu  
Rosa

Copani  
Cenney  
Harpu  
Harpu  
Harpu

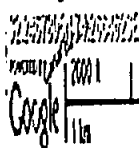
Copani  
Harpu

Harpu  
Coboy  
Kangpu  
Channel

Bimuxal

Kala Tapa

Busti  
Shango



Google

Harpu  
Dakboby

0.1 km

Harpu  
Bimuxal

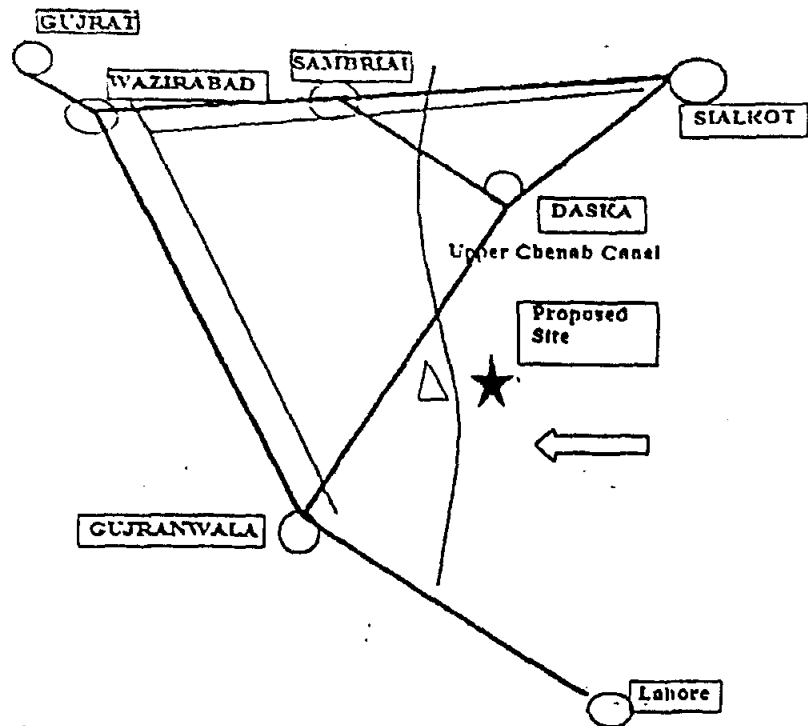
Gujranwala

Map data ©2011 Google

# PROPOSED SITE FOR NANDIPUR 425 MW THERMAL

## COMBINED CYCLE PROJECT

(Sketch Not To Scale)





## **ANNEXURE-II**

**Technology, Size of Plant, No. of Units**

## Technology, Size of Plant, No. of Units

1	Type of Technology	Combined Cycle Power Plant (CCPP)		
2	Number of Units	3 x Gas Turbine		
		1 x Steam Turbine		
	Plant Capacity/Size MW	On HSFO	On Gas (RLNG)	On HSD
3	474.0	474.0	565.65 MW	474.0
4	425.0	425.0	513.51 MW	425.0
5	411.0	411.0	500.49 MW	411.0
6	14.0 MW (3.29 %)	14.0 MW (3.29 %)	13.02 MW (2.536 %)	14.0 MW (3.29 %)

## ANNEXURE-III

### Fuel

Type, Imported/Indigenous, Supplier, Logistics, Pipelines etc.

## FUEL DETAILS

1	Primary Fuel	Gas (RLNG)
2	Alternative / Back-up Fuel	HSD
3	Primary Fuel Source (Imported/Indigenous)	Imported
4	Fuel Supplier	SNGPL & PSO
5	Supply Arrangement	Gas by SNGPL through Pipe-Line. HSD by PSO through Oil Tankers.
6	No. of Storage Tanks	02
7	Storage Capacity of Each Tank	10,000 M Ton
8	Total Gross Storage	20,000 M Ton

## **ANNEXURE-IV**

### **Emission Values**

## EMISSION VALUES

Sr. No.	Description	GAS	HSD
1	SO <sub>x</sub> (SO <sub>2</sub> )	< 1% Very Low	Later
2	NO <sub>x</sub> @ 15% O <sub>2</sub> )	Very Low	Later
3	CO	Very Low	Later
4	PM	Very Low	Later

- Within permissible limits of World Bank.

## **ANNEXURE-V**

**Cooling Water Source  
Tube-Wells, Sea/River/Canal, Distance from  
Source etc.**

## **COOLING WATER SOURCE**

### **Upper Chenab Canal (UCC):**

Cooling water for the Plant shall be supplied from UCC passing through the Plant virtually having no distance. Average flow of canal-water is 8,000 Cusecs. Raw water from Canal shall be pumped and passed through the condenser of Steam Turbine in Open-cycle mode.

### **Tube-Wells & Cooling Towers:**

During canal closure which is normally less than one month in a year, tube wells installed inside the boundary of the plant, shall supply make-up water to the Cooling Towers for cooling of the Plant in Closed-Cycle mode.



## **ANNEXURE-VI**

### **Interconnection with National Grid Company**

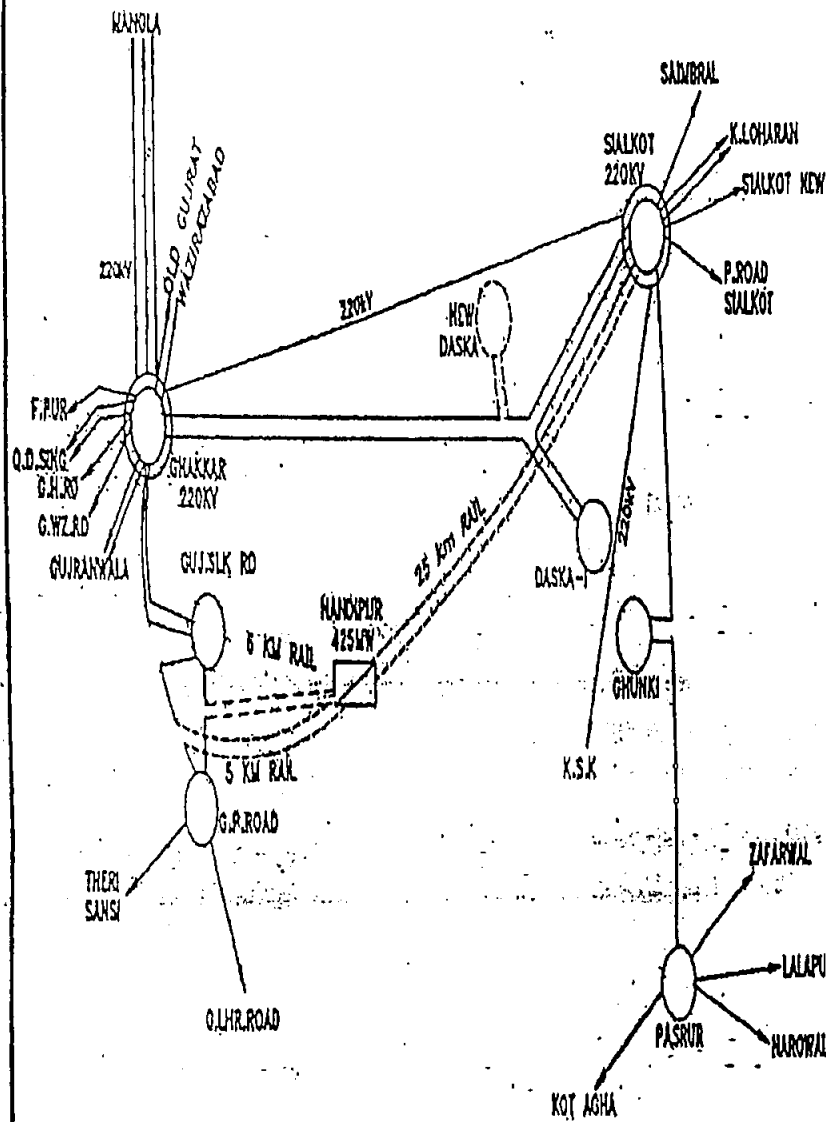
**Stance and name of the nearest Grid, Voltage level (Single-Line  
Diagram)**

## Interconnection with National Grid

The Power generated from the Power Plant shall be dispersed to power system directly within GEPCO load center at 132kV voltage level through six circuits comprising three D/C transmission lines as follows:

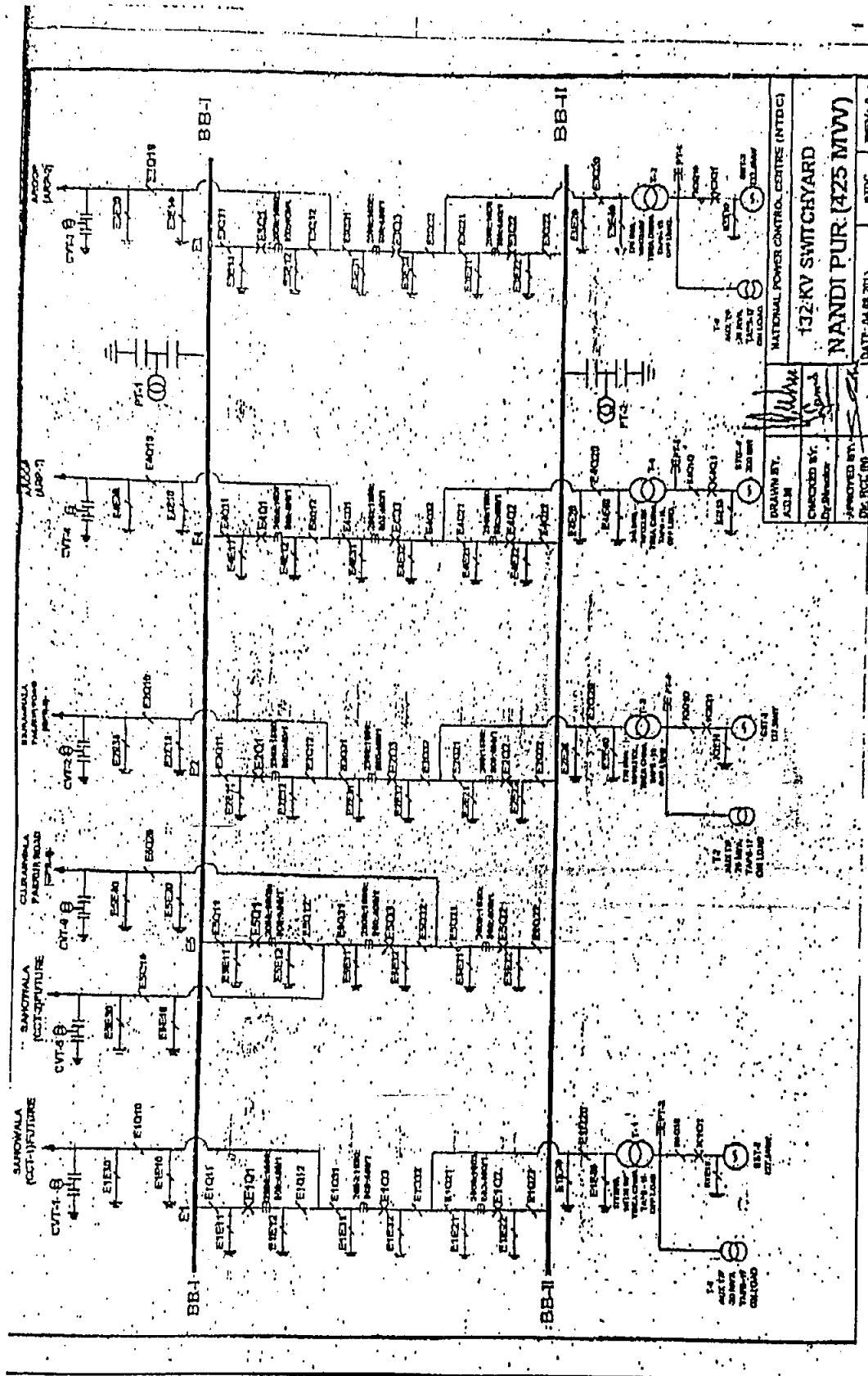
- 132 kV D/C T/Line with twin bundle Rail Conductor (on 220 KV Towers) from Nandipur CCPP to Sahowala 220/132 kV Substation (33 Km).
- Two 132kV D/C T/Lines on AASC Greely Conductor for looping In/Out of 132 KV D/C T/Lines from Gujranwala Pasrur Road - Gujranwala Sialkot Road (Aroop) at Nandipur CCPP (7.0 + 6.5=13.5 Km)

# **Interconnection Scheme** (Based on enhanced capacities of the Nandipur CCPP)



## **NOTE:**

DOTTED LINES INDICATE SCOPE OF PROPOSED  
INTERCONNECTION SCHEME FOR NANDIPUR THERMAL POWER PLANT



NATIONAL POWER CONTROL CENTRE (NTDC)	
132 KV SWITCHYARD	
NANDI PUR (425 MW)	
DATE: 04.08.2013	REV: 0
DESIGNED BY: <i>[Signature]</i>	CHECKED BY: <i>[Signature]</i>
APPROVED BY: <i>[Signature]</i>	By: <i>[Signature]</i>
DR. SGT. 00	

## **Detail of installed Capacity**

**CCPP, Nandipur**

## Detail of installed Capacity CCPP, Nandipur

	On HSFO		On Gas Fuel		On HSD	
	ISO 15 °C	Site Condition 30 °C	ISO 15 °C	Site Condition 30 °C	ISO 15 °C	Site Condition 30 °C
03 no. Gas Turbines (MW)	3 x 106.7 = 320.1 MW	3 x 95.4 = 286.2 MW	3 x 122.1 = 366.3 MW	3 x 110.5 = 331.8 MW	3 x 106.7 = 320.1 MW	3 x 95.4 = 286.2 MW
01 No. Steam Turbine (MW)	1 x 153.89 = 153.89 MW	1 x 138.80 = 138.80 MW	1 x 199.35 = 199.35 MW	1 x 182 = 182.0 MW	1 x 153.89 = 153.89 MW	1 x 138.80 = 138.80 MW
Gross Capacity of complete CCPP (MW)	474.0 MW	425.0 MW	565.65 MW	513.51 MW	474.0 MW	425.0 MW
Net output of complete CCPP (MW)	460.0 MW	411.0 MW	550.00 MW	500.49 MW	460.0 MW	411.0 MW
Auxiliary consumption	13.99 MW (2.95 %)	14.0 MW (3.29 %)	15.65 MW (2.766 %)	13.02 MW (2.536 %)	13.99 MW (2.95 %)	14.0 MW (3.29 %)

CERTIFICATE  
OF  
INCORPORATION

GOVERNMENT OF PAKISTAN



CERTIFICATE OF INCORPORATION

(Under section 32 of the Companies Ordinance, 1984 (XLVII of 1984))

Company Registration No. L 10019/1988

I hereby certify that "NORTHERN POWER GENERATION COMPANY LTD."

//

//

//

//

is this day incorporated under the Companies Ordinance, 1984 (XLVII of 1984) and that

the company is limited by Shares.

Given under my hand at Lahore.

this 15th day of October

one thousand nine hundred and Ninety eight.

Fee Rs. =5,000,200

Certified to be true Copy



Registrar of Companies  
Company Registration Office  
Government of Pakistan  
Lahore. AKBAR

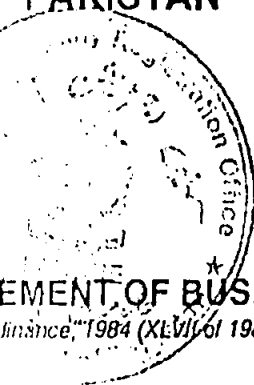
JOINT

SHAH  
REGISTRAR  
OF COMPANIES

No-JRL/2747 dt 15/10/88



# GOVERNMENT OF PAKISTAN



## CERTIFICATE FOR COMMENCEMENT OF BUSINESS

[Under section 146 (2) of the Companies Ordinance, 1984 (XLVII of 1984)]

I hereby certify that the "NORTHERN POWER GENERATION COMPANY LTD.

//

which was incorporated under the Companies Ordinance, 1984 (XLVII of 1984), on the 15th day of October 1993 and which has filed a duly verified declaration in the prescribed form that the conditions of clauses (a) to (e) of sub-section (1) of Section 146 of the said Ordinance have been complied with, is entitled to commence business.

Given under my hand at Lahore

this 23rd day of November one thousand nine hundred and Ninety eight.

Fee Rs. = 200/-

Certified to be true Copy

C.R.O.-4



Deputy Registrar of Companies  
Company Registration Office  
Government of Pakistan  
(AKBAR SHAH)  
Lahore Joint Registrar of Companies

No-ORL/3662 dt 23/11/98

MEMORIAL  
AND  
ARTICLE  
ASSOCIATION

**THE COMPANIES ORDINANCE, 1984**

**Company Limited by Shares**

**Memorandum**

**and**

**Articles of Association**

**NORTHERN POWER GENERATION COMPANY LIMITED**

GOVERNMENT OF PAKISTAN



CERTIFICATE OF INCORPORATION

(Under section 32 of the Companies Ordinance, 1984 (XLVII of 1984))

Company Registration No. L 09607 of 1998-99

I hereby certify that "NORTHERN POWER GENERATION COMPANY LTD."

//

//

//

//

is this day incorporated under the Companies Ordinance, 1984 (XLVII of 1984) and that

the company is limited by 3 shares.

Given under my hand at Lahore.

this 15th day of October

one thousand nine hundred and Ninety eight.

Fee Rs. =5,000,200

Certified to be true Copy



CRO-1

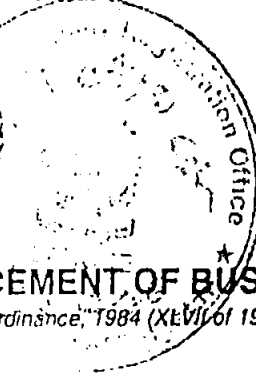
Registrar of Companies  
Company Registration Office  
Government of Pakistan  
Lahore. AKBAR

JOINT

SHAH  
REGISTRAR  
OF COMPANIES

No-JRL/2747 dt 15/10/98

# GOVERNMENT OF PAKISTAN



## CERTIFICATE FOR COMMENCEMENT OF BUSINESS

[Under section 146 (2) of the Companies Ordinance, 1984 (XLVII of 1984)]

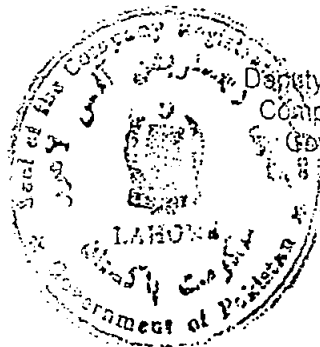
I hereby certify that the "NORTHERN POWER GENERATION COMPANY LTD.  
//  
..... which was incorporated under the  
Companies Ordinance, 1984 (XLVII of 1984), on the 15th  
day of October 1998 and which has filed a duly verified  
declaration in the prescribed form that the conditions of clauses (a) to (e) of sub-section  
(1) of Section 146 of the said Ordinance have been complied with, is entitled to  
commence business.

Given under my hand at Lahore  
this 23rd day of November  
one thousand nine hundred and Ninety eight.

Fee Rs. =200/-

Certified to be true Copy

C.R.O.-4



Dputy Registrar of Companies  
Company Registration Office  
Government of Pakistan  
**AKBAR SHAH**  
Lahore Joint Registrar of Companies

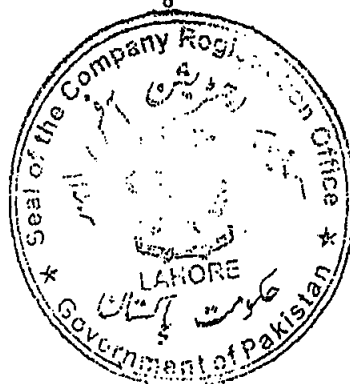
No-ORL/3662 dt 23/11/98

# NORTHERN POWER GENERATION COMPANY LIMITED

## INDEX

### MEMORANDUM OF ASSOCIATION

Sr. No.	Contents	Page No.
1.	Name	1
2.	Registered Office	1
3.	Objects	1
4.	Liability of Members	8
5.	Authorized Capital	8

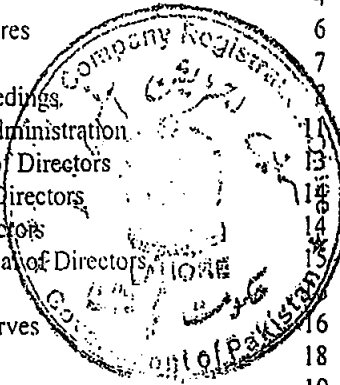


# NORTHERN POWER GENERATION COMPANY LIMITED

## INDEX

### ARTICLES OF ASSOCIATION

Sr. No.	Contents	Page No.
1.	Preliminary	1
2.	Business	2
3.	Shares	3
4.	Transfer of Shares	4
5.	Transmission of Shares	6
6.	Alteration of Capital	7
7.	Meetings and Proceedings	11
8.	Management and Administration	13
9.	Powers and Duties of Directors	14
10.	Disqualification of Directors	14
11.	Proceedings of Directors	14
12.	Election and Removal of Directors	15
13.	The Seal	16
14.	Dividends and Reserves	18
15.	Accounts	19
16.	Notices	19
17.	Confidentiality	20
18.	Reconstruction	20
19.	Winding Up	20
20.	Indemnity	21
21.	Arbitration	21



THE COMPANIES ORDINANCE 1984

PUBLIC COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION

-of-

NORTHERN POWER GENERATION COMPANY LIMITED

- I. The name of the Company is "Northern Power Generation Company Limited".
- II. The registered office of the Company will be situated in the Province of Punjab, Pakistan.
- III. The objects for which the Company is established are to undertake any or all of the following businesses in and outside Pakistan:
  1. Muzaffargarh, Multan, Multan Cantt, Faisalabad and Shahdara Power Facilities. - To acquire or purchase from the Pakistan Water and Power Development Authority ("WAPDA") the business, properties, assets, and undertakings of WAPDA's blended fuel oil, high speed diesel, natural gas, and combined cycle power stations, having a combined nominal generation capacity of 2111.5 MW, consisting of twenty nine (29) thermal power generation units situated in the Districts of Muzaffargarh, Multan, Faisalabad and Lahore respectively, all in the Province of Punjab, together with related facilities (collectively, the "Facilities") and to take over any or all of the belongings, funds, assets, rights, privileges, liabilities, obligations and contracts related to or in respect of the Facilities.
  2. Power Generation. - To carry on the businesses of generating, purchasing, importing, transforming, converting, distributing, supplying, exporting and dealing in electricity and all other forms of energy and products or services associated therewith and of promoting the conservation and efficient use of electricity and all other forms of energy, and all other powers necessary or incidental to the business of electricity generation, transmission, distribution and supply.
  3. Electrification. - To do anything which a public electricity generation licensee is empowered or required to do under or by virtue of or under a license or other authorization granted according to law and its implementing rules and regulations or any statutory instrument made thereunder or any statutory modification or re-enactment thereof and to plan, survey, design, supply equipment, and carry out the electrification of cities, towns, villages, gas and oil refineries, workshops, buildings, highways, bridges, ports, air terminals, and other premises within or outside Pakistan.
  4. Dealer in Electrical Equipment. - To carry on all or any of the businesses of wholesalers, retailers, traders, importers, exporters, suppliers, distributors, designers, developers, manufacturers, installers, fitters, testers, repairers, maintainers, contractors, constructors, operators, users, inspectors, reconditioners,

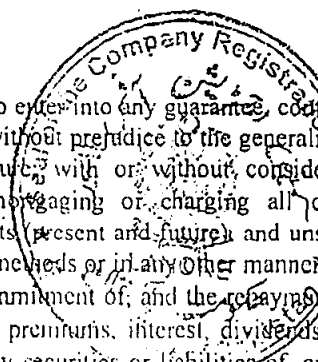


servicers, improvers, alterers, protectors, removers, hirers, replacers, importers and exporters of, and dealers in, electrical appliances, systems products and services used for energy conservation, domestic, commercial, agricultural, industrial, household and general equipment, furniture, fixtures, fittings and devices, and all other kinds of goods, equipment, machinery, materials and installations, including but not limited to cables, wires, meters, pylons, tracks, rails, pipelines and any other plant, apparatus, equipment, systems and things incidental to the efficient generation, procurement, transformation, supply, and distribution of electricity.

5. Determination of Bulk Supply Tariff Rates. - To ascertain the bulk supply tariff rates that will secure recovery of operating costs, interest charges and depreciation of assets, redemption at due time of loans other than those covered by depreciation, expansion projects, payment of taxes, and a reasonable return on investment, and to petition the appropriate government body for the adoption of or increase in its schedule of bulk supply tariff rates.
6. Facilities and Installations. - To locate, establish, construct, equip, operate, use, manage and maintain thermal power plants, power grid stations, transforming, switching, conversion, and distribution facilities, grid stations, cables, overhead lines, substations, switching stations, tunnels, cable bridges, link boxes, telecommunications stations, masts, aerials and dishes, fiber optic circuits, satellites and satellite microwave connections, heat pumps, plant and equipment for combined heat and power schemes, offices, computer centers, shops, dispensing machines, for pre-payment cards and other devices, showrooms, depots, factories, workshops, plants, printing facilities, warehouses and other storage facilities (including but not limited to facilities for storage and disposal of products and waste), training, education and display centers, stands and show-houses, testing premises, laboratories, research stations, compressor stations, vehicle parks, terminals, transport facilities, roads, and other electrical installations and infrastructure it may deem beneficial to its business.
7. Acquisition and Conveyance of Assets. - To acquire or convey, whether by purchase, lease, concession, grant, hire or otherwise, establish, develop, exploit, operate and maintain real or personal properties including but not limited to land, any estates in land, claims, licenses, concessions, easements, exploration and production rights, and rights or interests of all descriptions in or relating to the same, which may seem to the Company capable or possibly capable of affording or facilitating the generation purchase, transformation, conversion, supply, distribution, and development of electricity or any other form of energy, and for the accomplishment of all the purposes of the Company herein stated.
8. Site Development. - To build, construct, maintain, alter, enlarge, pull down, and remove or replace structures, factories, offices, works, wharves, roads, railways, tramways, machinery, engines, walls, fences, banks, dams, sluices or water courses and to clear sites for the same and to work, manage and control the same and to carry on any other business which may seem to the Company capable of being conveniently carried on in connection with the above or calculated directly or indirectly to enhance the value of or render more profitable the Company's properties, but not to engage in the business of a real estate developer.

9. Intellectual Property Rights. - To apply for and take out, purchase or otherwise acquire any patents, patent rights, inventions, secret processes, designs, copyrights, trademarks, service marks, commercial names and designations, technological know-how, formulae, licenses, concessions and the like (and any interest in any of them), and exclusive or non-exclusive or limited rights to use any secret or other information as to any invention or secret process of any kind, and to use, exercise, develop, and grant licenses in respect of, and otherwise turn to account and deal with, the property, rights and information so acquired.
10. Metering. - For the purposes of electricity generation and supply, distribution and communication, to install in, on, above or under any premises or place and to operate, use, inspect, maintain, repair, replace and remove cables, lines, ducts, transformers, switchgear (remotely controlled and otherwise, and including time switches), fuses, circuit breakers, electricity service equipment, meters and other devices for measuring or controlling the quantity or quality of electricity supplied, prepayment and debt payment devices, items provided to afford access to, support, encase, insulate, and protect from damage or tampering, the above-mentioned gadgets, or to protect people and property from injury or damage, or to comply with any legal obligation and for other purposes associated with the generation and supply of electricity and to install all such things and apparatus and items for the purposes of generating, supplying, measuring and controlling light, heat, steam, hot water, air-conditioning and refrigeration, and for associated purposes, including payment for these facilities.
11. Demand Forecasting. - To provide or procure the provision of such facilities and services as may be necessary or desirable to forecast electricity/energy demand and to satisfy such demand.
12. Transportation. - To acquire, (whether by purchase, lease, concession, grant, hire or otherwise), charter, lease, take or let on hire, operate, use, employ or turn to account, build, equip, service, repair, maintain, and supply motor vehicles, railway locomotives, wagons, trucks, vessels, and craft of any description, engineering plants and machinery, and parts and accessories of all kinds, and to carry on the businesses of storage contractors, freight contractors, carriers by land, water and air, of freight and passengers, forwarding agents, shipping agents and agents of any other kind, in so far as such activities are incidental to or necessary for the generation, transformation, supply and distribution of electricity.
13. Audio-Visual System. - To carry on as principal, agent, contractor or sub-contractor all or any of the businesses of running, operating, managing, supplying and dealing in systems for the conveyance by any means of sounds, visual images, signals, and services, facilities and equipment ancillary to or for use in connection with such systems.
14. Management Information System. - To carry on all or any of the businesses of running, operating, managing, supplying and dealing in data processing and information retrieval systems, computers, computer programmes and software, computer bureau and data bases, meter reading and credit checking and to provide services, facilities and equipment ancillary to or for use in connection with the same.

15. **Research and Development.** - To carry on business as inventors, researchers and developers, to conduct, promote and commercial research and development in connection with the businesses and activities of the Company and its subsidiaries, to establish and maintain research stations, laboratories, workshops, testing and proving grounds and sites, facilities and establishments and installations, and to capture and claim to account the results of any research and development carried out by or for it.
16. **Labour Contracting.** - To carry on all or any of the businesses of consultants, advisers and suppliers of management, personnel and training services, whether generally or in respect of one or more of the types of business or activity which the Company has power to carry on, and to provide training and educational courses, instruction and materials of every description for workers of the Company and for other persons.
17. **Contracts.** - To enter into agreement with any individual, firm, cooperative or other society, company, corporate body, Government or local authority or other legal entity necessary or expedient for the purpose of carrying on any business of the Company.
18. **Employment of Engineers.** - To carry on all or any of the businesses of and provide services associated with engineers (including without limitation electrical, mechanical, heating, ventilation, civil, chemical, sanitation, telecommunications and other engineers), mechanics, technicians, draftsmen, designers, surveyors, architects, builders, installers, and shopfitters.
19. **Advertisement.** - To adopt such means of making known the products of the Company as may seem expedient and, in particular, by advertising in the press, by circulars, by purchase and exhibition of works of art or interests, by publication of booklets periodically, and by granting prizes, rewards and donations.
20. **Other Businesses.** - To carry on all or any of the businesses of manufacturers, wholesalers, retailers, and traders, whether generally or in relation to particular goods or commodities, and to carry on all or any of the businesses of factors, debt collectors, and developers of and dealers in property, so far as incidental to or necessary for the generation, transformation, distribution and supply of electricity.
21. **Borrowing.** - To borrow or raise money or secure or discharge any debt or obligation (whether of the Company or any other person) in such manner as the Company thinks fit and in particular (but without prejudice to the generality of the foregoing) by the creation or issue, upon such terms as to priority or otherwise as the Company thinks fit, of securities of any kind or mortgages or discharges founded or based upon all or any part of the undertaking, property, assets and rights (present and future) of the Company, or, without any such security, and advance payments with or without allowance of mark-up thereon.
22. **Bank Accounts.** - To open, operate, transfer, and close banking accounts of the Company with any bank or banks and to draw, make, accept, endorse, discount, execute, and issue promissory notes, bills of exchange, bills of lading, warrants, debentures, and other negotiable/non-negotiable or transferable/non-transferable instruments, but not to act as a finance or banking company.

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23. Guaranty and Suretyship. - To enter into any guarantee, contract of indemnity or suretyship and, in particular (without prejudice to the generality of the foregoing), to guarantee, support or secure, with or without consideration, whether by personal obligation or by mortgaging or charging all or any part of the undertaking, property and assets (present and future) and undistributed capital of the Company or by both such methods or in any other manner, the performance of any contract, obligation or commitment of, and the repayment or payment of the principal amounts of and any premiums, interest, dividends, and other moneys payable on or in respect of any securities or liabilities of, any person, including (without prejudice to the generality of the foregoing) any company which is a subsidiary, an affiliate or a holding company of the Company or otherwise associated with the Company, whether or not any valuable consideration or advantage is received by the Company.
24. Partnerships. - To enter into partnership, joint venture or cooperation arrangements with any person or company or other legal entity, local or foreign, carrying on or engaged in any business or transaction which the Company is authorized to carry on or engage in, or otherwise seek assistance from or assist any such person, company or legal entity.
25. Related Businesses. - To acquire by any means the whole or any part of the assets, and to undertake the whole or any part of the liabilities, of any person, natural or juridical, carrying on or proposing to carry on any business which the Company is authorized to carry on or which can be carried on in connection therewith, to acquire an interest in, amalgamate or enter into partnership or into any arrangement for sharing profits, cooperation, or mutual assistance, with any such person, to promote, form and sponsor any company or companies in furtherance of the objects herein stated, and to give or accept, for any of the acts or things aforesaid or property acquired, such consideration as the Company thinks fit, including without limitation, any shares, debentures, or other securities or rights.
26. Equity Investment. - To invest the surplus moneys of the Company not immediately required in any manner to subscribe for, purchase or otherwise acquire, and to hold, and deal with, any shares, debentures, bonds, notes, and other securities, obligations and investments of any nature whatsoever, including any options or rights in respect of them, and otherwise to invest and deal with the money and assets of the Company, but not to act as an investment company.
27. Lending. - To advance money or give credit to such persons or companies and on such terms as may seem expedient and, in particular, to customers and others having dealings with the Company, to guarantee the performance of any contract or obligation and the payment of money by the Company, and to accept securities of any person or any property or interest therein of whatever nature in payment or partial payment for any services rendered or for any sale or supply made to, or debt owing from, any such person, but not to act as a finance or banking company.
28. Trusts. - To vest any real or personal property, rights or interests acquired by or belonging to the Company in any person or company on behalf of or for the benefit of the Company, with or without any declared trust in favour of the Company, and to undertake and execute any trust the undertaking whereof may seem desirable, either gratuitously or otherwise.

29. **Portfolio Investments.** - Subject to such terms and conditions as may be thought advantageous, to trade its shares and to undertake markup and currency swaps, options (including traded options), swap option contracts, forward exchange contracts, futures contracts or other financial instruments allowed by law, including hedging agreements of any kind, all or any of which may be on a fixed and/or floating rate basis and/or in respect of local or foreign currency or commodities of any kind, but not to engage in the business of a stockbroker.
30. **Government Permissions.** - To apply for and obtain necessary consents, permissions and licenses from any Government, Provincial, Local, Foreign, Multilateral or other authorities or entities for enabling the Company to carry any of its objects into effect or for extending any of the powers of the Company or for effecting any modification of the constitution of the Company or for any other purpose which may seem expedient, and to enter into arrangements with any Government or authorities, foreign, federal, provincial, municipal, local or otherwise, public or quasi-public bodies, or with any other persons, in any place where the Company may have interests that may seem conducive to the objects of the Company or any of them and to obtain from any such Government, authorities or persons any rights, privileges and concessions which the Company may think fit to obtain, and to carry out, exercise and comply therewith.
31. **Dispute Resolution.** - To resolve disputes by negotiation, conciliation, mediation, arbitration, litigation or other means, judicial or extra-judicial, and to enter into compromise agreement with creditors, members and any other persons in respect of any difference or dispute with them and to exercise the power to sue and be sued and to initiate or oppose all actions, steps, proceedings or applications which may seem calculated directly or indirectly to benefit or prejudice, as the case may be, the interests of the Company or of its members.
32. **Employees' Funds.** - To establish and maintain or procure the establishment and maintenance of any contributory or non-contributory pension or superannuation funds for the benefit of, and give or procure the giving of donations, gratuities, pensions, allowances or emoluments to such persons who are or were at any time in the employ or service of the Company, or of any company which is a holding company or a subsidiary of the Company or is allied to or associated with the Company or with any such subsidiary or affiliate company, or who are or were at any time directors or officers of the Company or of any such other company as aforesaid, and the wives, widows, families and qualified dependents of any such persons, and also to establish, subsidize and subscribe to institutions, associations, clubs or funds calculated to be for the benefit of or to advance the interests and well-being of the Company or of any such other company as aforesaid, and make payments to or towards the insurance of any such person as aforesaid and do any of the matters aforesaid, either alone or in conjunction with any such other company as aforesaid.
33. **Remuneration.** - To enter into contracts with its salaried employees, including a chief executive who, prior to his appointment as such, was not a director of the Company or of its subsidiary or holding Company, and to provide for such other financial assistance to said employees or workers under personnel rules and regulations that the Company may subsequently adopt.

34. Commissions. - To pay and discharge all or any expenses, costs and disbursements, and to pay commissions and to remunerate any person for services rendered or to be rendered in connection with the formation, registration, promotion and flotation of the Company and any company formed, sponsored, registered, and promoted by the Company or incidental to any negotiations between promoters preliminary to the formation of the Company, and the underwriting, placing or issue at any time of securities of the Company or of any other person plus all costs and expenses incurred in the acquisition of any property or assets, including the accomplishment of all or any formalities which the Company may think necessary or proper in connection with any of the matters aforesaid.
35. Charitable Contributions. - To subscribe or contribute (in cash or in kind) surplus properties to, and to promote or sponsor, any charitable, eleemosynary, scientific, educational, benevolent or useful object of a public character or any object which may in the opinion of the Company be likely, directly or indirectly, to further the interests of the Company, its employees and workers or its members, and to receive donations and grants, in cash or in kind, whether absolutely gratuitous or otherwise, which it may deem beneficial to its business, employees or shareholders.
36. Dissolution and Winding Up. - To cease carrying on or wind up any business or activity of the Company and to cancel any registration of and to wind up or procure the dissolution of the Company in any state or territory.
37. Equity Conversion. - To issue, allot and grant options over securities of the Company towards the satisfaction of any liability or obligation undertaken or agreed to be undertaken by or for the benefit of the Company, or in consideration of any obligation or for any other similar purpose.
38. International Operations. - To procure the Company to be registered or recognized in any part of the world and to do all or any of the above things in any part of the world, either as principal, agent, trustee, contractor or otherwise, alone or in collaboration with another, and either by or through agents, trustees, sub-contractors, subsidiaries or otherwise.
39. Disposal of Assets and Declaration of Dividends. - To dispose by any means of the whole or any part of the assets of the Company or of any interest therein and to distribute in specie or otherwise by way of dividends or bonus or reduction of capital all or any of the property or assets of the Company among its members, and particularly, but without prejudice to the generality of the foregoing, securities of any other company formed to take over the whole or any part of the assets or liabilities of the Company or any proceeds of sale or other disposal of any property or assets of the Company.
40. Insurance. - To insure the property, assets, and employees of the Company in any manner deemed fit by the Company, and to create any reserve fund, sinking fund, insurance fund or any other special fund whether for depreciation or for repairing, insuring, improving, extending or maintaining any of the properties of the Company or for any other purpose conducive to the interests of the Company, but not to act as an insurance company.

41. Regulations. - To make rules or regulations not inconsistent with this Memorandum and to provide for all matters for which provision is necessary or expedient for the purpose of giving effect to the provisions of this Memorandum and the efficient conduct of the affairs of the Company.
42. General Power. - To carry on any other businesses or activities which the Directors consider capable of being carried on directly or indirectly for the benefit of the Company and to do all such other things as may be deemed incidental or conducive to the attainment of the above objects or any of them.

Declaration. It is hereby declared that:

- (a) the word "company" in this Memorandum of Association, except where used in reference to this Company, shall be deemed to include any partnership or other body of persons, whether corporate or unincorporated, and whether domiciled in Pakistan or elsewhere;
- (b) the objects specified in each of the paragraphs of this clause shall be regarded as independent objects and, accordingly, shall in no way be limited or restricted (except where otherwise expressed in such paragraphs) by reference to or inference from the terms of any other paragraph or the name of the Company, but may be carried out in as full and ample a manner and construed in as wide a sense as if each of the said paragraphs defined the objects of a separate and distinct company;
- (c) the headings used in each of the paragraphs of this clause are for convenience only and are not intended to affect the construction thereof in any way; and,
- (d) notwithstanding anything contained in the foregoing object clauses of this Memorandum of Association, nothing herein shall be construed as empowering the Company to undertake or indulge in the business of managing agency, banking or financing institution, leasing, investment, or real estate brokerage or insurance, directly or indirectly, as restricted by law or in any unlawful operations.

IV. The liability of the members is limited.

V. The authorized share capital of the Company shall be Rs. 50,000,000,000 (Rupees Fifty billion) divided into 5,000,000,000 (five billion) ordinary shares of Rs. 10 (Rupees Ten) each with power to increase or reduce the capital and to divide the shares in the capital for the time being into several classes and to attach thereto respectively such rights, privileges or conditions as may be determined by or in accordance with the regulations of the Company, and to vary, modify or abrogate any such rights, privileges or conditions in such manner as may for the time being be provided by the regulations of the Company in accordance with law; provided, however, that rights as between various classes of ordinary shares, if any, as to profits, votes and other benefits shall be strictly proportionate to the paid-up value of shares.

We, the several persons whose names and addresses are subscribed below, are desirous of being formed into a company in pursuance of this Memorandum of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names

Name and surname (Present and former) in full (in Block Letters)	Father's/ Husband's Name in Full	Nationality	Occupation	Residential Address	Number of Shares taken by each Subscriber	Signature
1. Ch. Arshad Zaman	Ch. Sher Zaman	Pakistani	Wapda Service	75, Bahar Block, New Gardens Town, Lahore.		
2. Mr. Muhammad Qasim Shaikh	Haji Noor Muhammad Shaikh	Pakistani	Wapda Service	Bachelor Officers Hostel, Thermal Colony, Nishtarabad, Faisalabad		
3. Mr. Muhammad Maqbool Anjum	Ch. Imam Din	Pakistani	Wapda Service	54-Nishtar Block, Alama Iqbal Town, Lahore.		
4. Mr. Mansoor Ali Sheikh	Muhammad Ali Sheikh	Pakistani	Wapda Service	2-C, Audit Officers Colony, Building III, Lahore		
5. Mr. Akhtar Pervez Akhtar	Ch. Muhammad Ibrahim	Pakistani	Wapda Service	13, Daood Street No 21, Wasanpura Lahore.		
6. Brig. Saeed Ahmad Rafi	Muhammad Ajaib	Pakistani	Wapda Service	B-33, Upper Mall, Wapda Colony, Lahore.		
7. Mr. Noor Elahi Baig	M. Fazal Elahi Baig	Pakistani	Wapda Service	B-2, Shalamar Grid Station, Wapda Colony, Lahore.		

Total number of shares taken 7 (Seven)

Dated the \_\_\_\_\_ day of \_\_\_\_\_, 199

Witness to the above signatures

(Full Name, Father's/Husband's Name)

(in Block Letters) \_\_\_\_\_

**Certified to be true Copy**

Signature \_\_\_\_\_

Occupation \_\_\_\_\_

Full Address \_\_\_\_\_

Deputy Registrar of Companies  
Company Registration Office  
Government of Pakistan  
Lahore.



THE COMPANIES ORDINANCE 1984  
PUBLIC COMPANY LIMITED BY SHARES  
ARTICLES OF ASSOCIATION

-of-

NORTHERN POWER GENERATION COMPANY LIMITED



I. PRELIMINARY

1. TABLE "A" Not to Apply

The regulations in Table 'A' in the First Schedule to the Companies Ordinance, 1984 shall not apply to the Company except as reproduced herein.

2. Definitions

Unless the context otherwise requires, capitalized terms used in these Articles shall have the meanings set out below:-

- (a) "Articles" mean these Articles as originally framed or as from time to time altered in accordance with law.
- (b) "Board" means the group of Directors in a meeting duly called and constituted or, as the case may be, the Directors assembled at a board.
- (c) "Company" means Northern Power Generation Company Limited.
- (d) "Directors" means the Directors for the time being of the Company as named in Article 49 and, subsequently, such members duly elected and registered pursuant to Sections 178 and 205, respectively.
- (e) "Month" means calendar month according to the Gregorian calendar.
- (f) "Office" means the registered office for the time being of the Company.
- (g) "Ordinance" means the Companies Ordinance, 1984, or any modification or re-enactment thereof for the time being in force.
- (h) "Ordinary Resolution" means a resolution passed at a general meeting of the Company when the votes cast (whether *viva voce*, by show of hands or by poll) in favour of a resolution by members who, being entitled to vote in person or by proxy, do so vote, exceed the number of votes, if any, cast against the resolution by members so entitled and voting.

- (i) "Register" means, unless the context otherwise requires, the register of members to be kept pursuant to Section 147 of the Ordinance
- (j) "Seal" means the common or official seal of the Company.
- (k) "Section" means a Section of the Ordinance.
- (l) "Special Resolution" means the special resolution of the Company as defined in Section 2(1)(36) of the Ordinance.

### 3. Interpretation

In these Articles, unless the context otherwise requires:-

- (a) provisions bearing on transfer or transmission of shares, meetings, voting in person or by proxy, management, and the appointment, powers and removal of Directors and employees of the Company shall be read subject to the provisions of Section 183 relating to the power of control by a holding company over its subsidiary; the headings are for convenience only and do not constitute part of these Articles and shall not be used in construing these Articles;
- (b) the singular includes the plural and vice versa and words denoting any gender shall include all genders;
- (c) references to any Act, Ordinance, legislation, Rules or Regulations or any provision of the same, shall be a reference to that Act, Ordinance, legislation, Rules or Regulations or provision, as amended, re-promulgated or superseded from time to time;
- (d) the terms "include" or "including" shall mean include or including without limitation;
- (e) expressions referring to writing shall, unless the contrary intention appears, be construed as including references to printing, lithography, photography, and other modes of representing or reproducing words in a visible form;
- (f) words importing persons shall include bodies corporate; and
- (g) words and expressions contained in these Articles shall bear the same meaning as in the Ordinance.

## II. BUSINESS

### 4. Public Company

The Directors shall have regard to the restrictions on the commencement of business imposed by Section 146 if, and so far as, those restrictions are binding upon the Company.

### III. SHARES

#### A. General

#### 5. Shares Under Directors' Control

Subject to Section 183 and these Articles, the shares of the Company shall be under the control of the Directors who may allot or otherwise dispose of the same to such persons, on such terms and conditions as the Directors think prudent.

#### 6. Amount Payable on Application

No shares shall be offered to the public for subscription except upon the term that the amount payable on application shall not be less than the full amount of the nominal amount of the share.

#### 7. Allotment of Shares

No share shall be issued at a discount except in accordance with the provisions of the Ordinance. The Directors shall, as regards any allotment of shares, duly comply with such of the provisions of Sections 68 to 73, as may be applicable to the Company. The minimum subscription upon which the Company may proceed to allot the shares shall be Rs 500,000.

#### 8. Share Certificates

Every person whose name is entered as a member in the Register shall, free of charge, be entitled to receive within ninety (90) days after allotment or within forty-five (45) days of the application for registration of transfer, a certificate under Seal specifying the share or shares held by him and the amount paid-up thereon, including in particular and without limitation, such legends as the Company shall be obliged to affix to certain classes of share certificates as provided by law or as the Company shall have agreed to affix pursuant to any contractual arrangement in this respect; Provided, that in respect of share or shares held jointly by several persons, the Company shall not be bound to issue more than one certificate, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all.

#### 9. Certificate under Seal

The certificate of title to shares may be issued under the authority of a Director or of a committee of Directors duly authorized thereto by the Board in such manner and form as the Directors may from time to time prescribe. The Seal shall be duly affixed to every share certificate issued by the Company.

#### 10. Issuance of Replacement Certificate

If a share certificate is defaced, lost or destroyed, it may be renewed on payment by the requesting shareholder or his representative of such fee and stamp taxes, if any, and compliance with such terms prescribed by the Directors as to evidence and indemnity and payment of expenses incurred by the Company in investigating title.

11. Joint Holders

The Company shall not be bound to register more than four persons as joint holders of any share.

12. Trusts Not Recognized

Except as required by law, no person shall be recognized by the Company as holding any share/s upon any trust, and the Company shall not be bound by or be compelled in any way to recognize (even when having notice thereof) any equitable, contingent, future or partial interest in any share or any interest in any fractional part of a share or (except only as by these Articles or by law otherwise provided) any other rights in respect of any share except an absolute right to the entirety thereof in the registered holder.

13. Payment of Commission

The Company may at any time pay a commission to any person for subscribing or agreeing to subscribe (whether absolutely or conditionally) for any shares, debentures or debenture stock in the Company or procuring or agreeing to procure subscriptions (whether absolutely or conditionally) for any shares, debentures or debenture stock in the Company; Provided, that, if the commission in respect of shares shall be paid or payable out of capital, the statutory requirements and conditions shall be observed and complied with, and the amount or rate of commission shall not exceed such percentage on the shares, debentures or debenture stock in each case subscribed or to be subscribed, as may be determined by the Board subject to any limits required by law. The commission may be paid or satisfied, either wholly or partly, in cash or in shares, debentures or debenture stock. The Company may also on any issue of shares pay such brokerage fees as may be lawful; provided that such brokerage fees shall not exceed such percentage of the shares, debentures or debenture stock paid-up as may be determined by the Board, subject to any limits required by law.

14. Bar on Use of Company Funds

Except to the extent and in the manner allowed by Section 95, no part of the funds of the Company shall be employed in the purchase of, or in loans upon the security of, the Company's shares.

B. TRANSFER OF SHARES

15. Transfer

The instrument of transfer of any share in the Company shall be executed both by the transferor and transferee, and the transferor shall be deemed to remain the holder of the share until the name of the transferee is entered in the Register in respect thereof.

16. Form of Transfer

Shares in the Company shall be transferred in the following form, or in any usual or common form which the Directors shall approve:-

## Northern Power Generation Company Limited

I/We \_\_\_\_\_, of \_\_\_\_\_, in consideration of the sum of Rupees \_\_\_\_\_ paid to me by \_\_\_\_\_, of \_\_\_\_\_ (hereinafter called the "Transferee/s", for brevity), do hereby transfer to the Transferee/s the Ordinary/Preferred Share(s) numbered \_\_\_\_\_ to \_\_\_\_\_ inclusive, standing in my/our name in the books of the Northern Power Generation Company Limited; to hold unto the said Transferee, his/her/their executors, administrators and assigns, subject to the several conditions on which I/We held the same at the time of the execution hereof, and I/We, the Transferee/s, do hereby agree to take the said share (s) subject to the conditions aforesaid.

Witness our hands this \_\_\_\_\_ day of \_\_\_\_\_, 1998.

Transferor

Transferee

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Signed by the above-named Transferor/s and Transferee/s in the presence of:

Witnesses

Full Name, Father's/  
Husband's Name

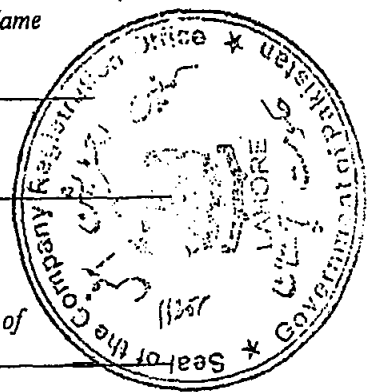
(1) \_\_\_\_\_  
Signature

Nationality \_\_\_\_\_

Full Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Occupation \_\_\_\_\_

Full Address of  
Transferee: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



(2) \_\_\_\_\_  
Signature

Full Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Occupation \_\_\_\_\_

17. Non-Refusal of Transfer of Shares

The Directors shall not transfer any fully paid shares if the transfer deed is defective or invalid. The Director may decline to recognize any instrument of transfer, unless—

(a) a fee not exceeding two rupees as may be determined by the Directors and the appropriate stamp tax is paid to the Company in respect thereof, and

(b) the duly stamped instrument of transfer is accompanied by the certificate of the shares to which it relates, and such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer.

If the Directors refuse to register a transfer of shares, they shall within one Month after the date of which the transfer deed was lodged with the Company send to the transferee and the transferor notice of the refusal indicating the defect, invalidity or any ground for objection to the transferee, who shall, after removal of such defect or invalidity be entitled to re-lodge the transfer deed with the Company.

18. Closure of Register

On giving seven days' prior notice in the manner provided by the Ordinance, the Register may be closed for such period or periods not exceeding forty-five (45) days in any one year as the Directors may from time to time determine; however, the Register shall not be closed for a period longer than thirty (30) days at any given time.

C. TRANSMISSION OF SHARES

19. Transmission

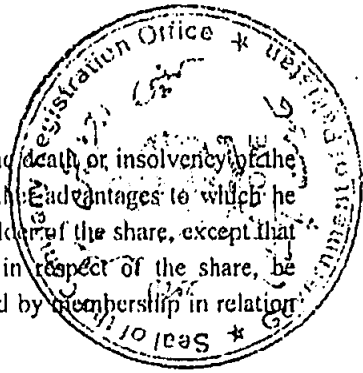
The executors, administrators, heirs or nominees, as the case may be, of a deceased sole holder of a share shall be the only persons recognized by the Company as having any title to the share. In the case of a share registered in the names of two or more holders, the survivor or survivors shall upon proof of his right of succession be the only person or persons recognized by the Company as having any title to the share.

20. Election to Register or Transfer

Any person becoming entitled to a share in consequence of the death or insolvency of a member shall, upon such evidence being produced as may from time to time be required by the Directors, have the right, either to be registered as a member in respect of the share or, instead of being registered himself, to make such transfer of the share as the deceased or insolvent person could have made. The Directors shall, in either case, have the same right to decline or suspend registration as they would have had in the case of a transfer of the share by the deceased or insolvent person before the death or insolvency.

21. Rights of Person Entitled by Transmission

A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would have been entitled if he were the registered holder of the share, except that he shall not, before being registered as a member in respect of the share, be entitled in respect of it to exercise any right conferred by membership in relation to meetings of the Company.



D. ALTERATION OF CAPITAL

22. Power to Increase Capital

The Company may, from time to time, by ordinary resolution, increase the share capital by such sum to be divided into shares of such amount as the resolution shall prescribe.

23. Further Issue of Capital

All further issue of share capital shall be subject to the applicable provisions of Section 86. Thereafter, the Directors may dispose of the same in such manner as they think most beneficial to the Company.

24. Provisions Applicable to New Shares

The new shares capital shall be subject to the same provisions with reference to transfer and transmission as the original share capital.

25. Consolidation and Subdivision

The Company may, by ordinary resolution:-

- (a) consolidate and divide its share capital into shares of larger amount than its existing shares;
- (b) subdivide its existing shares or any of them into shares of smaller amount than that fixed by the Company's Memorandum of Association, subject to the provisos to Section 92, sub-section (1), clause (d); or
- (c) cancel any shares which, at the date of the passing of the resolution, have not been taken or agreed to be taken by any person.

26. Reduction of Share Capital

The Company may, by Special Resolution, reduce its share capital in any manner, with and subject to any incident authorized and consent required by law.

#### IV. MEETINGS AND PROCEEDINGS

##### A. GENERAL MEETINGS

###### 27. Statutory Meeting

The statutory meeting of the Company shall be held within the period required by Section 157.

###### 28. Annual General Meeting

The annual general meeting shall be held in accordance with the provisions of Section 158, within eighteen (18) Months from the date of incorporation of the Company and, thereafter, once at least in every year within a period of six Months following the close of its financial year and not later than fifteen Months after the holding of its last preceding annual general meeting, as may be determined by the Directors.

###### 29. Other Meetings

All general meetings of the Company other than the statutory meeting or an annual general meeting shall be called extraordinary general meetings.

###### 30. Extraordinary Meetings

The Directors may whenever they think necessary, call an extraordinary general meeting. Extraordinary general meetings may also be called on such requisition, or in default, may be called by such requisition, as provided under Section 159. If at any time there are not within Pakistan sufficient Directors capable of acting to form a quorum, any Director of the Company may call an extraordinary general meeting in the same manner as nearly as possible as that in which meetings may be called by the Directors.

##### B. Notice and Proceedings

###### 31. Notice of Meetings

Twenty-one days' notice at the least (exclusive of the day on which the notice is served or deemed to be served, but inclusive of the day for which notice is given) specifying the place, the date and the hour of meeting and, in case of special business, the general nature of that business, shall be given in the manner provided by the Ordinance for the general meeting to such persons as are, under the Ordinance or the regulations of the Company, entitled to receive such notices from the Company.

###### 32. Special Business

All business shall be deemed special that is transacted in an extraordinary general meeting and those transacted in an annual general meeting, with the exception of declaration dividends, the consideration of the accounts, balance sheet and the reports of the Directors and auditors, the election of Directors, and the appointment and fixing of the remuneration of auditors.



33. Quorum

No business shall be transacted at any general meeting unless a quorum of members is present at that time when the meeting proceeds to business. Three members present personally who represent not less than twenty-five percent of the total voting power either on their own account or as proxies shall be a quorum.

34. Effect of Quorum Not Being Present

If within half an hour from the time appointed for the meeting a quorum is not present, the meeting, if called upon the requisition of members, shall be dissolved; In any other case, it shall stand adjourned to the same day in the next week at the same time and place, and, if at the adjourned meeting a quorum is not present within half an hour from the time appointed for the meeting, the members present, being not less than three, shall be a quorum.

35. Chairman of Meeting

The Chairman of the Board of Directors, if any, shall preside as chairman at every general meeting of the Company, but if there is no such Chairman, or if at any meeting he is not present within fifteen minutes after the time appointed for the meeting, or is unwilling to act as chairman, any one of the Directors present may be elected to be the chairman, and if none of the Directors is present, or willing to act as chairman, the members present shall choose one of their number to be the chairman.

36. Adjournment

The Chairman may, with the consent of any meeting at which a quorum is present (and shall if so directed by the majority of members present), adjourn the meeting from time to time but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place. When a meeting is adjourned for ten days or more, notice of the adjourned meeting shall be given as in the case of an original meeting. Save as aforesaid, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.

37. Voting

A resolution put to the vote in any general meeting shall be decided on a show of hands unless a poll is (before or on the declaration of the result of the show of hands) demanded. Unless a poll is so demanded, a declaration by the Chairman that a resolution has, on a show of hands, been carried, or carried unanimously, or by a particular majority, or lost, and an entry to that effect in the minutes of the proceedings of the Company shall be conclusive evidence of the fact, without proof of the number or proportion of the votes recorded in favor of, or against, that resolution.

38. Demand for a Poll

A poll may be demanded only in accordance with the provisions of Section 167.

39. Manner of Taking a Poll

If a poll is duly demanded, it shall be taken in accordance with the manner laid down in Section 168 and the result of the poll shall be deemed to be the resolution of the meeting at which the poll was demanded.

40. Time of Taking a Poll

A poll demanded on the election of Chairman or on a question of adjournment shall be taken at once.

41. Casting Vote

In the case of an equality of votes, whether on a show of hands or on a poll, the chairman of the meeting at which the show of hands takes place, or at which the poll is demanded, shall have and exercise a second or casting vote.

C. Votes of Members

42. Right to Vote

Subject to any rights or restrictions for the time being attached to any class or classes of shares, on a show of hands every member present in person shall have one vote except for election of Directors in which case the provisions of Section 178 shall apply. On a poll, every member shall have voting rights as laid down in Section 169.

43. Voting By Joint Holders

In case of joint-holders, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint-holders. For this purpose, seniority shall be determined by the order in which the names stand in the Register.

44. Voting; Corporation Representatives

On a poll, votes may be given either personally or by proxy; Provided, that, no body corporate shall vote by proxy as long as a resolution of its directors in accordance with the provisions of Section 162 of the Ordinance is in force.

45. Proxy to be in Writing

The instrument appointing a proxy shall be in writing under the hand of the principal to his attorney duly authorized in writing. A proxy must be a member of the Company.

46. Instrument Appointing Proxy to be Deposited

The instrument appointing a proxy and the power-of-attorney or other authority (if any) under which it is signed, or a notarially certified copy of that power or authority, shall be deposited at the Office of the Company not less than forty-eight (48) hours before the time for holding the meeting at which the person named in the instrument proposes to vote and in default the instrument of proxy shall not be treated as valid.

47. Form of Proxy

An instrument appointing a proxy may be in the following form, or a form as near thereto as may be:

**NORTHERN POWER GENERATION COMPANY LIMITED**

I, \_\_\_\_\_, of \_\_\_\_\_, in the District of \_\_\_\_\_, being a member of Northern Power Generation Company Limited, hereby appoint \_\_\_\_\_ of \_\_\_\_\_, as my proxy to vote for me and on my behalf at the (annual/extraordinary as the case may be) general meeting of the Company to be held on the \_\_\_\_\_ day of \_\_\_\_\_ and at any adjournment thereof.

48. Revocation of Authority

A vote given in accordance with the terms of an instrument of proxy shall be valid notwithstanding the previous death or insanity of the principal or revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the share in respect of which the proxy is given; Provided, that, no intimation in writing of such death, insanity, revocation or transfer as aforesaid shall have been received by the Company at its Office before the commencement of the meeting or adjourned meeting at which the proxy is used.

**V. MANAGEMENT AND ADMINISTRATION**

A. Board of Directors

49. Number of Directors

The number of Directors shall not be less than seven. The first Directors, to hold office until the first annual general meeting, shall be:-

- (1) Ch. Arshad Zaman
- (2) Mr. Muhammad Qasim Shaikh
- (3) Mr. Muhammad Maqbool Anjum
- (4) Mr. Mansoor Ali Sheikh
- (5) Mr. Akhtar Pervez Akhtar
- (6) Brig. Saeed Ahmad Rafi
- (7) Mr. Noor Elahi Baig

50. Qualification of Directors

Save as provided in Section 187, no person shall be appointed as a Director unless he is a member of the Company.

51. Chairman of the Board

The Directors may elect one of their number as the Chairman of the Board and vest in him such powers and functions as they may deem fit in relation to the management and administration of the affairs of the Company subject to their general supervision and control.

52. Chief Executive

The Directors may elect one of their number to be the Chief Executive of the Company in accordance with the provisions of Sections 198 and 199 and vest in him such powers and functions as they deem fit in relation to the management and administration of the affairs of the Company subject to their general supervision and control. The Chief Executive of the Company shall be the *ex-officio* Vice-Chairman of the Board. The provisions of the Ordinance shall be observed regarding other matters relating to the Chief Executive.

53. Remuneration

Subject to any approval or limits required by law, the terms and conditions and remuneration of:-

- (a) Director for performing extra services, including the holding of the office of Chairman;
- (b) the Chief Executive; and
- (c) any Director for attending the meetings of the Directors or a Committee of Directors shall be determined by the Board of Directors.

54. Alternate Director

A Director may, with the approval of the Board, appoint any person (including another Director) to be his alternate Director and such an alternate Director shall be entitled to notice of meetings of the Directors and to attend and vote thereat accordingly and, generally, to exercise all the rights of such absent Director subject to any limitations in the instrument appointing him. For the purposes of the proceedings at such meetings, the provisions of these Articles shall apply as if any alternate Director (instead of his appointer) were a Director. An alternate Director shall not require any share qualification and he shall *ipso facto* vacate office as and when his appointer (a) vacates office as a Director; (b) removes the appointee from office; or (c) returns to Pakistan; Provided, that, upon each occasion upon which the appointer thereafter leaves Pakistan again, and unless the appointer shall have informed the Company to the contrary, he shall be deemed to have re-appointed the appointee as his alternate Director and no further approval of the Board shall be required unless the appointer desires to approve another person not previously approved by the Board as his alternate. If an alternate Director shall be himself a Director, his voting rights shall be cumulative but he shall not be counted as more than one for quorum purposes. Any appointment or removal under this Article shall be reflected by notice in writing under the hand of the Director making the same.

## B. POWERS AND DUTIES OF DIRECTORS

### 55. General Management Powers

The business of the Company shall be managed by the Directors, who may exercise all such powers of the Company as are not by the Ordinance or by these regulations, required to be exercised by the Company in general meeting, subject nevertheless to the provisions of the Ordinance or to any of these Articles, and such regulations being not inconsistent with the aforesaid provisions, as may be prescribed by the Company in a general meeting, but no regulation made by the Company in general meeting shall invalidate any prior act of the Directors which would have been valid if that regulation had not been made.

### 56. Borrowing Powers

The Directors may exercise all the powers of the Company to raise money otherwise than by issue of shares and to mortgage, charge, pledge, hypothecate or otherwise create an encumbrance on its undertaking or any part thereof and to issue debentures and other securities whether outright or as security for any obligation, liability or debt of the Company or of any third party. In exercising the aforesaid powers of the Company the Directors may, from time to time and on such terms and conditions as they think fit, raise money from banks and financial institutions and from other persons under any permitted system of financing, whether providing for payment of interest or some other form of return, and in particular the Directors may raise money on the basis of mark-up price, musharika, modaraba or any other permitted mode of financing, and without prejudice to the generality of the foregoing, the Directors may exercise all or any of the powers of the Company under Section 196(2) of the Ordinance. In particular, the Directors may issue any security as defined in Section 2(1)(34) of the Ordinance or may issue any instrument or certificate representing redeemable capital as defined in 2(1)(30A) of the Ordinance or participatory redeemable capital as defined in Section 2(1)(25) of the Ordinance.

### 57. Duties of Directors

The Directors shall duly comply with the provisions of the Ordinance.

### 58. Minute Books

The Directors shall cause minutes to be made in books provided for the purpose of:-

- (a) all appointments of officers made by the Directors;
- (b) the names of the Directors present at each meeting of the Directors and of any committee of the Directors; and
- (c) all resolutions and proceedings at all meetings of the Company and of the Directors and of committees of Directors; and every Director present at any meeting of Directors or committee of Directors shall sign his name in a book to be kept for that purpose.

C. DISQUALIFICATION OF DIRECTORS

59. Disqualification of Directors

No person shall become a Director of the Company if he suffers from any of the disabilities or disqualifications mentioned in Section 187 of the Ordinance and, if already a Director, shall cease to hold such office from the date he so becomes disqualified or disabled or:-

- (a) if removed by general or special order of the holding company;
- (b) if removed by a resolution of members as hereinafter provided; or
- (c) if by notice in writing given to the Company he resigns his office;

Provided, however, that no Director shall vacate his office by reason only of his being a member of any company which has entered into contracts with, or done any work for, the Company but such Director shall not vote in respect of any such contract or work, and if he does so vote, his vote shall not be counted.

D. PROCEEDINGS OF DIRECTORS

60. Meetings of Directors

- (a) The Directors may meet together for the dispatch of business, adjourn and otherwise regulate their meetings, as they deem proper. Questions arising at any meeting shall be decided by a majority of votes. In case of an equality of votes, the Chairman shall have and exercise a second or casting vote. A Director may, and the secretary on the requisition of a Director shall, at any time, summon a meeting of Directors. Seven (7) days' notice at the least, exclusive of the day on which the notice is served or deemed to be served, but inclusive of the day for which notice is given, shall be given for a meeting of Directors; Provided, that, if all the Directors entitled to attend and vote at any such meeting so agree, in writing, a meeting may be held of which less than seven (7) days' notice has been given.
- (b) The quorum for the meeting of directors shall not be less than one third of their number or four, whichever is greater.
- (c) A meeting of the Directors may consist of a conference between Directors, some or all of whom are in different places; Provided, that, each Director who participates is able to hear each of the other participating Directors addressing the meeting and, if he so wishes, to address each of the other participating Directors simultaneously, whether directly, by conference telephone or by any other form of communications equipment (whether in use when this Article 60(c) is adopted or developed subsequently) or by a combination of methods. A quorum shall be deemed to be present if those conditions are satisfied in respect of the minimum number and designation of Directors required to form a quorum. A meeting held in this way shall be deemed to take place at the place where the largest group of Directors is assembled or, if no such group is readily identifiable, at the place from where the Chairman participates. Any Director may, by prior notice to the Secretary, indicate that he wishes to participate in the meeting in such manner, in which event, the Directors shall procure that an appropriate conference facility is arranged.

61. Chairman of Directors' Meetings

The Chairman of the Board shall preside at all meetings of the Board but, if at any meeting the Chairman is not present within ten minutes after the time appointed for holding the same or is unwilling to act as Chairman, the Directors present may choose one of their number to be chairman of the meeting.

62. Committees

The Directors may delegate any of their powers not required to be exercised in their meeting to committees consisting of such member or members of the body as they think fit. Any committee so formed shall, in the exercise of the powers so delegated, conform to any restrictions that may be imposed on it by the Directors.

63. Chairman of Committee Meetings

A committee may elect a chairman of its meetings but, if no such chairman is elected, or if at any meeting the chairman is not present within ten minutes after the time appointed for holding the same or is unwilling to act as chairman, the members present may choose one of their number to be chairman of the meeting.

64. Proceedings of Committee Meetings

A committee may meet and adjourn as it thinks fit. Questions arising at any meeting shall be determined by a majority of votes of the members present. In case of an equality of votes, the chairman shall have and exercise a second or casting vote.

65. Validity of Directors' Acts

All acts done in any meeting of the Directors or of a committee of Directors shall, notwithstanding that it be afterwards discovered that there was some defect in the appointment of such Directors or that they or any of them were disqualified, be as valid as if every such person had been duly appointed and was qualified to be a Director unless the said act or acts is *ultra vires* in itself.

66. Resolution in Writing

A resolution in writing circulated to all the Directors and signed by a majority of the total number of Directors or affirmed by them through fax, telex or telegram shall be as valid and effectual as if it had been passed at a meeting of the Directors duly convened and held.

E. ELECTION AND REMOVAL OF DIRECTORS

67. Rotation of Directors

At the first annual general meeting of the Company, all the Directors shall retire from office, and Directors shall be elected in their place in accordance with Section 178 for a term of three years.

68. Eligibility for Re-election

A retiring Director shall be eligible for re-election.

69. Election in Accordance with the Ordinance

The Directors shall comply with the provisions of Sections 174 to 178 and Sections 180 and 184 relating to the election of Directors and matters ancillary thereto.

70. Filling of Casual Vacancy

Any casual vacancy occurring in the Board of Directors may be filled by the Directors, but the person so chosen shall be subject to retirement at the same time as if he had become a Director on the day on which the Director in whose place he is chosen was last elected as Director.

71. Removal of Director

The Company may remove a Director but only in accordance with the provisions of the Ordinance.

VI. THE SEAL

72. Common Seal

The Directors shall provide a common seal of the Company which shall not be affixed to any instrument except by the authority of a resolution of the Board or by a committee of Directors authorized in that behalf by the Board. Two (2) Directors or one Director and the secretary of the Company shall sign every instrument to which the common seal is affixed.

73. Official Seal

The Directors may provide for the use in any territory, district or place not situated in Pakistan, of an official seal which shall be a facsimile of the common seal of the Company, with the addition on its face of the name of every territory, district or place where it is to be used. The provisions of Section 213 shall apply to the use of the official seal.

VII. DIVIDENDS AND RESERVE

74. Declaration of Dividends

The Company in general meeting may declare dividends but no dividend shall exceed the amount recommended by the Board.

75. Interim Dividends

The Board may from time to time direct payment to the members or to the holding company such interim dividends as appear to be justified by the distributable profits of the Company.



76. Dividends Payable Out of Profits

No dividends shall be paid otherwise than out of distributable profits of the year or any other undistributed profits. No unpaid dividend shall bear interest against the Company.

77. Dividends Payable on Amount Paid on Shares

All dividends shall be declared and paid according to the amounts paid on the shares.

78. Reserve Fund

The Directors may, before recommending any dividend, set aside out of the profits available for distribution of the Company such sums as they think proper as a reserve or reserves which shall, at the discretion of the Directors, be applicable for meeting contingencies, or for equalizing dividends, or for any other purpose to which the profits of the Company may be properly applied, and pending such application may either be employed in the business of the Company or be invested in such investments (other than shares of the Company) as the Directors may, subject to the provisions of the Ordinance, from time to time think fit.

79. Profit Carried Forward

The Directors may carry forward any profits which they may think prudent not to distribute, without setting them aside as a reserve.

80. Payment of Dividends Specie

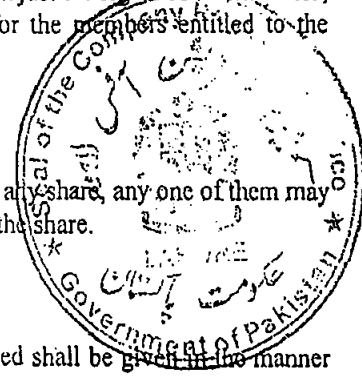
With the sanction of a resolution in a general meeting, any dividend may be paid wholly or in part by the distribution of specific assets and in particular of paid-up shares or debentures of any other company or in any one or more of such ways. The Directors may fix the value for distribution of such specific assets or any part thereof and may determine that cash payments shall be made to any members upon the footing of the value so fixed, in order to adjust the rights of all members, and may vest any such specific assets in trust for the members entitled to the dividend as may seem expedient to the Directors.

81. Dividends to Joint Holders

If several persons are registered as joint holders of any share, any one of them may give effectual receipt for any dividend payable on the share.

82. Notice of dividend

Notice of any dividend that may have been declared shall be given in the manner hereinafter mentioned to the persons entitled thereto. The Company may give such notice by publication in a newspaper of general circulation in the Province where the Office is situated.



83. Period for Payment of Dividends

Dividends shall be paid within the period specified in Section 251.

**VIII. ACCOUNTS**

84. Books of Account

The Directors shall cause to be kept proper books of account as required under Section 230.

85. Place Where Accounts Kept

The books of account shall be kept at the Office or at such other place as the Directors shall think fit and shall be open to inspection by the Directors during business hours.

86. Inspection by Members

The Directors, or their representatives, shall from time to time determine whether and to what extent and at what time and place/s and under what conditions or regulations the accounts and books or papers of the Company or any of them shall be open to the inspection of members not being Directors. No member (not being a Director) shall have any right of inspecting of any account and book or papers of the Company, except as conferred by law or authorized by the Directors or by the Company in general meeting.

87. Annual Accounts

The Directors shall as required by Sections 233 and 236 cause to be prepared and to be laid before the Company in general meeting such profit and loss accounts and balance sheets duly audited and reports as are referred to in those sections.

88. Balance Sheet and Profit and Loss Account

A balance sheet, profit and loss account, and other reports referred to in the preceding Article shall be made out every year and laid before the Company in the annual general meeting made up to a date not earlier than six months before such meeting. The balance sheet and profit and loss account shall be accompanied by a report of the auditors of the Company and the report of Directors.

89. Copy of Accounts to be Sent to Members

A copy of the balance sheet and profit and loss account and reports of Directors and auditors shall, at least twenty-one days preceding the meeting, be sent to the persons entitled to receive notices of general meetings in the manner in which notices are to be given as hereinafter provided.

90. Compliance with the Ordinance

The Directors shall in all respects comply with the provisions of Sections 230 to 236.

91. Capitalization of Profits

The Company in general meeting may, upon the recommendation of the Directors, resolve that it is desirable to capitalize any part of the amount for the time being standing to the credit of any of the Company's reserve accounts or to the credit of the profit and loss accounts or otherwise available for distribution. The Company may then set free such sum for distribution among the members who would have been entitled thereto if distributed by way of dividend and, in the same proportions, on condition that the same be not paid in cash but be applied in or towards paying up in full un-issued shares or debenture of the Company to be allotted and distributed, credited as fully paid up to and amongst such members in the proportion aforesaid. The Board of Directors shall give effect to such distribution by resolution.

92. Audit

Auditors shall be appointed and their duties regulated in accordance with Sections 252 to 255 of the Ordinance.

IX. NOTICES

93. Notice to Members, etc.

Notice shall be given by the Company to members and auditors of the Company and other persons entitled to receive notice in accordance with law.

X. CONFIDENTIALITY

94. Confidentiality Undertaking

Every director, manager, adviser, auditor, trustee, member of a committee, officer, agent, accountant, or other employees of the Company shall, if so required by the Directors, before entering upon his duties, sign a confidentiality undertaking in relation to all transactions of the Company with its customers and the state of accounts with individuals and in matters relating thereto, and shall undertake not to reveal any of the matters which may come to his knowledge in the discharge of his duties, except when required to do so by the Directors or by any general meeting or by any court of law of competent jurisdiction and except so far as may be necessary in order to comply with any of the provisions in these presents.

95. Members' Access to Company Premises

No member or other person (not being a Director) shall be entitled to enter upon the property of the Company or examine the Company's premises or properties without the permission of a Director, subject to Article 94, to require discovery of or any information respecting any detail of the Company's trading or any matter which is or may be in the nature of a trade secret, mystery of trade, or secret process or of any matter whatsoever which may relate to the conduct of the business of the Company and which in the opinion of the Directors will be inexpedient, in the interest of the Company and its members, to communicate.

## XI. RECONSTRUCTION

### 96. Reconstruction

On any sale of the undertakings of the Company, the Directors or the liquidators on a winding up may, if authorized by a Special Resolution, accept fully paid shares, debentures or securities of any other company, either then existing or to be formed for the purchase in whole or in part of the property of the Company. The Directors (if the profits of the Company permit), or the liquidators (in a winding up), may distribute such shares or securities, or any other properties of the Company amongst the members without realization, or vest the same in trustees for them. A Special Resolution may provide for the distribution or appropriation of the cash, shares or other securities, benefits or property, and for the valuation of any such securities or property at such price and in such manner as the meeting may approve. All shareholders shall be bound by any valuation or distribution so authorized, and waive all rights in relation thereto save only such statutory rights (if any) as are, in case the Company is proposed to be or is in the course of being wound up, incapable of being varied or excluded by these Articles.

## XII. WINDING UP

### 97. Division and distribution of Assets Upon Dissolution

If the Company is wound up, the liquidator may, with the sanction of a Special Resolution of the Company and any other sanction required by law, divide amongst the members in specie or kind the whole or any part of the assets of the Company (whether they shall consist of property of same kind or not) and may, for such purpose, set such value as he deems fair upon any property to be divided as aforesaid and may determine how such division shall be carried out as between the members or different classes of members. The liquidator may, with like sanction, vest the whole or any part of such assets in trustees upon such trust for the benefit of the contributors, as the liquidator with like sanction, shall think fit; Provided, that, no member shall be compelled to accept any shares or other securities whereon there is any liability.

## XIII. INDEMNITY

### 98. Indemnification

Every officer or agent of the Company may be indemnified out of the assets of the Company for any liability incurred by him in defending any proceedings, whether civil or criminal, arising out of his dealings in relation to the affairs of the Company, except those brought by the Company against him, in which judgement is given in his favour or in which he is acquitted, or in connection with any application under Section 488 in which relief is granted him by a court of competent jurisdiction.

#### XIV. ARBITRATION

##### 99. Differences to be Referred to Arbitrator

Every intra-corporate dispute shall, as a condition precedent to any other action at law be referred, in conformity with the Arbitration Act, 1940, as amended, and its implementing rules, to the decision of an arbitrator to be appointed by the parties in dispute or, if they cannot agree upon a single arbitrator, to the decision of two arbitrators of whom one shall be appointed by each of the parties in dispute or, in the event of the two arbitrators not agreeing, then of an umpire to be appointed by the two arbitrators, in writing, before proceeding on the reference. Such decision and arbitral award shall be final and binding on the parties. Intra-corporate disputes shall include any dispute that may arise between the Company on the one hand and any of the members, their executors, administrators or assigns on the other hand, or between members, their executors, administrators or assigns, relating to these Articles or the statutes, or anything then or thereafter done, executed, omitted or suffered in pursuance of these Articles or of the statutes or any breach or alleged breach, or otherwise relating to these Articles or to any statute affecting the Company or to any of the affairs of the Company.

We, the several persons whose names and addresses are subscribed below, are desirous of being formed into a company in pursuance of these Articles of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names

Name and surname (Present and former) in full (in Block Letters)	Father's/ Husband's Name in Full	Nationality	Occupation	Residential Address in Full	Number of Shares taken by each Subscriber	Signature
1. Ch.Arshad Zaman	Ch.Sher Zaman	Pakistani	Wapda Service	75, Babar Block, New Garden Town, Lahore.	1	
2. Mr. Muhammad Qasim Shaikh	Haji Noor Muhammad Shaikh	Pakistani	Wapda Service	Bachelor Officers Hostel, Thermal Colony, Nishatabad, Faisalabad.	1	
3. Mr. Muhammad Maqbool Anjum	Ch. Imam Din	Pakistani	Wapda Service	54-Nishtar Block, Allama Iqbal Town, Lahore.	1	
4. Mr.Mansoor Ali Sheikh	Muhammad Ali Sheikh	Pakistani	Wapda Service	2-C, Audit Officers Colony, Gulberg- III, Lahore.	1	
5. Mr. Akhtar Pervez Akhtar	Ch.Muhammad Ibrahim	Pakistani	Wapda Service	13, Daood Street No.21, Wasanpura, Lahore.	1	
6. Brig. Saeed Ahmad Rafi	Muhammad Ajaib	Pakistani	Wapda Service	B-33, Upper Mall, Wapda Colony, Lahore.	1	
7. Mr. Noor Elahi Baig	M.Fazal Elahi Baig	Pakistani	Wapda Service	B-2, Shalamar Grid Station, Wapda Colony, Lahore.	1	

Total number of shares taken 7 (Seven)

Dated the \_\_\_\_\_ day of \_\_\_\_\_, 199

Witness to the above signatures

(Full Name, Father's/Husband's Name)

(in Block Letters)

**Certified to be true Copy**

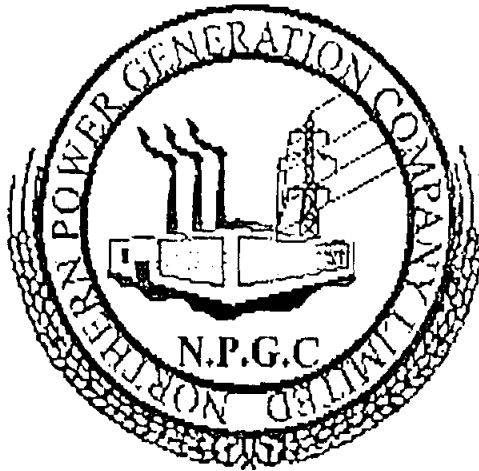
Deputy Registrar of Companies  
Company Registrar's Office  
Government of Pakistan  
Lahore.

Signature \_\_\_\_\_

Occupation \_\_\_\_\_

Full Address \_\_\_\_\_

**NORTHERN POWER GENERATION COMPANY LTD  
(GENCO-III)**



**COMPANY PROFILE**

As on April 14,2022

**A) General Information**

<i>Company Name</i>	Northern Power Generation Company Limited
<i>Registered Office</i>	197-WAPDA House, Lahore
<i>Corporate/Business Office</i>	Thermal Power Station, Muzaffargarh.
<i>Province</i>	Punjab
<i>Country</i>	Pakistan
<i>Phone</i>	0669200165
<i>Fax</i>	0669200166

**B) Legal Structure**

<i>Type of Enterprise</i>	Unlisted Public Company
<i>Company Reg. No.</i>	L09667 of 1998-99
<i>Date of Incorporation</i>	15 October 1998
<i>Line Ministry</i>	Ministry of Energy (Power Division)
<i>Company Business</i>	Electric Power Generation
<i>Regulator</i>	NEPRA
<i>Generation License No.</i>	GL/03/2002 dated 01-07-2002
<i>NTN</i>	3049717-5
<i>STRN</i>	0402271600473

**C) Key Management**

<i>Chief Executive Officers</i>	Mr. Sabeeh Uz Zaman Faruqi
---------------------------------	----------------------------



#### **D) Bankers**

*United Bank Limited*  
*National Bank of Pakistan*  
*Habib Bank Limited*  
*Askari Bank*  
*Bank of Punjab*  
*Bank Alfalah*  
*Muslim Commercial Bank*  
*Allied Bank Limited*

#### **E) Auditors & Legal Advisor**

*Auditors* Riaz Ahmad and Company  
Chartered Accountants

*Legal Advisors* Rasikh Consilium

#### **F) Ownership, Share Capital & Shareholders Pattern**

The Company is 100% owned by the Government of Pakistan.

The authorized capital of the company is Rs: 50,000,000,000 divided into 5,000,000,000 Ordinary shares of Rs. 10 each. In total 50,000 shares have been issued and out of which one share of Rs. 10 each has been issued to seven directors of the company and 49,993 shares issued to WAPDA and subsequently transferred in the name of President Islamic Republic of Pakistan.

#### **G) Company History & Operations**

Pursuant to unbundling of WAPDA, Generation companies and Distribution companies were formed. NPGCL was incorporated on 15th October 1998 and certificate for commencement of business was obtained on 1st March 1999 under section 146(2) of Companies Ordinance 1984. BTA and Supplementary BTA between WAPDA and NPGCL regulating the transfer of assets from WAPDA to NPGCL and the issuance of shares and debt instruments by NPGCL to WAPDA, signed on dated 01.03.1999. National Electric Power Regulatory Authority (NEPRA) granted Generation License on July 01, 2002 pursuant to NEPRA Act 1997, which is valid up to Year 2044.

The principal activities of the Company are to own, operate and maintain Thermal Power Houses. These Power Plants are located at Muzaffargarh, Faisalabad, Lahore and Nandipur. The installed capacity of these individual power plants is as under:

TPS, Muzaffargarh	1350	MW
NGPS Multan	260	MW (Defunct)
MESCO Multan	20	MW (Never Licensed)
GTPS Shahdara Lahore	85	MW (Never Licensed)
SPS Faisalabad	132	MW
GTPS Faisalabad	244	MW
CCPP Nandipur	565.65	MW

#### **H) Agreements**

- **Power Purchase Agreement ("PPA") –**

Power Purchase Agreement has been signed in 2015 with CPPA-G.

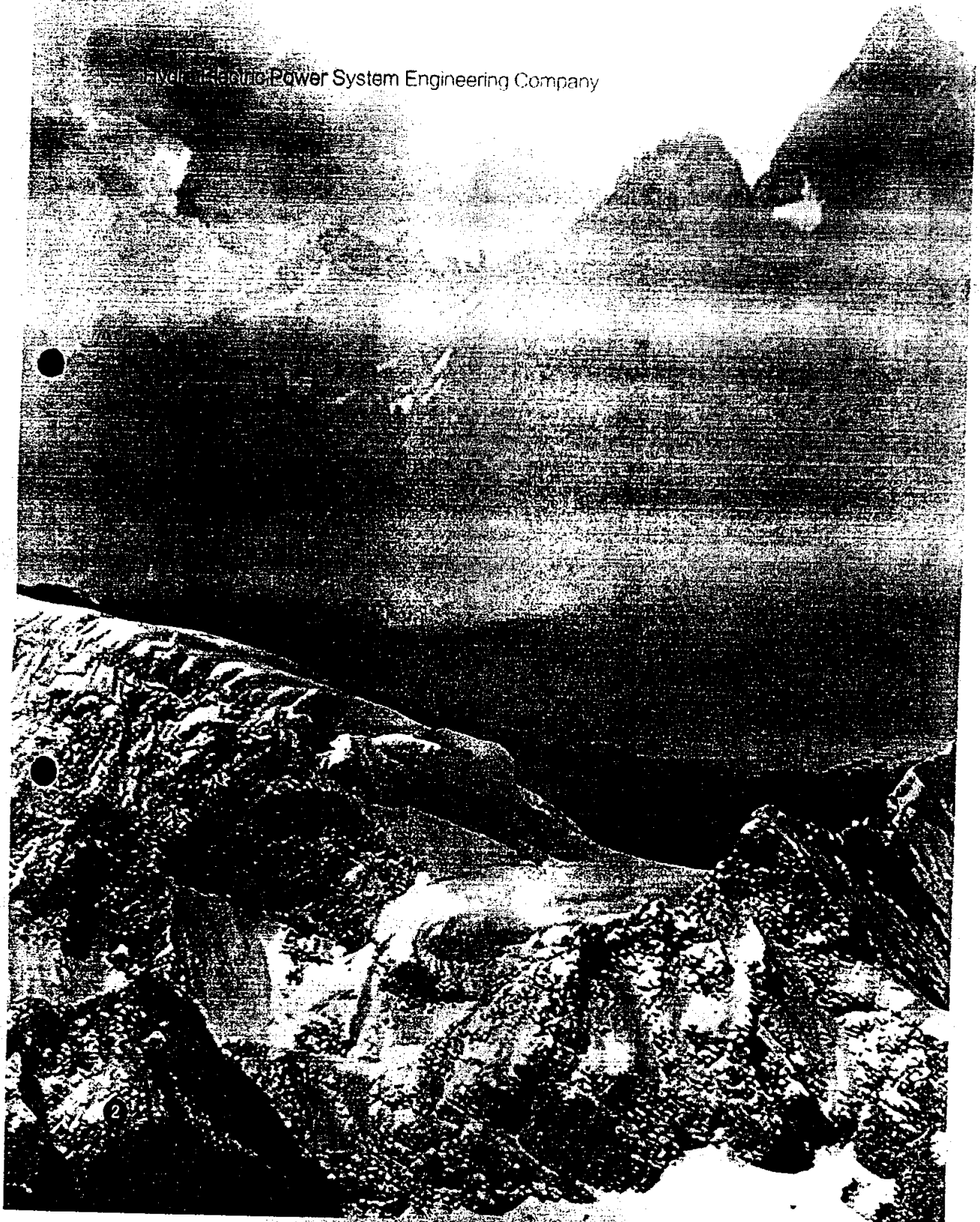
- **Gas Supply Agreement ("GSA") –**

Interim GSA has been signed for provision of RLNG to TPS Muzaffargarh (200 MMCFD), Nandipur (100 MMCFD) and Faisalabad (28MMCFD) with SNGPL on as and when available basis.

- **Fuel Supply Agreement ("FSA") –**

Furnace Oil Supply agreement has been signed between NPGCL and Pakistan State Oil Company Limited (PSO) on dated 16.09.2009.

Hydroelectric Power System Engineering Company



# Content

Group Introduction	04 / 05
Company Introduction	06 / 07
Business Philosophy	08 / 09
Qualifications	10 / 11
Honors and Awards	12 / 15
Distribution of Overseas Projects	16 / 16
Distribution of Domestic Projects	17 / 17
Civil Engineering Projects	18 / 39
Thermal Power Projects	40 / 47
Gas Turbine Projects	48 / 51
Power Grid Projects	52 / 55
New Energy Power Projects	56 / 57
Green Power Projects	58 / 59
Hydraulic Power Projects	60 / 61
Overhaul and Maintenance Projects	62 / 65

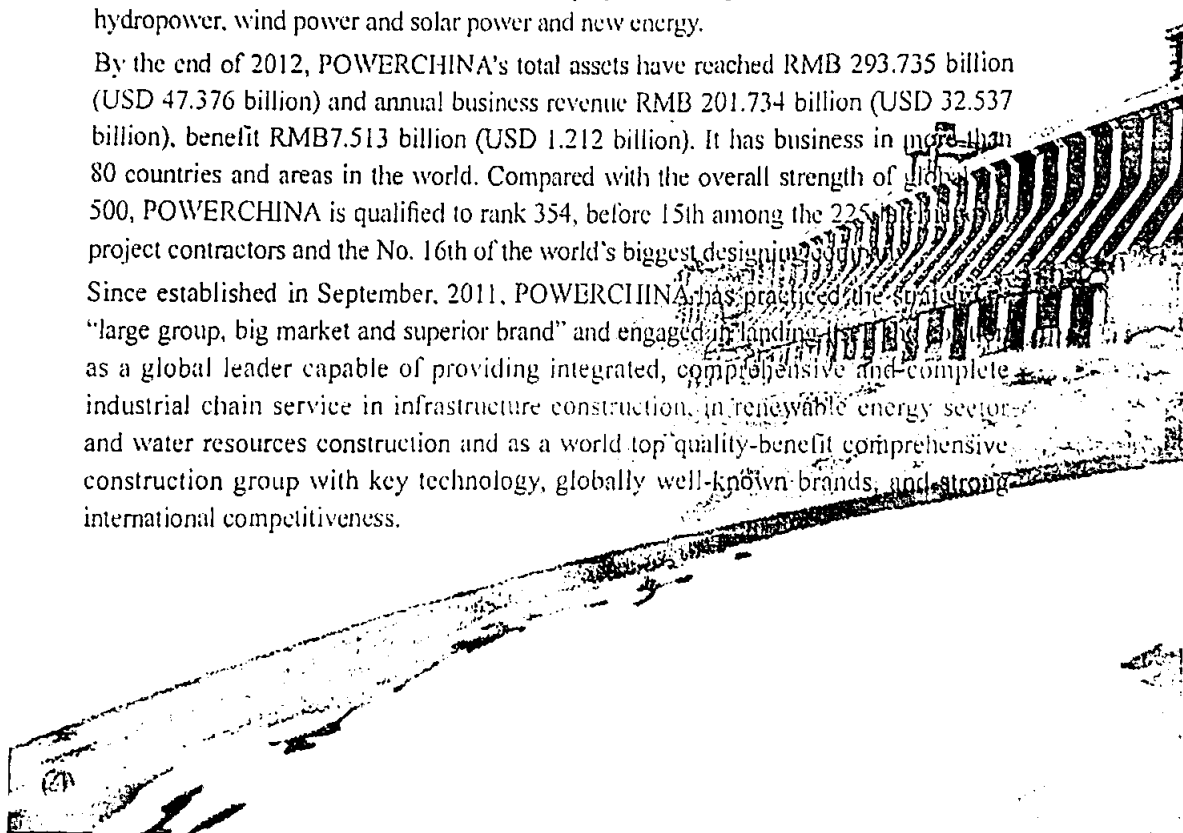
## Group Introduction

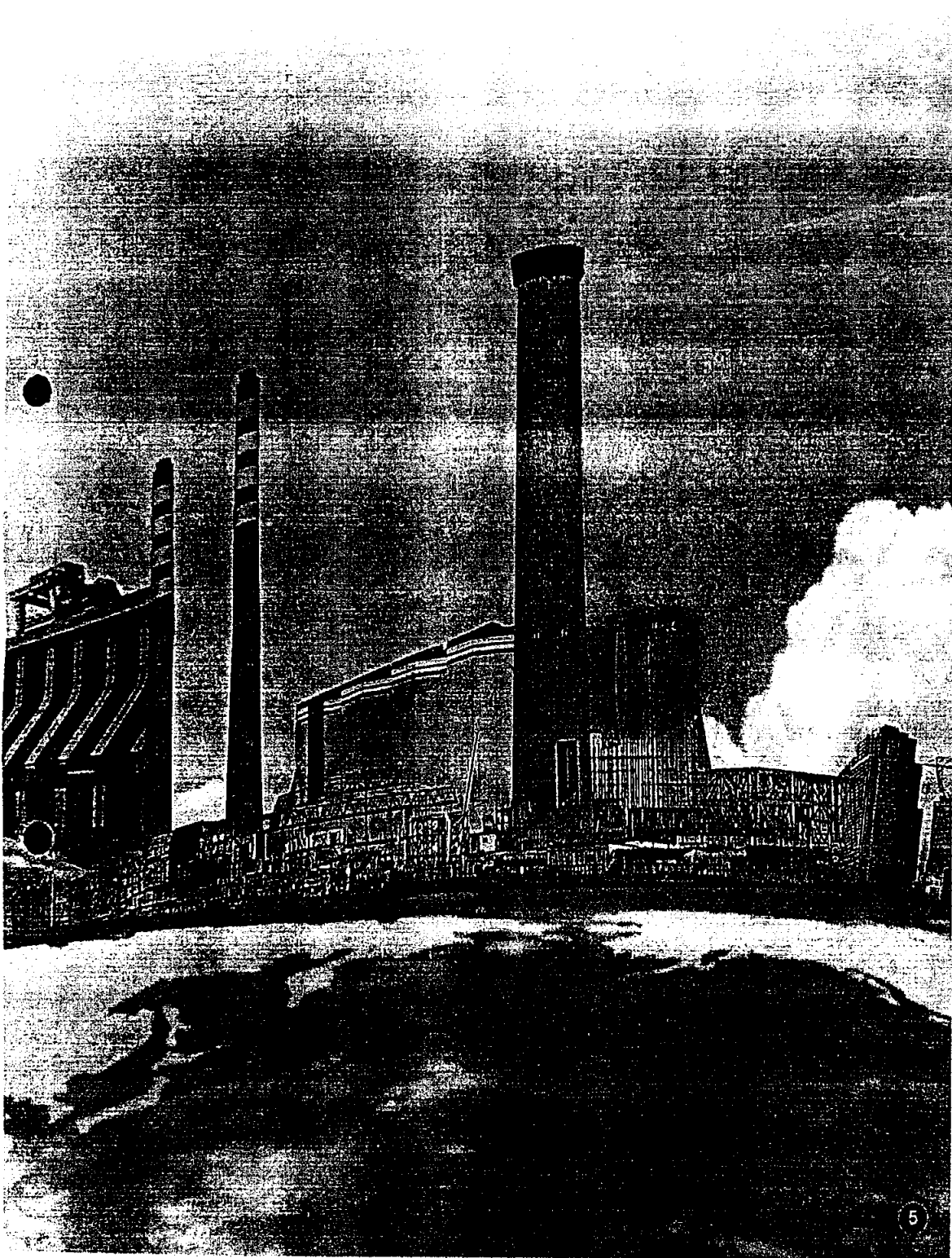
Power Construction Corporation of China (POWERCHINA) is a mega-scale power construction group approved by the State Council, formed by merging and restructuring Sinohydro Corporation, HydroChina Corporation and 14 provincial (local) survey & design institutions, power construction companies and equipment manufactures under State Grid and China Southern Power Grid, and it is also the only comprehensive construction group covering planning, survey, design, consulting, construction, operation, investment in power and hydropower construction and infrastructure construction.

Main business: general contract of projects, planning, survey, design, installation, science and technology development, construction, consulting, supervision, equipment manufacturing, investment, operation, sales, export, import in power and hydropower construction and infrastructure construction; real estate; logistics; operation of international capital, finance and investment of foreign project, overseas labor dispatch and project contract. It is authorized to take charge of industrial planning, policy research, standard establishment and project investigation of clean energy like hydropower, wind power and solar power and new energy.

By the end of 2012, POWERCHINA's total assets have reached RMB 293.735 billion (USD 47.376 billion) and annual business revenue RMB 201.734 billion (USD 32.537 billion), benefit RMB7.513 billion (USD 1.212 billion). It has business in more than 80 countries and areas in the world. Compared with the overall strength of global 500, POWERCHINA is qualified to rank 354, before 15th among the 225 project contractors and the No. 16th of the world's biggest design firms.

Since established in September, 2011, POWERCHINA has practiced the strategy of "large group, big market and superior brand" and engaged in landing its business as a global leader capable of providing integrated, comprehensive and complete industrial chain service in infrastructure construction, in renewable energy sector and water resources construction and as a world top quality-benefit comprehensive construction group with key technology, globally well-known brands, and strong international competitiveness.



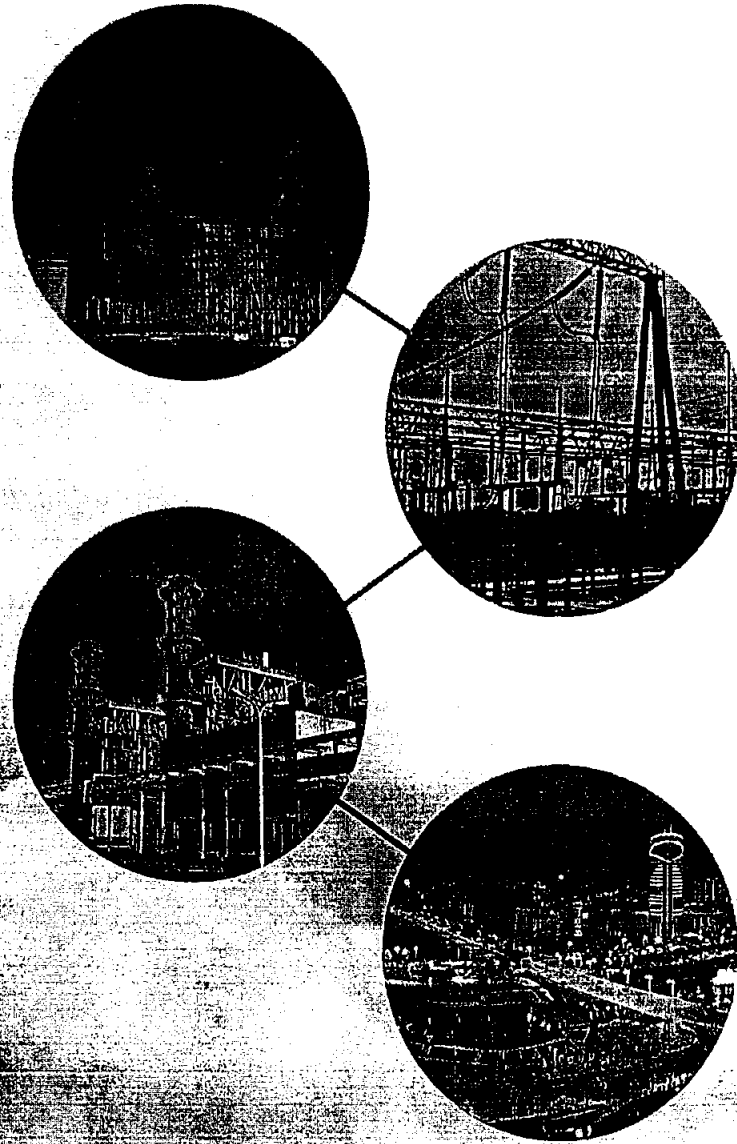


## Company Introduction

Hydro Electric Power System Engineering Company (simplified as HEPSEC for short thereafter), established in April 1959, which is an electric power construction enterprise with the first-rate qualification of general contract certificated by national Ministry of Construction. HEPSEC specializes in the construction, installation and unit commissioning of foreign and domestic large-scale thermal power plant and is also involved in roads, bridges, civil & public buildings, and urban complex. For the last 57 years, the developments of HEPSEC have spread to more than ten cities and provinces in China and more than ten countries in Asia, Africa, Europe and South America. At present there are 15 projects under construction in Vietnam, Laos, Bangladesh, Indonesia, Turkey, Pakistan, Venezuela and Timor-Leste, etc.

HEPSEC possesses the qualification of dealing foreign businesses and contacting projects, A-level foreign aid construction projects by commerce ministry, and has National First Level Installation, Reformation, Repair and Maintenance License of Special Equipment (Boiler), Installation license of Penstock Manifold, First Level Metal Lab Qualification, Second Level Commissioning Qualification of Thermal Power Engineering and First Level Welding Training and Examination Center certified by Quality and Technical Supervision and Power Industry. It has passed ISO9000 Quality Management System Certification in 1997, OHSMS18001 Occupational Health and Safety Management System Certification and ISO14001 Environmental Management System Certification in 2002.

HEPSEC is willing to cooperate with partners home and abroad, share the opportunities, meet the challenges jointly and pursuit mutual development.





## **Business Philosophy**

### **Basic values**

We perceive world outlook, methodology, core values, tasks, spirit and management purposes as our basic values, clearly showing our strong sense of responsibility, quick responses, mutual benefits and harmony. It indicates our basic behavior rules and judgment of values to countries, clients, partners, employees, and societies.

These basic values are the soul of our cultures, the source and power of our existence and development.

### **World outlook**

To keep pace with the times; complex theory appears simple; the honest win trust and integration produces benefits.

### **Methodology**

To make overall plans and develop, plan scientifically, reorganize resources and gain mutual benefit.

### **Core values**

Talented people are our foundation; innovation is the spirit; clients are respectable and brand is the soul.

### **Missions**

To construct high-quality energy for the world and to establish stages for the staff.

### **Spirit**

To be harmonious, realistic, creative and progressive.

### **Management aim**

Create together and possess together.

### **Scientific development strategies**

It is our foundation that we should uphold strategies of "safety, good quality,

famous brand and talented people", develop domestic and foreign market, in order to undertake high-quality projects.

#### Strategic objective

To be a "top international, aggregative and professional electric power project service supplier".

#### Strategic method

To persuade clients with good quality, to satisfy clients with excellent appearance, to create first-class brand and to achieve long-term development.

#### Strategic focus

To build inner safety and to ensure a safe and stable production situation is our eternal mission and the foundation of sustainable development.

#### Strategic guarantee

Talents are the base. Talents shall be cultivated, in order to organize high-quality teams which will be the source of power promoting the development of the company.

#### Staff behavior code

The characteristics of our staff are progress originates from royal responsibility; respectful reward originates from cooperation and mutual benefit and being grateful for the career originates from happy sharing. It is our belief that high quality originates from high level of specialization and high level of specialization originates from high concentration.

#### Staff code

To obey laws and regulations, honor respect and abandon humiliation and be civilized staff.

To show our loyalty to HEPSEC, devote to the society and create a famous brand of electric construction.

To Love our jobs, completely obey the regulations and fulfill our duties.

To unite and cooperate, work hard and dare to create and innovate.

To be human-oriented, to fulfill responsibilities and to ensure safety.

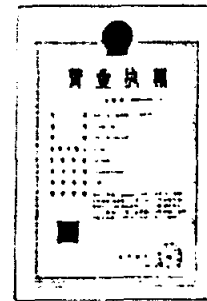
To carry forward our philosophy, keep promise and improve services.

To economize, manage in details and improve efficiency and benefit.

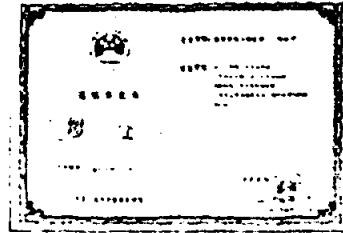
To make progress, pursue excellence and be a prominent company.

## Qualifications

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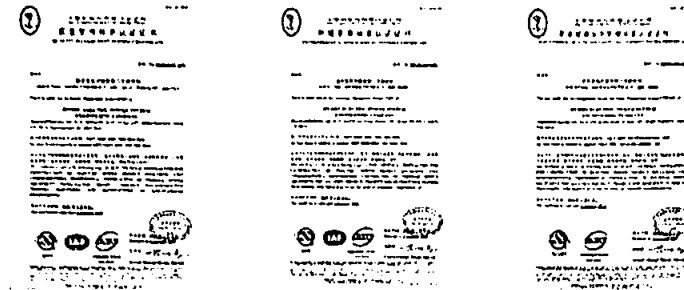
Qualification Certificate



Safety Production License

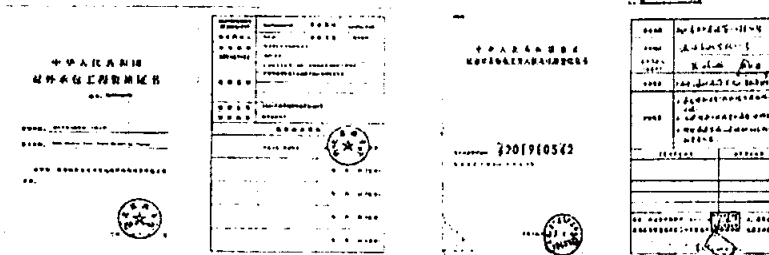


## HSE Certificates



## Foreign Project Contracting Permit

## Certificate of Registration for Customs Clearance of Consignees and Consignors of Imported & Exported Goods

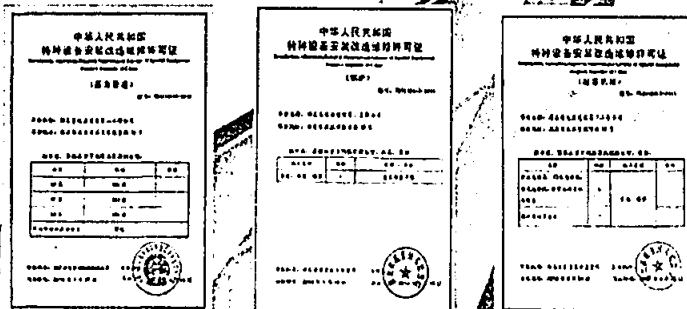


## Installation, Alteration, Repair & Maintenance License of Special Equipment

### Pressure Pipeline

### Boiler

### Lifting Machinery



## Honors and Awards

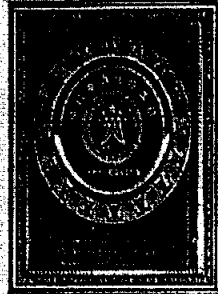


No.	Project	Award
1	Huaneng Haimen 2×1000MW ultra-supercritical power plant project	2010 National Gold Award for Project Quality 2010 National Award for Power Project Quality
2	Huaneng Rizhao 2×680MW super critical power plant project	2010 National Award for Power Project Quality 2010 National Silver Award for Power Project Quality
3	Fujian Shishi Hongshan 2×600MW supercritical thermal power plant project	2011-2012 National Silver Award for Project Quality 2012 National Award for Power Project Quality
4	Ningde nuclear power station 220KV substation project	2009 Relay Protection Device 100% Correct Operation Rate
5	HEPSEC Qianhuzhiyi QC Team of Xisaishan Project	2010 First Award of Best Quality Control (QC) Team of National Construction Project
6	Guodian Changyuan Jingmen Power Generation Co., Ltd. 2×600MW Project	High-quality and Focus of Attraction Project and Technology Innovation Project in 2006

**Huaneng Haimen 2 × 1000MW ultra-supercritical power plant project**

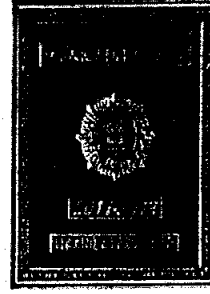


2010 National Gold Award for Project Quality

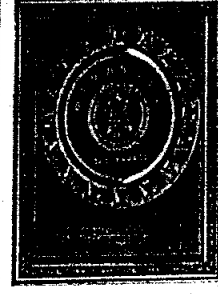


2010 National Award for Power Project Quality

**Fujian Shishi Hongshan 2 × 600MW supercritical thermal power plant project**



2011-2012 National Silver Award for Project Quality



2012 National Award for Power Project Quality

**Huaneng Rizhao 2 × 680MW super critical power plant project**



2010 National Award for Power Project Quality



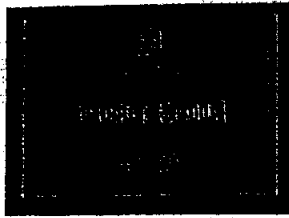
2010 National Silver Award for Power Project Quality

**HEPSEC Qianhuzhiyi QC Team of Xisaishan Project**



2010 National Award for Project Quality (QC Team)

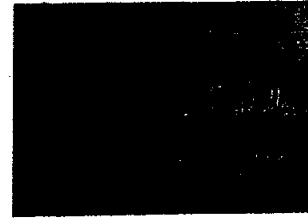
No.	Year	Title & Honor	Note
1	2012	Hubei Advanced Province Establishment undertaking Expatriate Labor Work	Awarded by Department of Commerce of Hubei Province
2	2011	2011 Advanced Establishment Compiling Financial Statement	Awarded by PowerChina
3	2011	2011 China Excellent Enterprise Undertaking Foreign Construction	Awarded by China Construction Enterprise Federation
4	2010	2010 China Top 100 Building Construction Enterprise	Awarded by Chinese Construction Enterprises Federation and Chinese Institute of Architecture and Technology and Quality
5	2010	"Comply with contract, Attention to Credit" Company	Awarded by Hubei Administration For Industry & Commerce and Hubei Enterprise Credit Development & Improvement Association
6	2010	Safe Production Advanced Establishment	Awarded by State Grid Hubei Electric Power Company
7	2009	The Initial National International Quality and Credit Level of AAAAA	Awarded by China Production Quality Association
8	2009	China Top 100 Innovative Companies of Project Management (PM)	China Enterprise Innovation Management Assessment Center and China Academy of Management Science
9	2009 2011	Advanced Establishment, No Misoperation Accident and No Casualties Establishment	Awarded by State Grid Hubei Electric Power Company



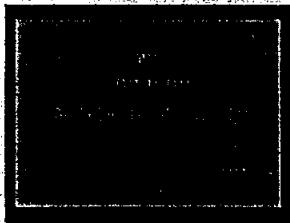
2010 China Top 100 Building Construction Enterprise



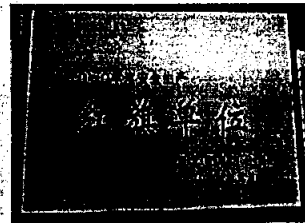
Hubei Province Advanced Establishment undertaking Expatriate Labor Work



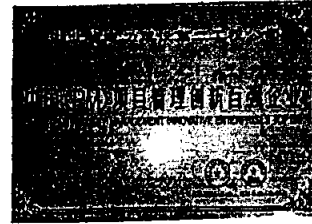
"Comply with contract, Attention to credit" Company



2011 China Excellent Enterprise Undertaking Foreign Construction

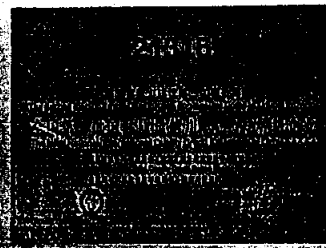
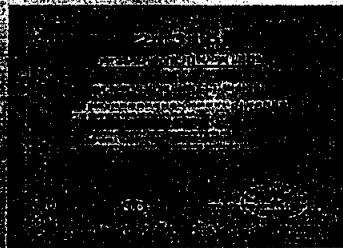
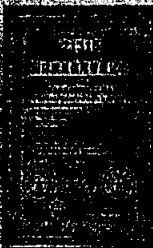


Safe Production Advanced Establishment



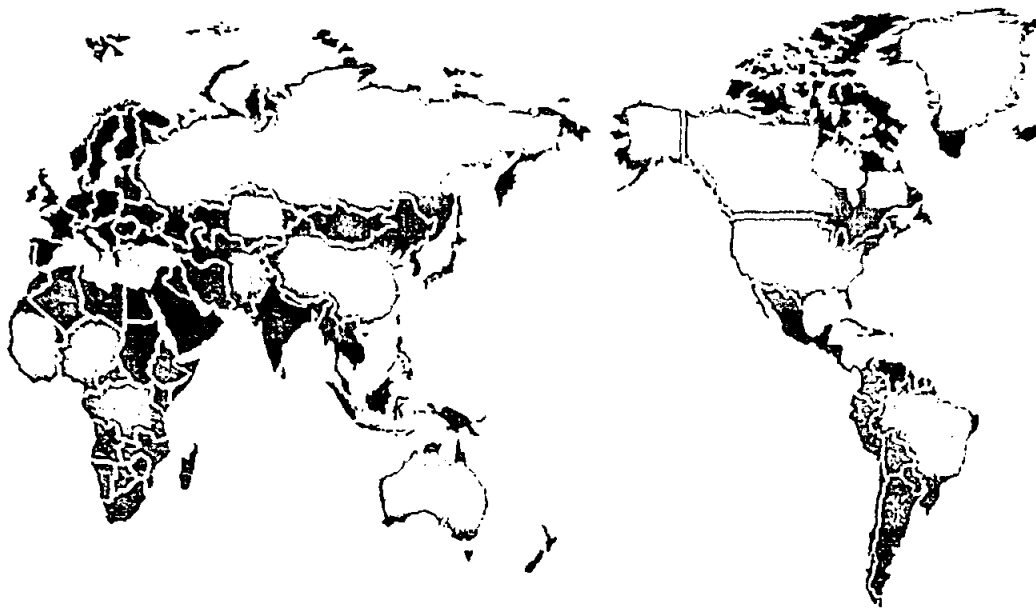
China Top 100 Innovative Companies of Project Management (PM)

The Initial National International Quality and Credit Level of AAAAA

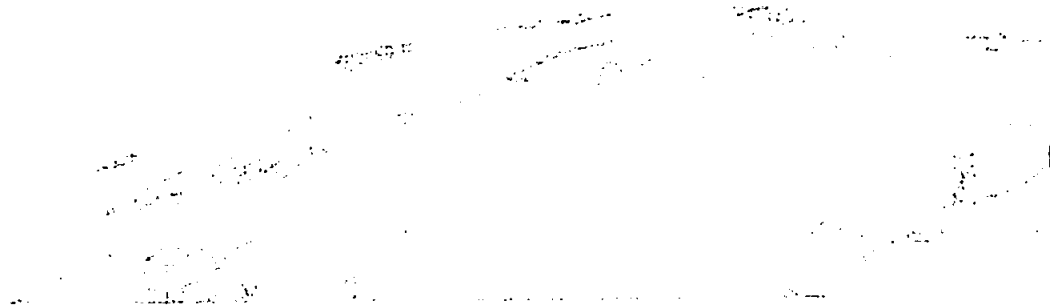




# Distribution of Overseas Projects



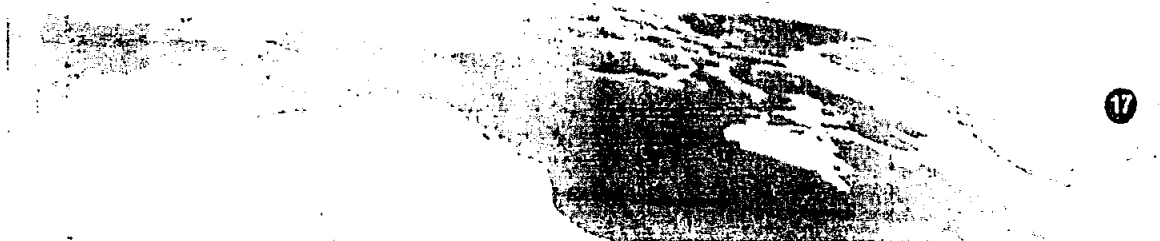
■ Indonesia	■ Syria	■ Pakistan	■ Kyrgyzstan	■ Malaysia
■ Vietnam	■ Venezuela	■ Laos	■ India	■ Angola
■ Turkey	■ Bangladesh	■ East Timor	■ Sudan	■ Tajikistan



# Distribution of Domestic Projects



■ Hubei	■ Jiangsu	■ Guangxi	■ Guizhou	■ Shanxi	■ Sichuan
■ Hunan	■ Shandong	■ Fujian	■ Anhui	■ Hainan	■ Jiangxi
■ Guangdong	■ Henan	■ Hebei	■ Xinjiang	■ Nelmenggu	■ Shanghai

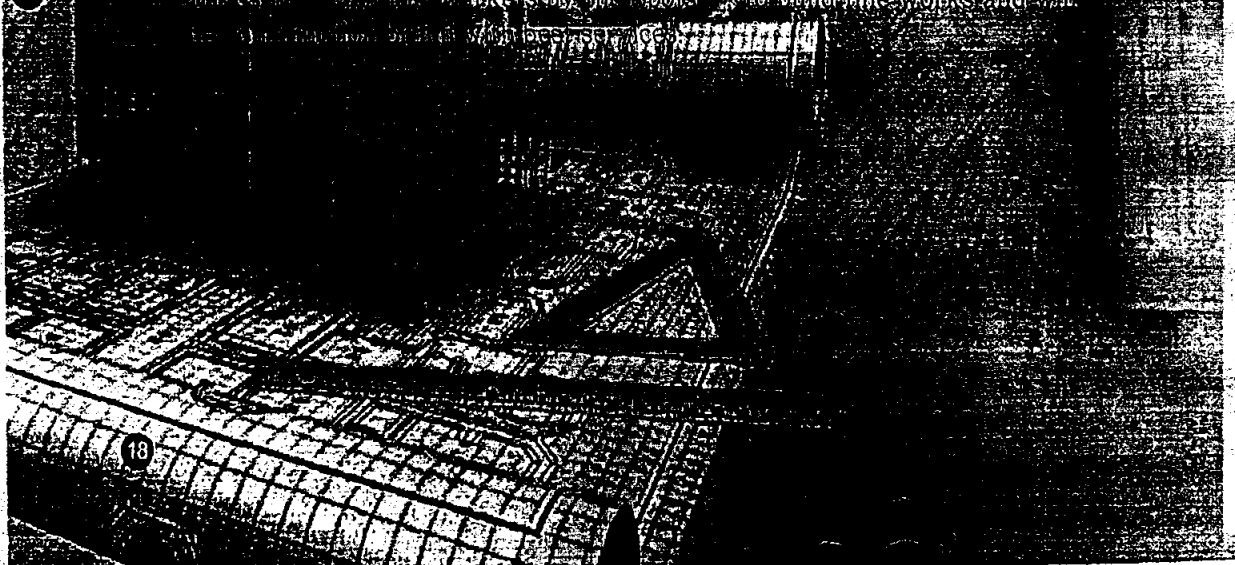


## Civil Engineering Projects

Hydro Electric Power System Engineering Company Infrastructure and Construction Branch (hereinafter referred to as Infrastructure and Construction Branch) was established in February 2009. The company possesses the qualifications of class I general contracting of power construction of State Ministry of Construction and upgraded class I general contracting of public works and housing construction.

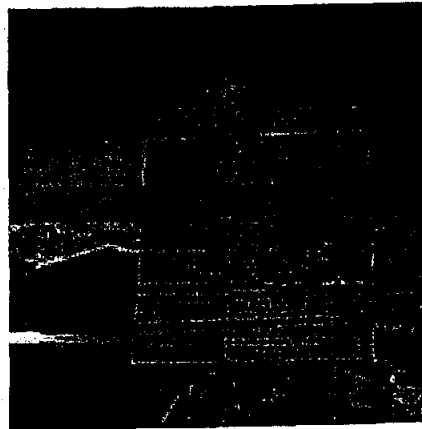
Since its establishment, the Infrastructure and Construction Branch implements a learning and knowledge-oriented strategy of staffs. The professional and technical staffs with college education account for over 90%. At present, the company has 80 staffs, including 14 constructors and associate constructors and 6 constructors of electromechanical specialty.

Against the background of an increasingly competitive market environment, the Infrastructure Branch implements a three-step strategy "Firm Foundation, Powerful Talents and Large Scale", strives to accumulate advanced construction and management experiences of the projects with awards titled "National Quality Project" and "Urban Construction Brand" competitive brands. By insisting on the corporate tenet "Integrity, Truth-seeking, Exploration and Surpass", the company strives to "Win the Markets by the Spots", to build fine works and win the construction brand with best service.



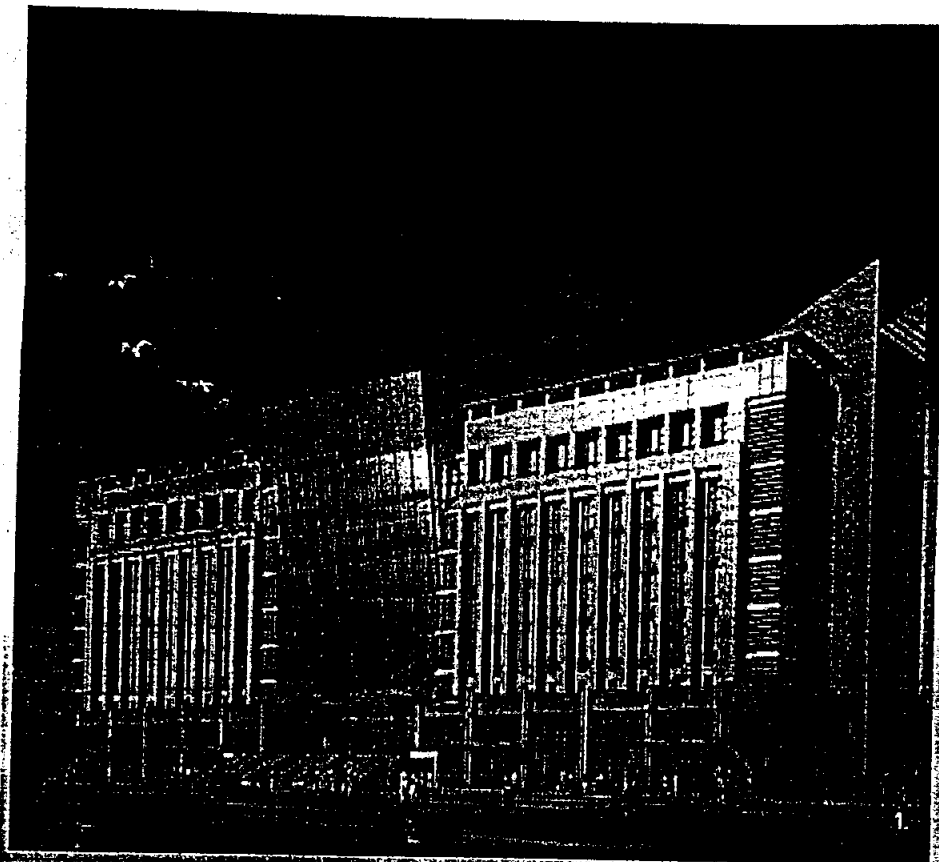
## Public & Civil Buildings

HEPSEC has won the tender of FELDA project in Malaysia on Jan 6th of 2014. The working scope includes 300 sets of single row houses, the main construction area is about 27881 m<sup>2</sup> (including main building, outdoor greening and pipeline).

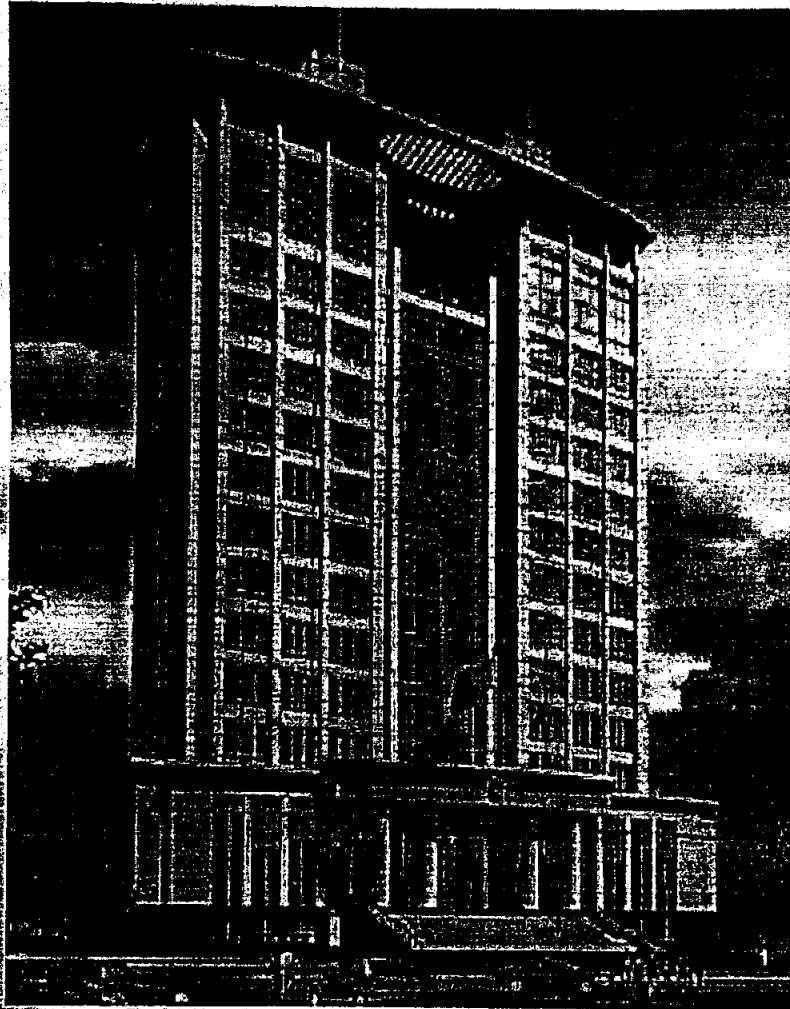




1 Library in Hubei University of Education  
Chinese Construction Engineering Luban Prize  
Design: [illegible]  
Proportion: 1:6884 m



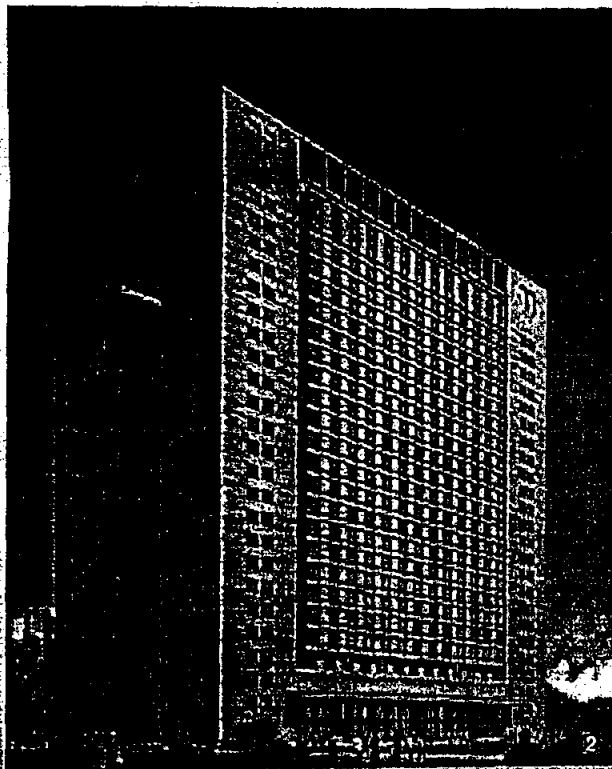
(1) Caidian Procuratorate  
Wuhan Construction Safety Engineering Co., Ltd.  
Frame: 14 layers  
Proportion: 9827 m<sup>2</sup>



- 1) Agriculture Bank of China Jingzhou Branch Office Building  
Framework: 23 layers  
Proportion: 5992.5 m<sup>2</sup>

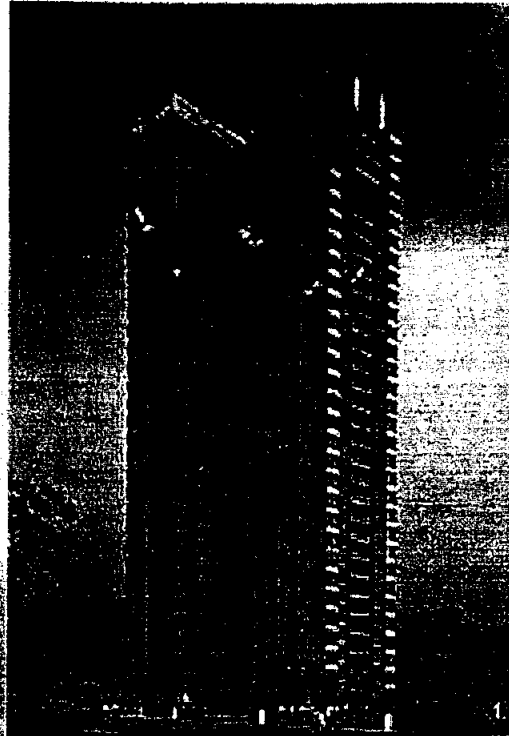


- 2) Gynaecology and Obstetrics Building of Hubei Maternal and Child Care Service Center  
Framework: 26 layers  
Proportion: 72000 m<sup>2</sup>

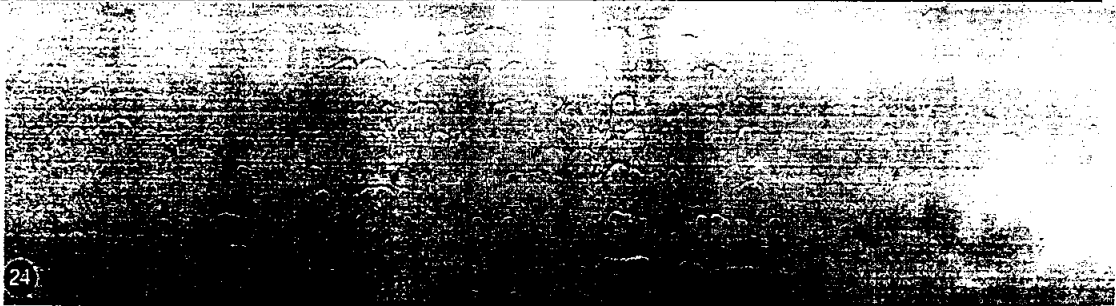
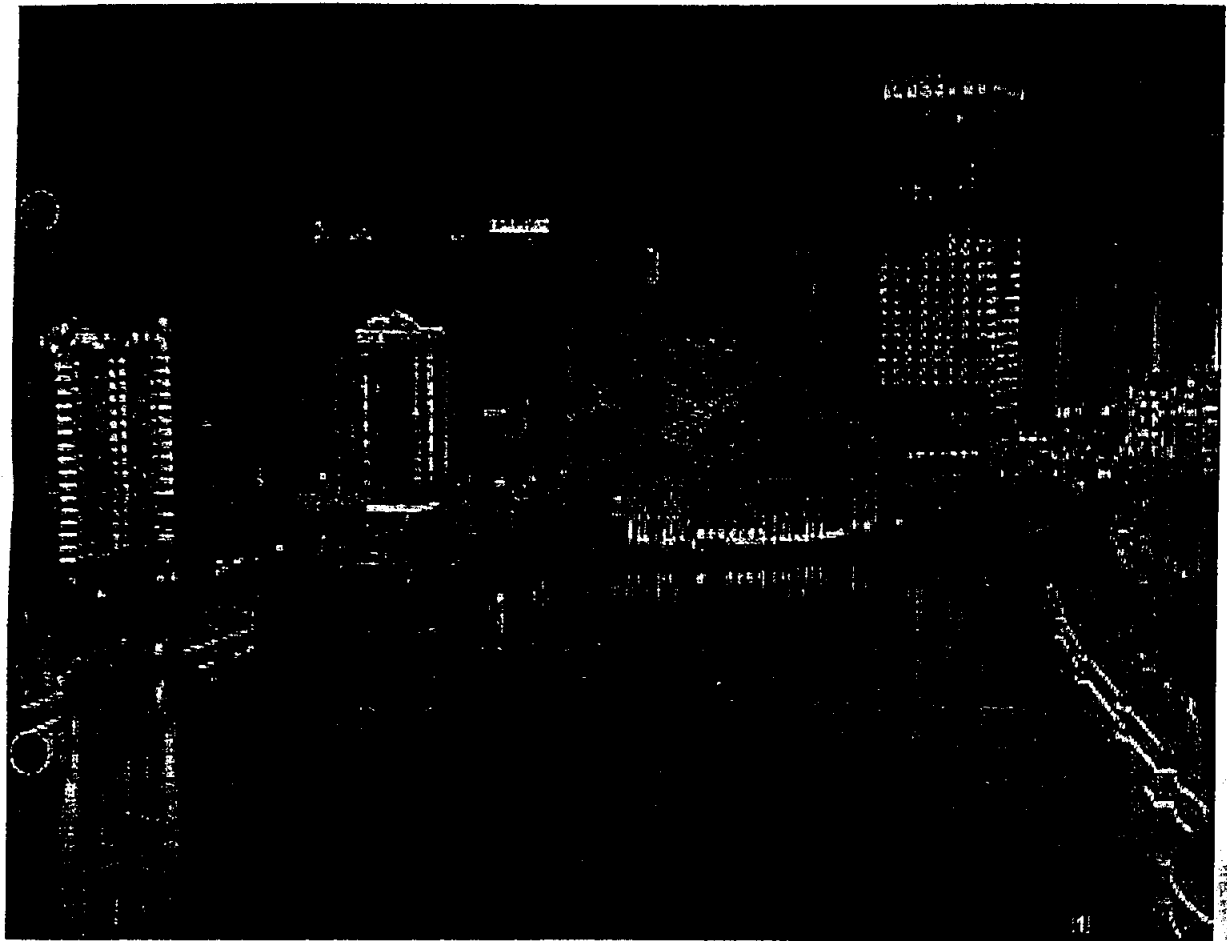


① Guangzhou Military Region Air Force Nursing Home Building in Wuhan  
Framework: 32 layers

② Xianning First People's Hospital  
Framework: 6 layers  
Proportion: 35000 m<sup>2</sup>

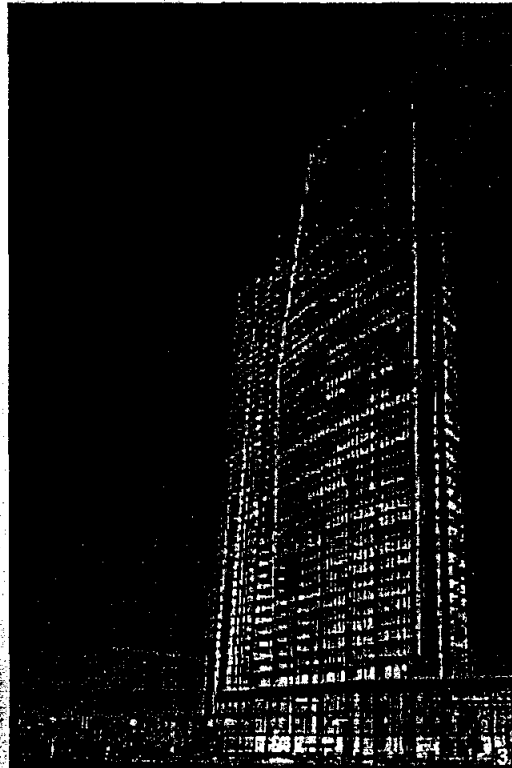






24

- ① The Han Show
- ② Wuhan Qintai Art Center
- ③ Main Building of Splendid Yangtze



① Shenzhen Kerry Plaza Phase II

② Chenglan Garden Economically  
Affordable Housing

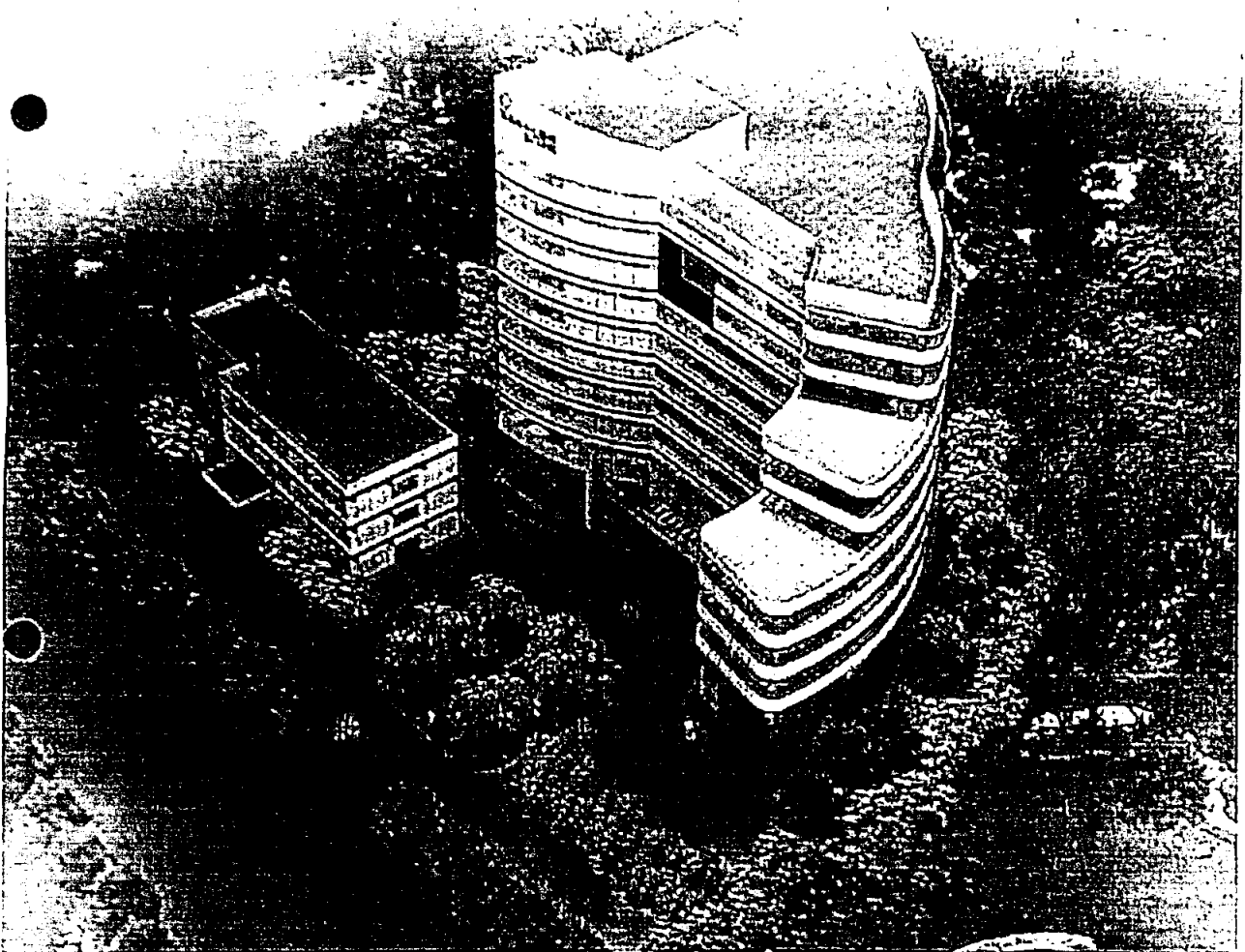
Frame: 23 layers

Proportion: 42351 m<sup>2</sup>



(1) Enshi Central Hospital The East Branch

Figure 1-1-1 Enshi Central Hospital

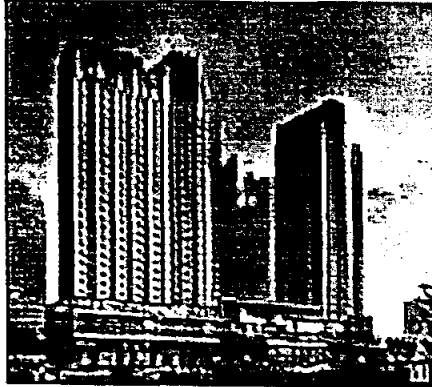


## Urban Complex

With the urbanization boosting, HEPSEC has participated into lots of Urban Complex Projects, which includes Commercial Retails, Business Offices, Hotel Catering, Apartments and Entertainment Resorts. The typical projects are the 12th Five-year Plan of Wuhan Government-Supporting Xinjiang "Happy Homeland" Project, New Optical Valley CBD - Rongzhong International and the First Low Carbon Demonstration Area in Central China- Huabin Jinggui Lake Low Carbon Demonstration Area. All the projects have been completed in schedule and with good quality , and are highly appraised by the clients.

- ① The 12th Five-year Plan of Wuhan Government- Supporting Xinjiang "Happy Homeland" Project  
Brick Framework Structure  
Proportion: 230000 m<sup>2</sup>



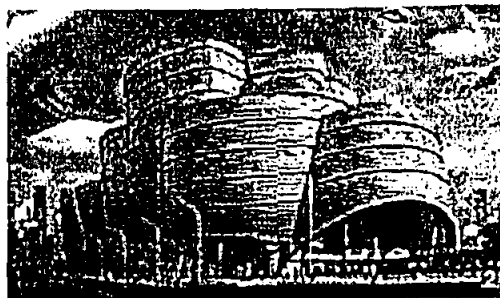


- ① Future City  
Framework: 32 layers  
Proportion: 110000 nf
- ② XinAo • City Impression Project
- ③ Optical Valley Central Garden  
Frameworks: 27 layers  
Proportion: 720000 nf

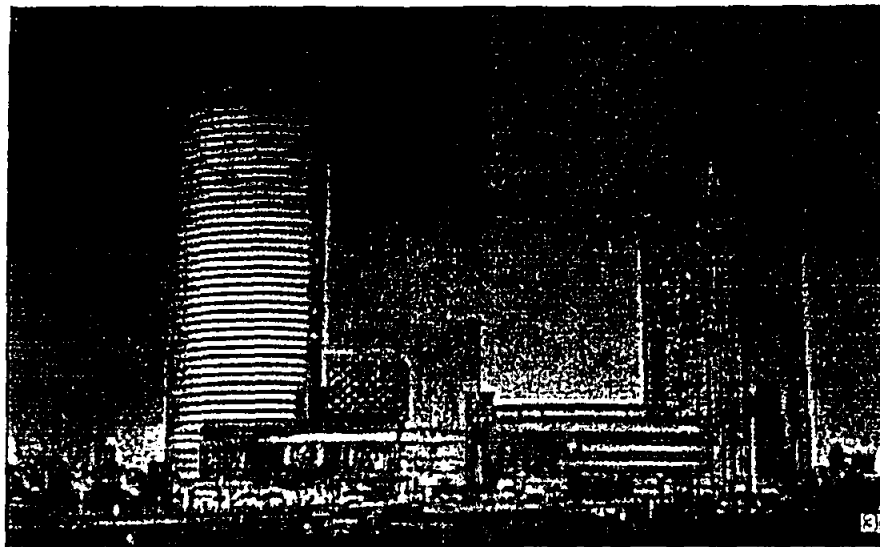


(1) Oceanwide City Square  
Proportion: 660000 m<sup>2</sup>

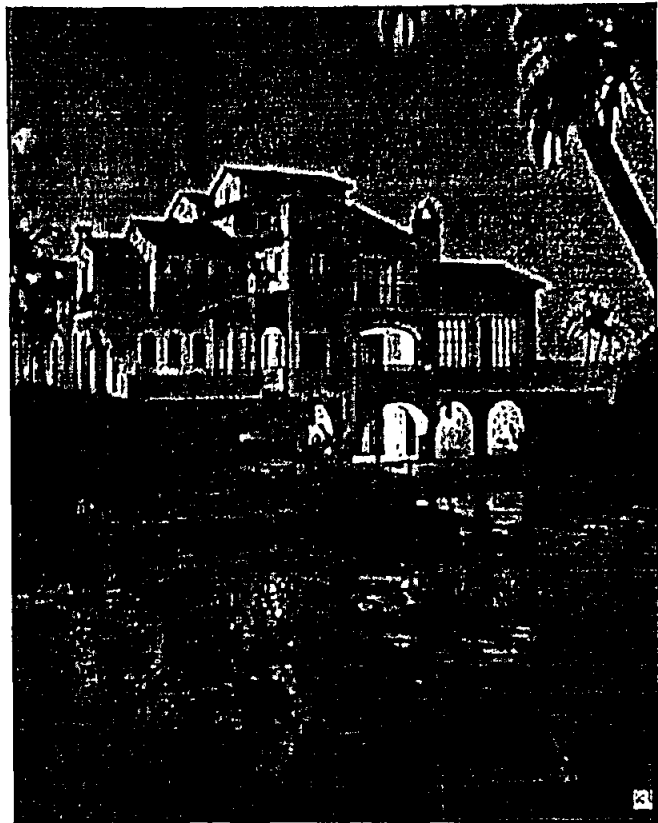
(2) Wanda Wuhan Movie Park



(3) Rongzhong International  
Height: 168m  
Overground Proportion: 59995.7 m<sup>2</sup>  
Total Proportion: 77552 m<sup>2</sup>

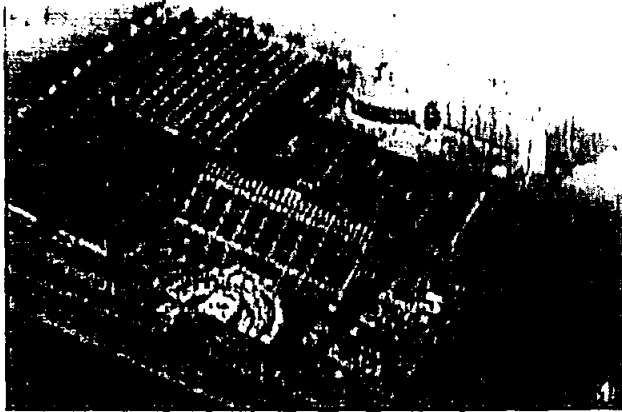


1 2 3 Huatien Deep Lake Low-Carbon Demonstration Area

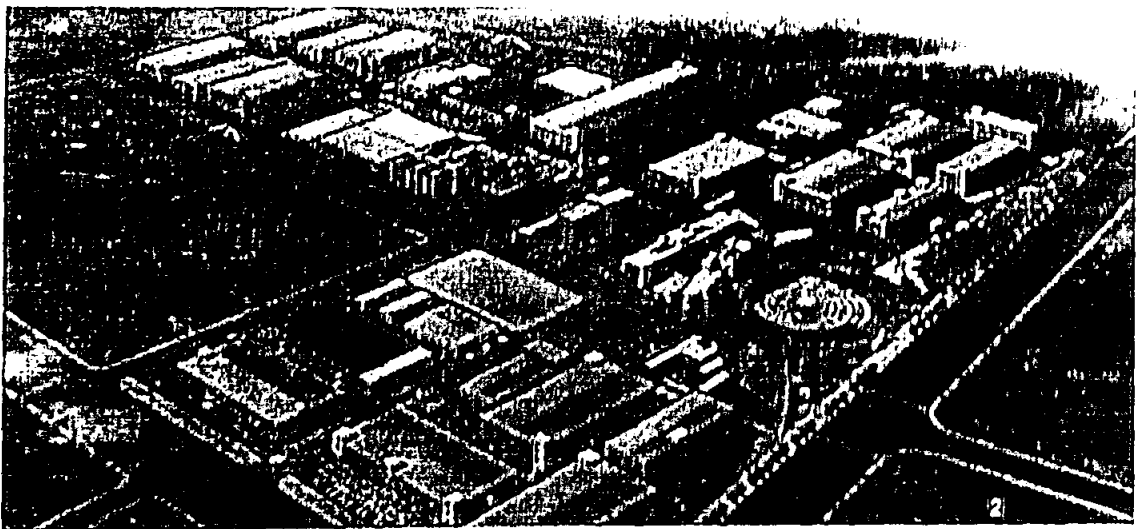




## Industrial Buildings:



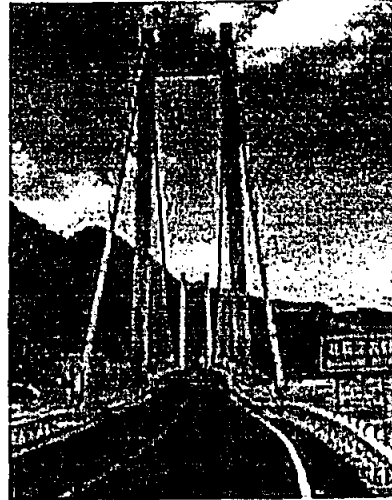
- (1) Huzhou Technology (Chengyuan) Industry Park
- (2) China Electron Control Electron Industrial Park  
Steel Structure Plant  
Framework: 21.1 meters  
Projection: 22.721 m



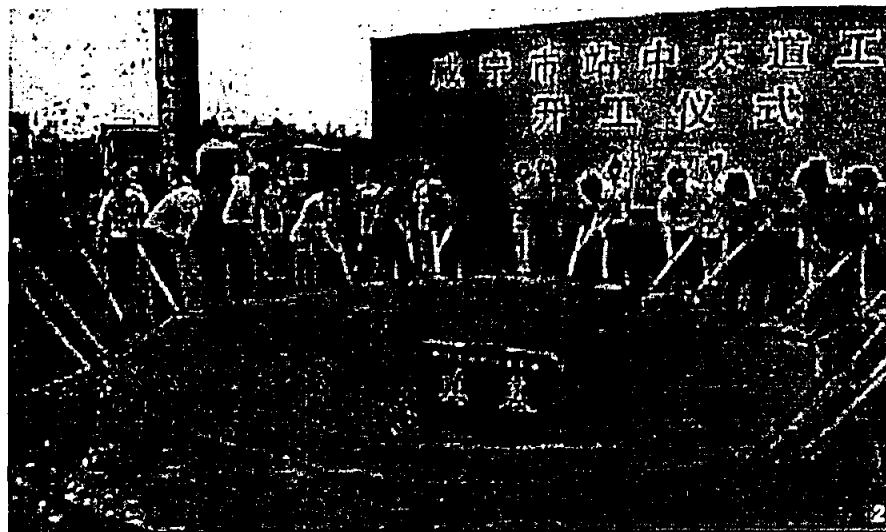
32

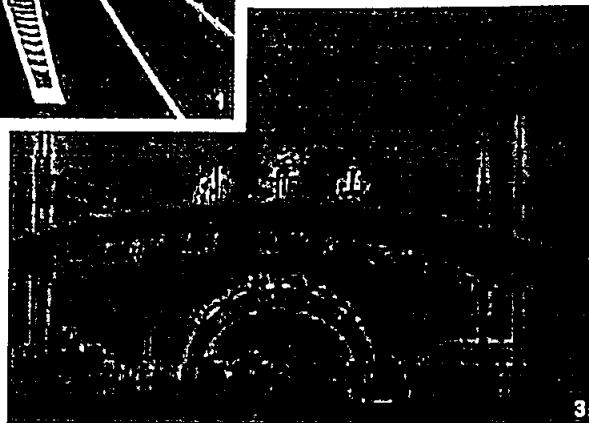
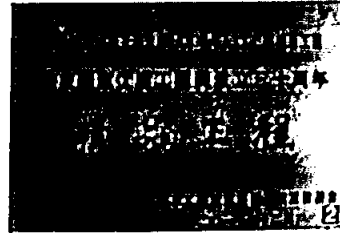
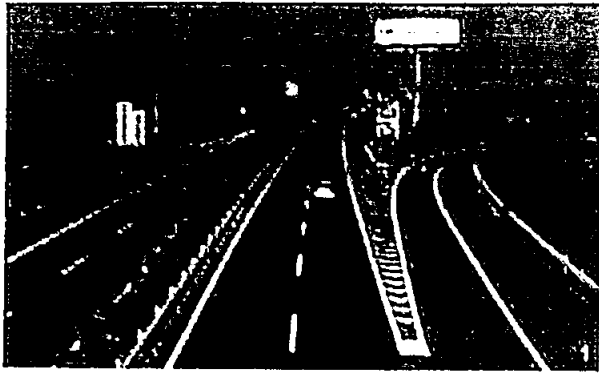
## Municipal Engineering Projects

HEPSEC has completed a number of municipal engineering roads and bridges projects including Xianning Zhanzhong Road, Beipanjiang Bridge in Suzhou, Hanhong Highway, High-grade highway along the rivier in Yangzhou, T2 Terminal of Wuhan Tianhe Airport, Shuishiling Tunnel of Wenshan Line in Shandong., etc.



- ① Beipanjiang Bridge in Guizhou
- ② Xianning Zhanzhong Road





① Hanhong Highway

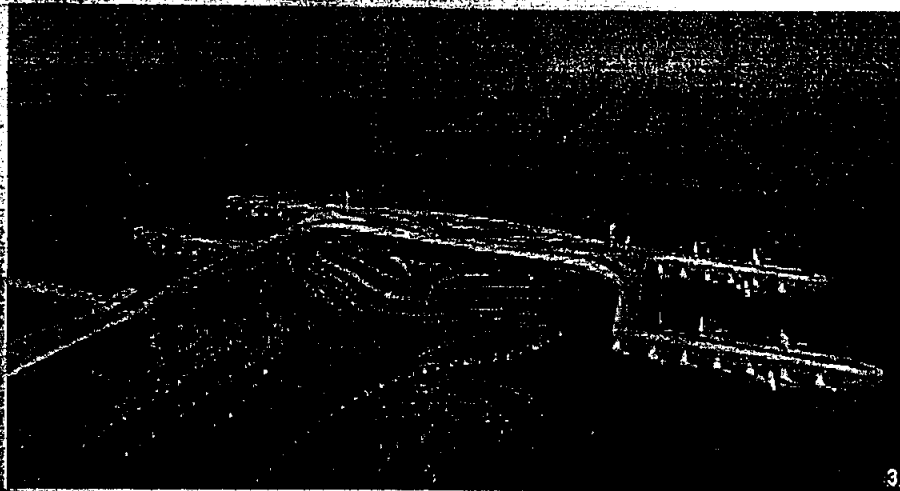
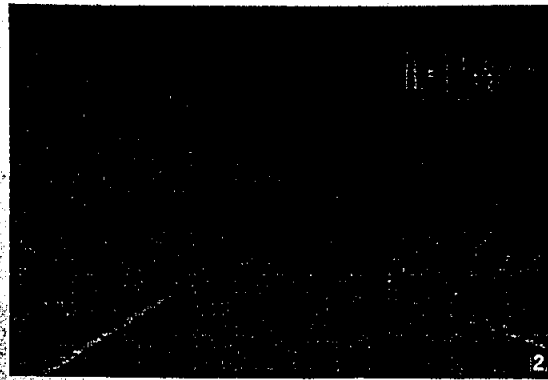
② ③ ④

High-grade highway along the river  
in Yangtze.



① ③ T2 Terminal of Wuhan Tianhe Airport

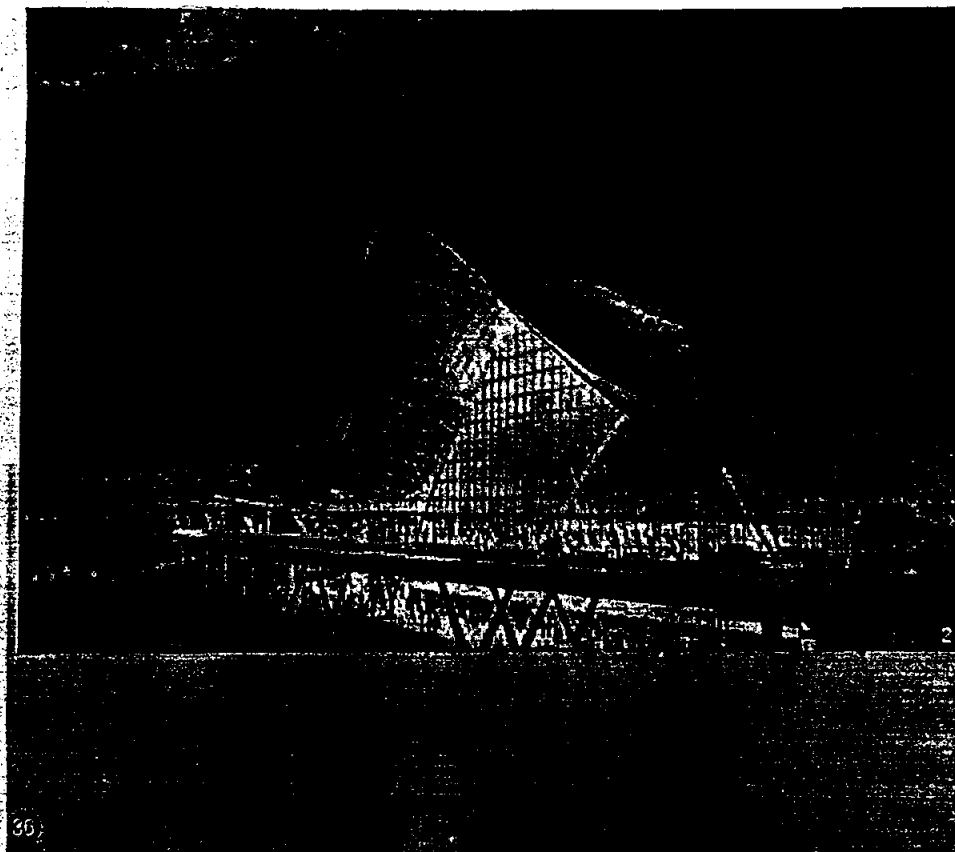
② Shuishiling Tunnel of Wenshan Line in Shandong

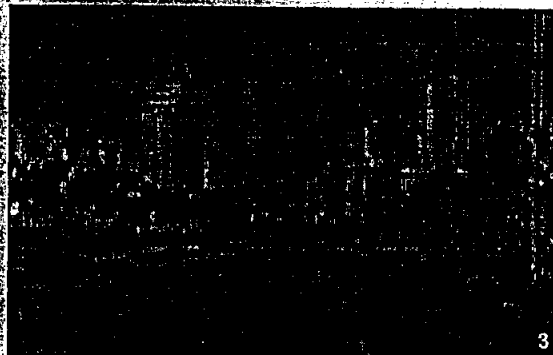
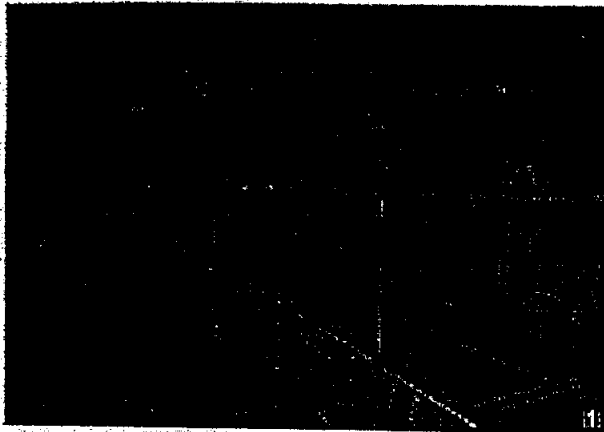




1: Yichang Dongshan Road BRT Project

2: Wuhan Railway Station



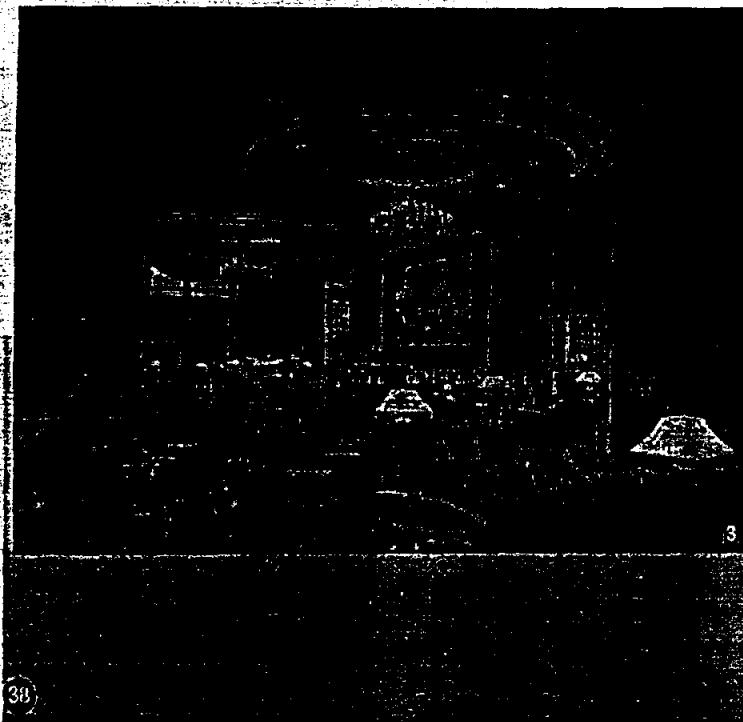


- ① Haoyue Bridge in Garden Show Park in Xiamen
- ② Urban Roads in Yizheng City, Jiangsu
- ③ Roads in Zhangjiagang Bonded Zone, Jiangsu

## Decorative Design and Construction Project

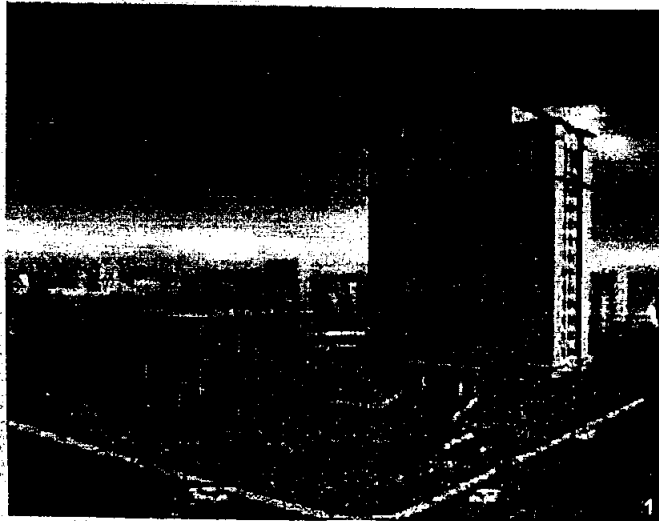


① ② ③ Ramada Hotel



① Wuhan Federation of Trade Reconstruction Project

② Royal Grace Hotel Optical Valley Wuhan



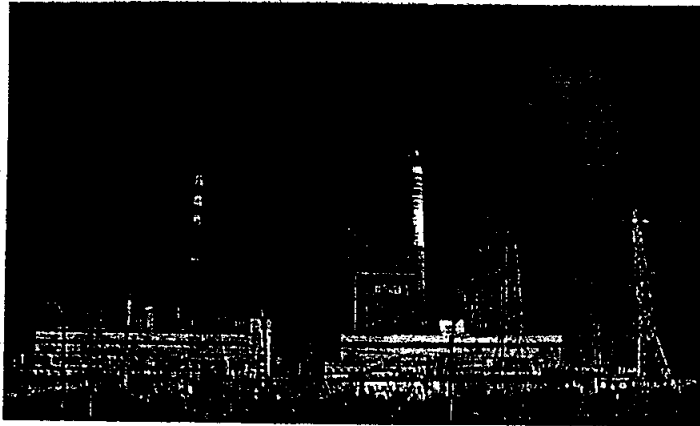


## Thermal Power Projects



No.	Domestic Project	Construction Scale	Completion Date
1	Jiangsu Linggu Chemical Co. Ltd. power plant technical innovation Phase II	2×260(T/H)	2009
2	Zhangzhou thermal power plant expansion project civil work and installation work	1×670t/h+1×150MW	2012
3	Guangdong Nanhai first power plant	2×200MW	2009
4	China Power Investment Corporation Henan Nanyang thermal power plant	2×210MW	2008
5	Guangdong Foshan Nanhai power plant	1×300MW	2009
6	China Resources Caofeidian power plant	2×300MW	2008
7	Yidu Dongyangguang Industry Development Corporation power plant	2×300MW CFB	2010
8	Qingshan power plant combined heat and power project	2×350MW (ultra-supercritical)	2011
9	China Resources Yichang Xiaoting combined heat and power main body installation project	2×350MW	2014
10	Changzhou consumer waste burning power plant construction project	2×400t/d+1×15MW	2008
11	China Huadian Guizhou Toubu power plant	2×490T/FB+2×150MW	2009
12	Hubei Ezhou power plant	2×600MW	2009
13	Huaneng Hunan Yueyang Power Generation Co., Ltd phase III expansion project	2×600MW	2011
14	Fujian Shishi Hongshan thermal supercritical power plant	2×600MW (supercritical)	2010
15	Huadian Anhui Wuhu power plant	2×660MW (ultra-supercritical)	2008
16	Tenglong Fangting (Zhangzhou) Co., Ltd. thermal power plant expansion project	1×670t/h+1×150MW	2013
17	Huaneng Rizhao power plant phase II expansion project	2×670MW	2008
18	Guangxi Jingui Paper Corporation power plant general contract project	2×670T/H+2×150MW	2010

19	Huadian Huangshi Xisaishan power plant phase II project	2×680MW	2010
20	Huaneng Haimen power plant	2×1000MW (ultra-supercritical)	2009
21	Puqi power plant phase II ultra-supercritical coal-fired power generation unit project	2×1000MW (ultra-supercritical)	2013
22	Xinjiang Zhongtai Chemical (Group) Co., Ltd. one million tons/year calcium carbide project power plant	4×150MW	2012
23	Xinjiang China Datang Hutubi thermal power plant main body construction project	2×300MW	2013
24	Xinjiang Hefeng project	2×300MW	2011
25	Xinjiang TBEA silicon power plant project	2×350MW	2012
26	Shandong Xinfu Group Xinjiang coal-fired power Co., Ltd. project	2×1100MW	2013
27	Shenhua Guoneng Energy Group Corporation Limited Hami 4×660MW supercritical power plant Unit3 and 4 civil work and installation general contracting project	4×600MW	2015
28	Zhongtai Chemical (Group) Co., Ltd. Tuokexun one million tons/year calcium carbide production auxiliary 600MW power plant project	2×330MW	2015
29	Huaneng Yingcheng combined heat and power plant	150MW+1×350MW	2014
30	Xinjiang Guoxin Zhundong Coal-fired power plant (Lot B) Civil work and Installation project	2×660MW	2016
31	Hubei Energy Group Ezhou power plant III ultra-supercritical coal-fired unit extension project	2×1050MW	2017
32	Hubei Huadian Jiangling power station phase I ultra—supercritical coal-fired project	2×660MW	2017
33	Tianchi Energy Changji thermal power plant main body construction project	2×350MW	2017
34	Xinjiang Lu'an Zhundong power plant	2×660MW	2017
35	Jiangxi Fengcheng power plant phase III extension project	2×1000MW	2018

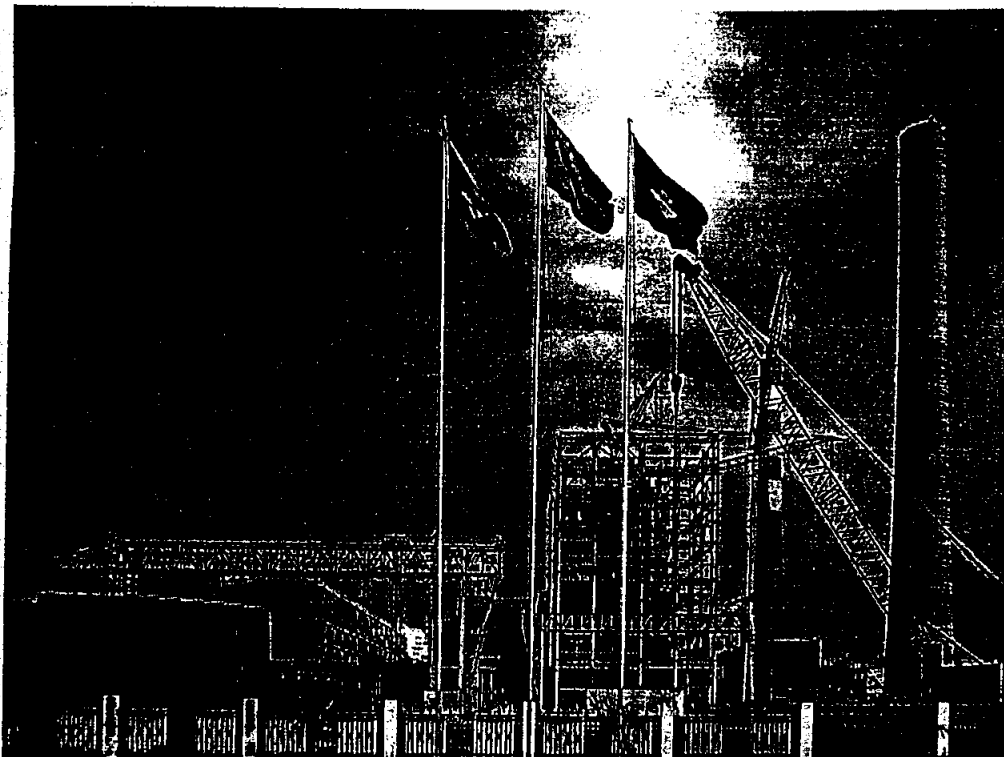


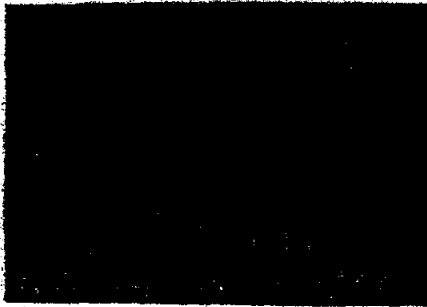
1.

2.

① Huaneng Hunan Yueyang Power Generation Co., Ltd phase III (2×600MW) expansion project.

② Hubei Ezhou power plant (2×600MW). put into operation in 2009.

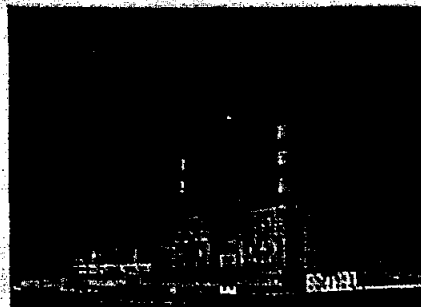




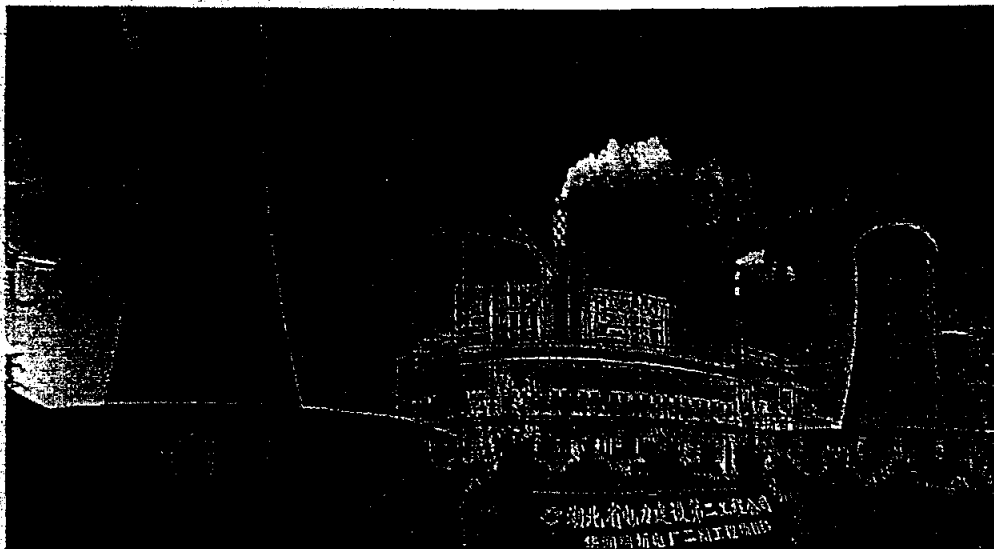
1. Design and construction of the 1000MW expansion power plant (2x1000MW) put into operation in 2010

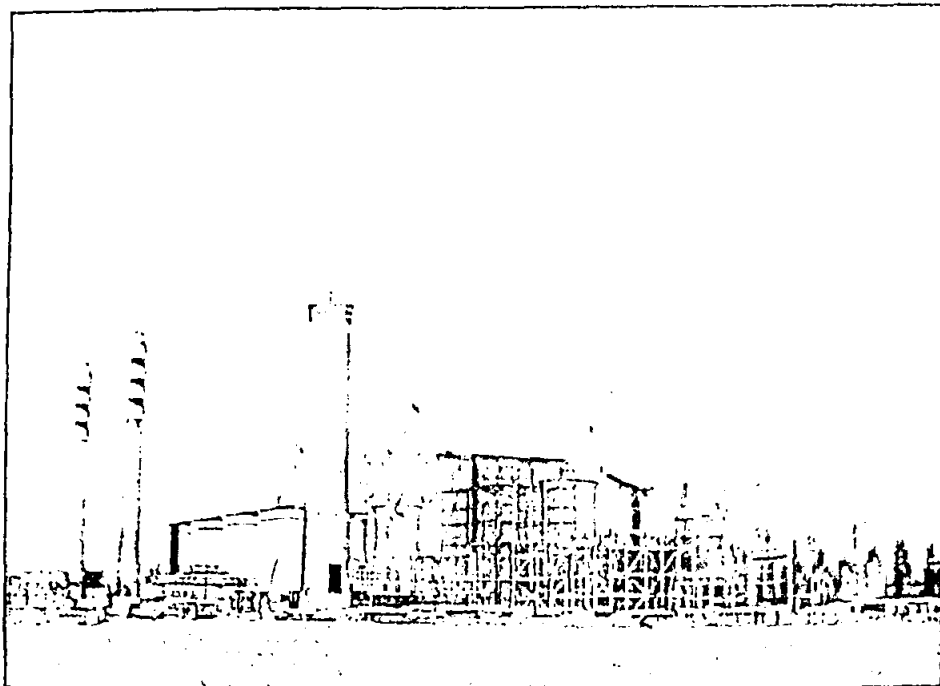
2. Huzhou 300MW power plant phase II (2x300MW) expansion project put into operation in 2008

3. Day power plant phase II (2x1000MW) ultra-supercritical coal-fired power generation unit project put into operation in 2011



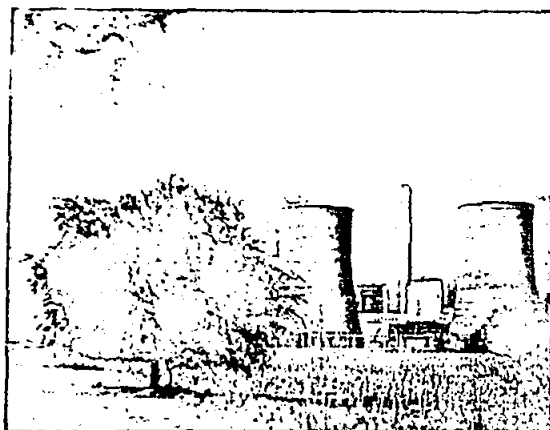
①	2
	3





①

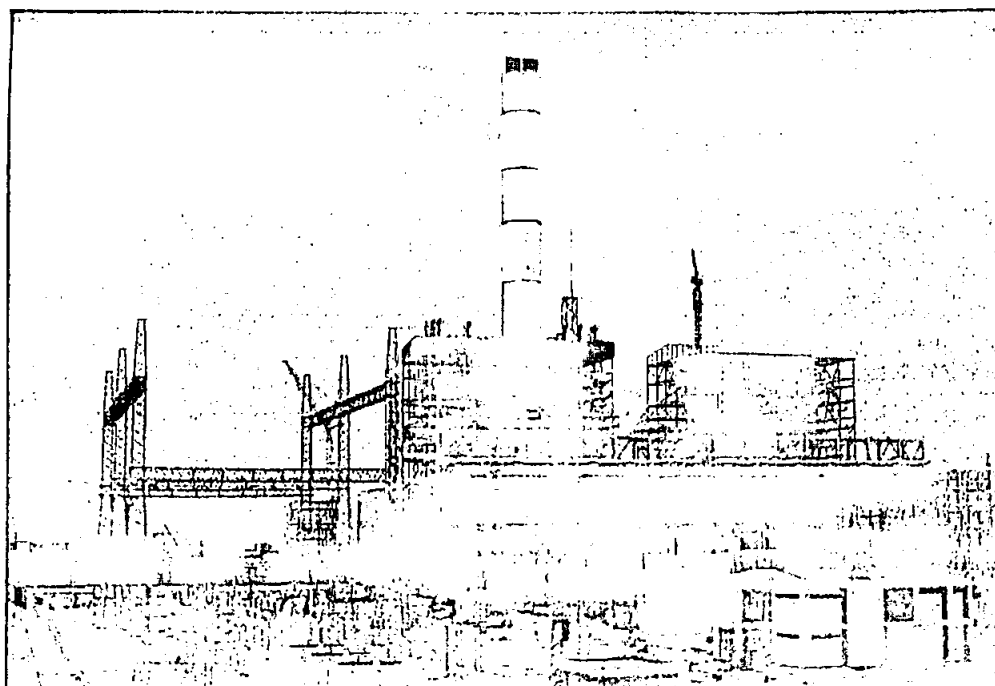
2



① Shandong Xinfu Group  
Xinjiang coal-fired  
power Co., Ltd. Project  
(2×1100MW).

② Xinjiang China Datang  
Hutubi thermal power plant  
(2×300MW) main body  
construction project put into  
operation in 2013.

No.	Overseas Project	Construction Scale	Completion Date
1	Syria Aleppo cement factory power plant project	2×30MW	2010
2	Sudan Al-Fula power plant project	3×135MW	2011
3	Indonesia BATAM TJK coal-fired power plant project	2×65MW	2012
4	Indonesia Bahari units project	2×30MW	2012
5	Indonesia Java Pacitan power plant units project	2×315MW	2012
6	Indonesia Sulawesi coal fired power plant installation and test project	2×220T/H CFB+2×50MW	2012
7	Indonesia Awar project	2×350MW	2013
8	Indonesia Pelabuhan Ratu 3×350MW coal-fired power plant project	3×350MW	2013
9	Turkey ATLAS supercritical units project	(1+1)×600MW	2014
10	Vietnam Vinh Tan thermal power plant project	2×622MW	2014
11	Pakistan Fatima bagasse coal-fired power plant project	2×60MW	2016
12	Indonesia Sulawesi Nickel iron industrial park power plant project	6×65MW	2018
13	Tajikistan Duschanbe power plant project	2×150MW	2016
14	Indonesia Pangkalan Susu coal-fired power plant	2×200MW	2017



Vietnam Vinh Tan thermal power plant project (2×622MW).

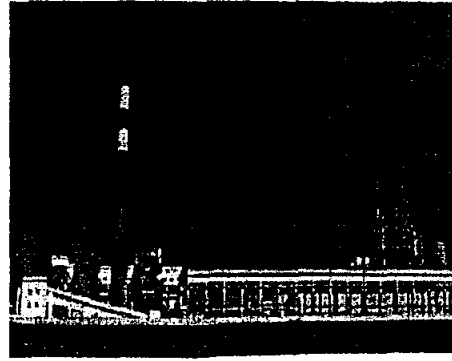
2 3

(12)

1. Indonesia Pelabuhan Ratu 1350MW coal-fired power plant project (1350MW), put into operation in 2013
2. Indonesia Sulawesi coal-fired power plant installation and test project (2x2201100TR/2x50MW), put into operation in 2012
3. Syria Aleppo cement factory expansion project (2x30MW), put into operation in 2010

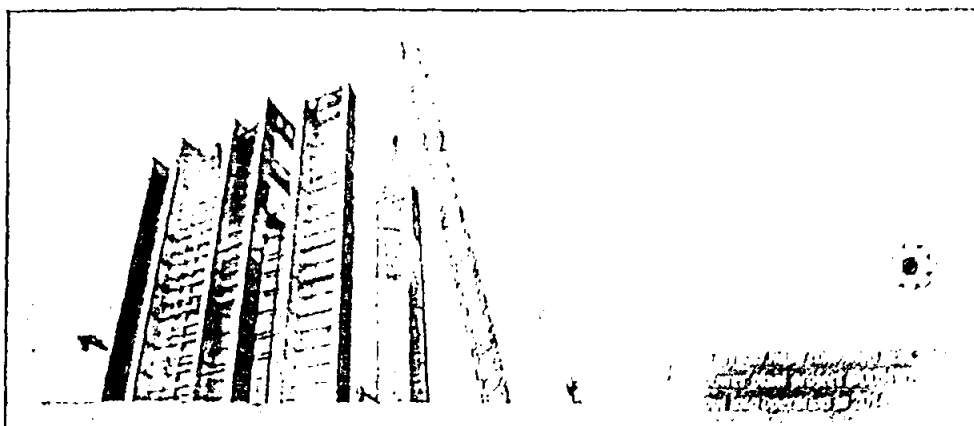


46





## Gas Turbine Projects



NO.	Domestic Power Plant	Capacity	Completion Date
1	Huadian Wuchang Thermal Power Plant reconstruction and extension project (natural gas as fuel)	1×185MW	2015
2	WISCO CCGP gas turbine installation project (single cycle)	2×125MW	2010
3	Taiyuan Jiajie combined heat and power plant project	2×298MW+1×284MW	2014
4	Shenzhen Nantian from oil-fired to gas-fired level E Unit2 installation power plant	258MW 1+1+1 combined cycle	2014
5	Shenzhen Meishi gas turbine power plant project	180MW	2007
6	Huadian Wuchang Thermal Power Ltd. Co. gas turbine project	1×185MW	2007
7	Shenzhen Nanshan Thermal Power Plant Phase I & Phase II project	3×24.8MW+1×36MW	1991
8	Fuzhou Mingda Gas Turbine Power Plant	2×24.8MW+1×36MW	1994
9	Zhongshan Nanlang Gas Turbine Power Plant	2×180MW	2005
10	Guangdong Foshan Funeng Gas Turbine Power Plant	2×180MW	2005
11	Wuhan Zhuankou Gas Turbine Regulating Power Plant	1×123MW+1×56MW	1997
12	Guangdong Dongguan Tongming Gas Turbine Power Plant	2×180MW	2005
13	Hubei Nengyuan Donghu Gas Turbine thermal power Co.LTD 2×9E Gas Turbine Cogeneration project	2×185MW	2016



Bengal Chandpur 150MW combined cycle power plant (1×120MW+1×60MW), put into operation in 2012

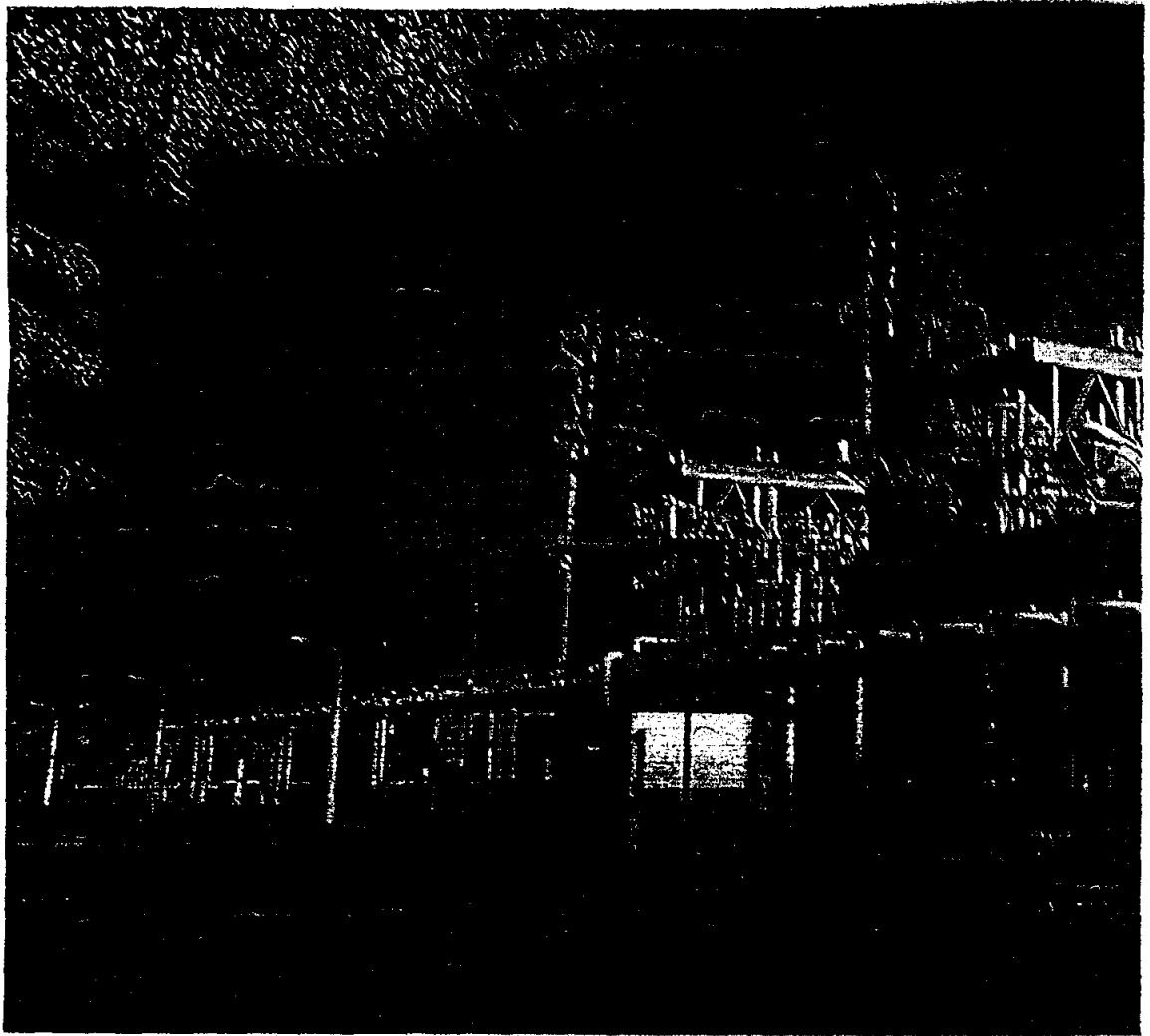
NO.	Overseas Power Plant	Capacity	Completion Date
1	Pakistan SAIF power plant project (combined cycle)	2×76MW+1×60MW 2 gas turbines and 1 turbine generator	2010
2	Pakistan Nandipur gas turbine project (combined cycle)	3×120MW+1×200MW 3 gas turbines and 1 turbine generator	2014
3	Bengal Chandpur 150MW combined cycle power plant	1×120MW+1×60MW	2012
4	Venezuela new center gas turbine power plant	4×192 MW	2013
5	Malaysia TNB Connaught Bridge gas turbine project	380MW	2015
6	Venezuela BATALLA DE SANTA ILES Refinery power plant project	6×100MW	2016
7	Turkey Kazan power plant project (combined cycle)	400MW	2017



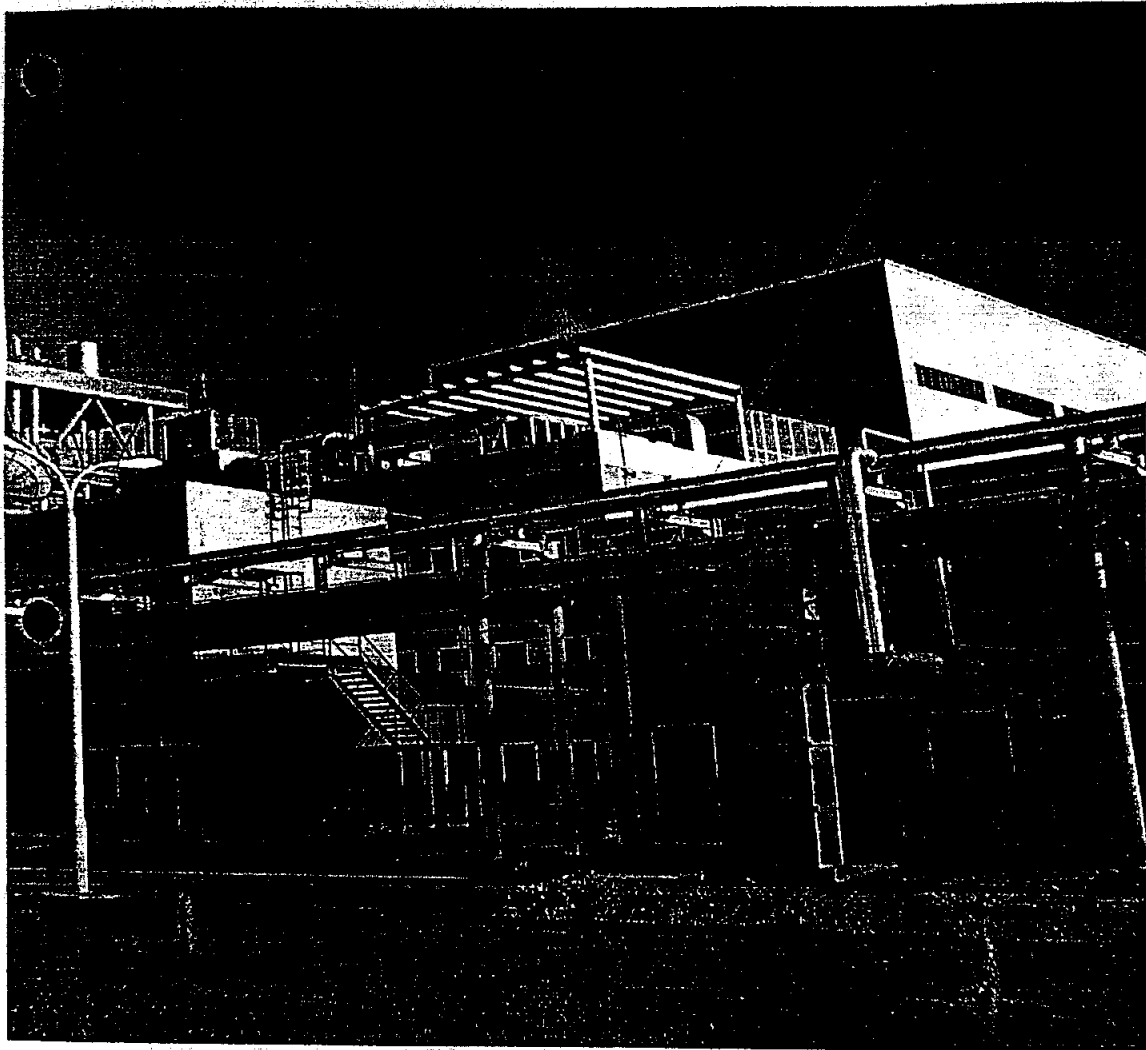
Pakistan Naudipar gas turbine power generating station  
(3 x 150 MW, 1 x 200 MW gas turbines) (1987)



Armenia Yeghvard gas turbine power station (4 x 150  
MW gas turbines) (1987)



Pakistan SAIF power plant project (combined cycle) (2 × 76MW + 1 × 60MW), put into operation in 2010



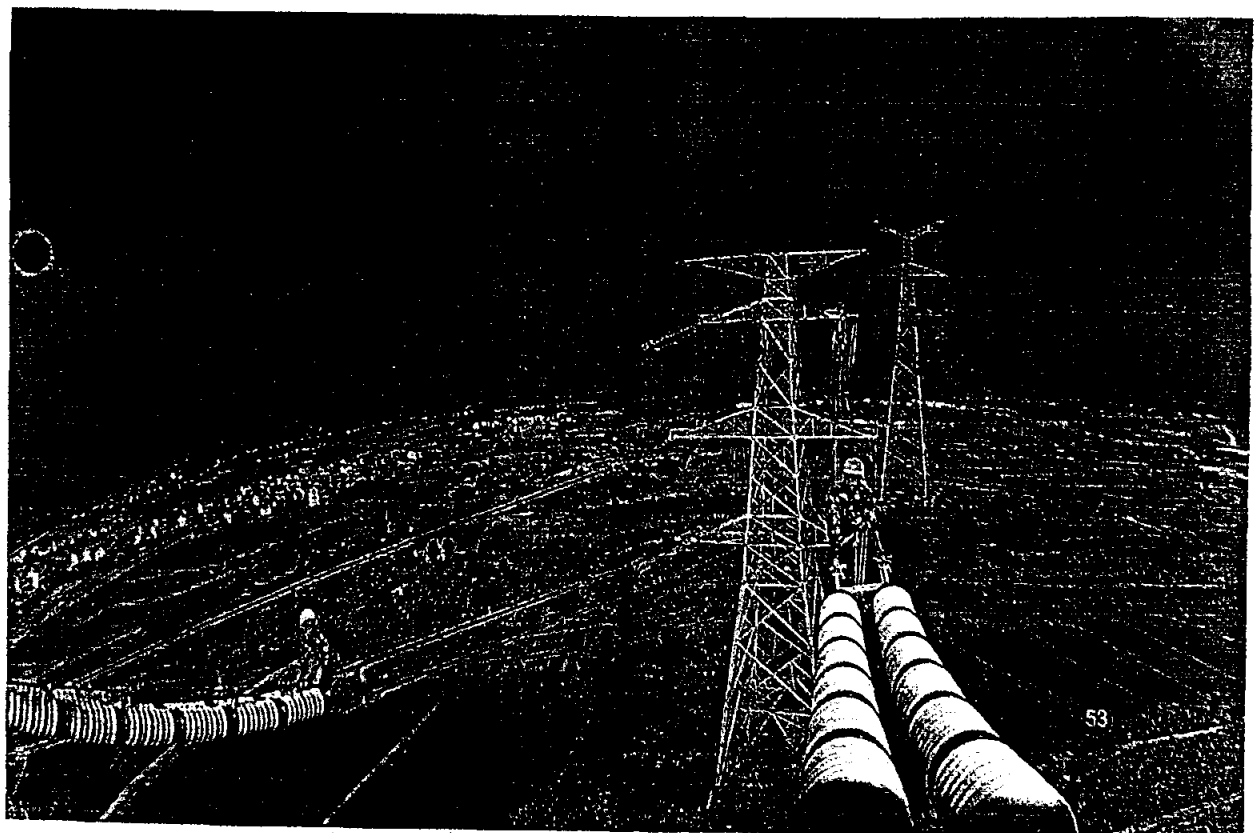
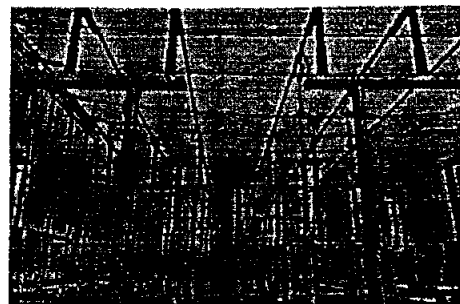
# Power Grid Projects

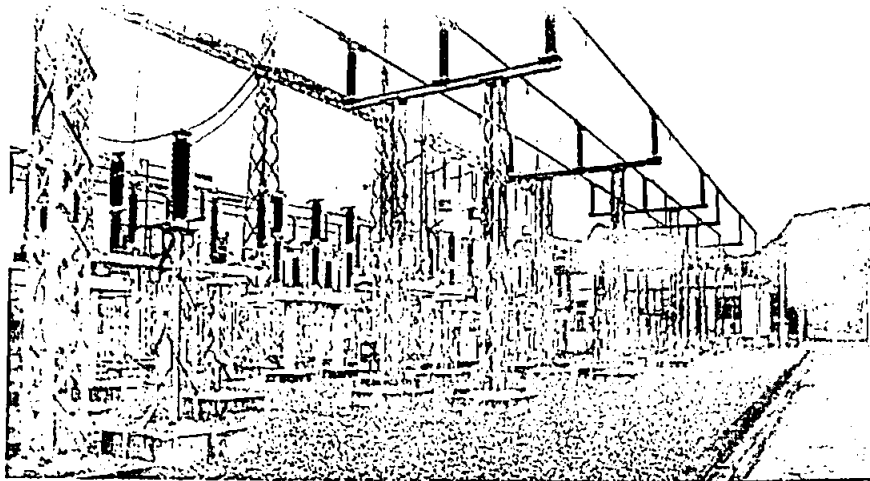


No.	Project	Completion Date
1	220kV Fuzhou Substation	2008
2	220kV Fuzhou Substation	2008
3	220kV Fuzhou Substation	2008
4	220kV Fuzhou Substation	2009
5	220kV Fuzhou Substation	2009
6	220kV Fuzhou Substation	2010
7	220kV Fuzhou Substation	2010
8	220kV Fuzhou Substation	2010
9	220kV Fuzhou Substation	2010
10	220kV Fuzhou Substation	2011
11	220kV Fuzhou Substation	2011
12	220kV Fuzhou Substation	2012
13	220kV Fuzhou Substation	2012
14	220kV Fuzhou Substation	2012
15	220kV Fuzhou Substation	2012
16	220kV Fuzhou Substation	2012
17	220kV Fuzhou Substation	2013
18	220kV Fuzhou Substation	2013
19	220kV Fuzhou Substation	2014
20	220kV Fuzhou Substation	2014



Figure 1-1-1: 110kV transmission tower  
 1. The tower is a lattice structure, 110kV transmission tower  
 2. The tower is a lattice structure, 110kV transmission tower  
 3. The tower is a lattice structure, 110kV transmission tower  
 4. The tower is a lattice structure, 110kV transmission tower





Laos northern rural electrification project, put into operation in 2012

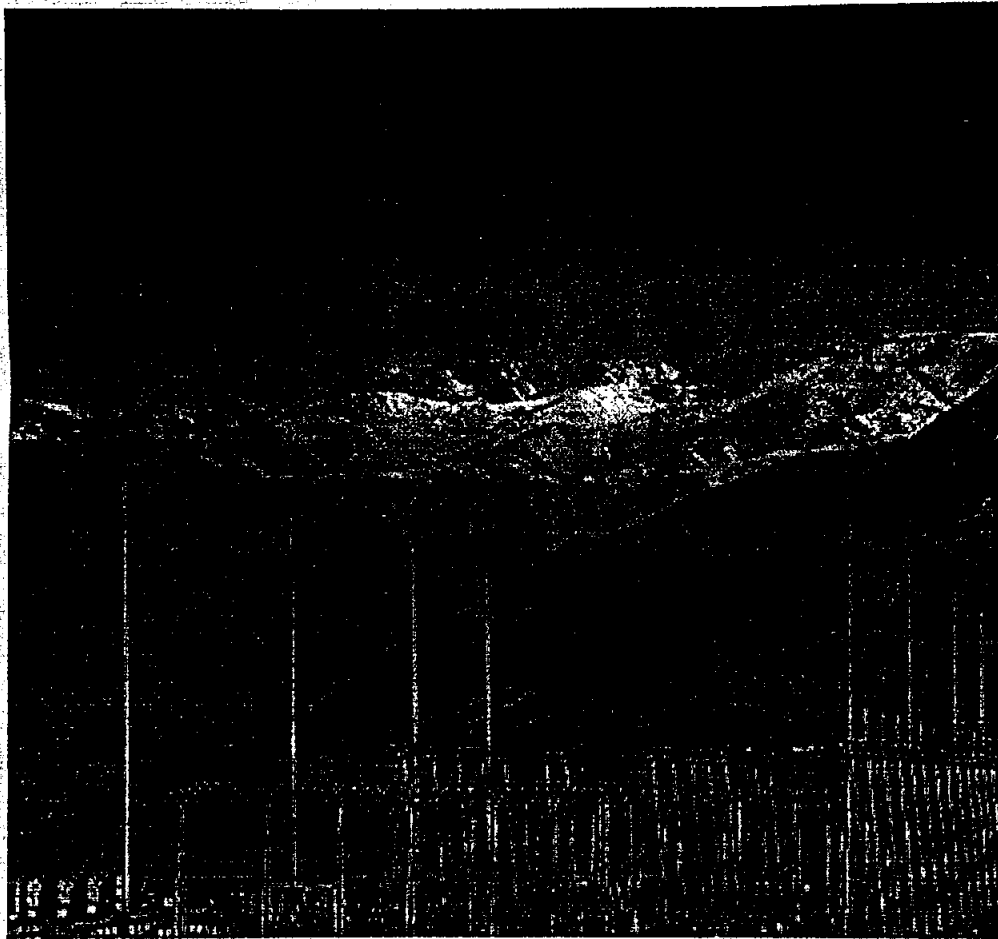
No.	Overseas Project	Completion Date
1	Laos 110kV transformer substation project civil work and installation work	2009
2	East Timor State Grid LIQUICA 150kV transformer substation	2011
3	East Timor State Grid Lospalos 150kv transformer substation	2011
4	East Timor State Grid Baucau 150kv transformer substation	2011
5	East Timor State Grid Maliana 150kv transformer substation	2011
6	East Timor State Grid ASUAI 150kv transformer substation	2012
7	Laos northern rural electrification project	2012
8	Laos Houay Lamphan Gnai Hydropower station 115kV transmission and transformation project	2013
9	Laos Nam Mang River No.1 hydropower station power resources project	2013
10	Laos Nam Shan 3A hydropower station construction power supply line project	2013
11	Kyrgyzstan Dateka - Ke Ming 500kV transmission and transformation project substation section	2014
12	Kyrgyzstan Dateka - Ke Ming 500kV transmission and transformation project power transmission section	2014
13	Laos 230kV Pak Ngeun and Pha Oudom Substation Extension Project	2017
14	Angola SK transmission and transformation project CATETE 400kV substation Electrical Installation project	2016
15	Kenya Nairobi 220kV、66kV power grid upgrading and reform project	2016

1) East Timor State Grid LIQUICA 150kV transformer substation, put into operation in 2013



2) Kyrgyzstan Dateka - Ke Ming 500kV transmission and transformation project substation section, put into operation in 2014

①  
2

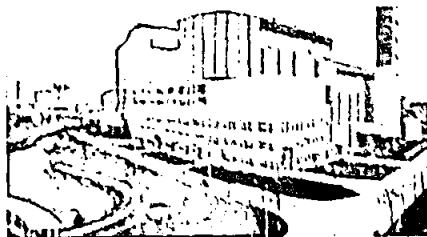




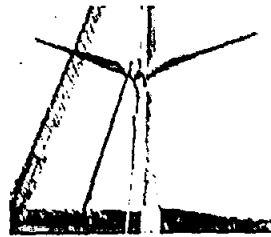
## New Energy Power Projects



No	Project	Capacity	Completed Date
1	Yancheng Changfeng 100MW wind power plant	100MW (3501.1)	2009
2	Guangxi Nongkhe wind power plant (100MW)	100MW	2009
3	China Resources Pengla Nongkhe wind power plant	50MW	2009
4	China Resources Huila Chonacha wind power plant	50MW	2010
5	Fujian Fuying Nantou wind power plant project	30MW	2011
6	Huadian Inner Mongolia Qibai wind power plant	49.5MW	2011
7	Huabei Huadian Longganghu methane power plant	132MW	2011
8	Kaifeng waste-to-energy power plant project	250MW (3501.1)	2012
9	Fujian Hunan Xiaozuo wind power plant project civil work and installation work	22MW	2012
10	China Resources Fuzhou wind power plant 200MW 110KV booster station civil work and installation work electric equipment installation work	110KV	2011
11	Nanning Jiangbei Jingmai Industry Development Zone waste-to-energy power plant	2518MW (45001.1)	2015
12	Hackun Energy Technology (Shanghai) Co., Ltd. Maibang District 4MWp photovoltaic power EPC project	4MWp	2015
13	Chen Phase 1 & 2 9568MWp photovoltaic (PV) power generation EPC project	509568MWp	2015
14	Tanghe Longshan 40MW wind power plant	40MW	2015
15	Pakistan DAWOOD 49.5MW wind power plant	49.5MW	2015
16	Pakistan TAPAL wind power plant	30MW	2015
17	Pakistan Master wind power plant booster station civil work and installation work and collecting power lines work	132KV	2015

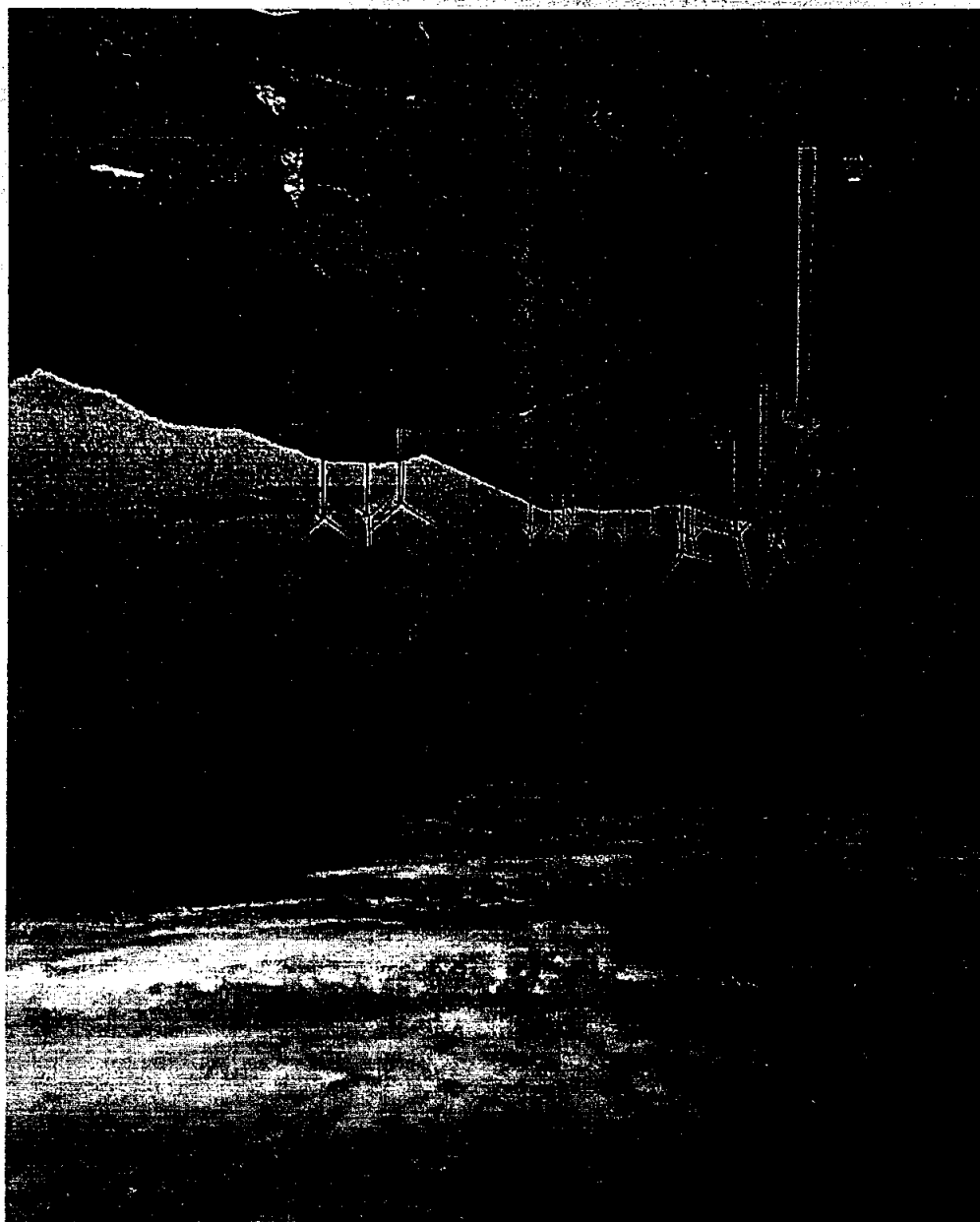


Kaifeng waste-to-energy power plant project (250 MW (3501.1)), put into operation in 2012



Fujian Fuying Nantou wind power plant project (30 MW), put into operation in 2011

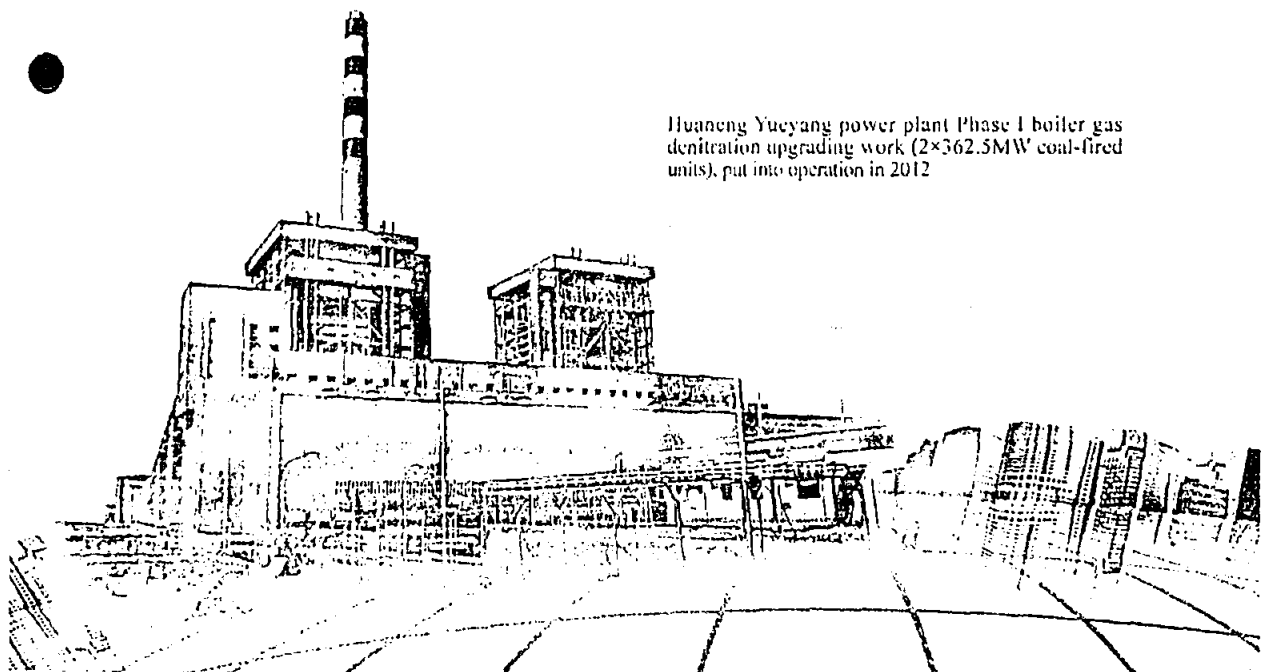
57



## Green Power Projects

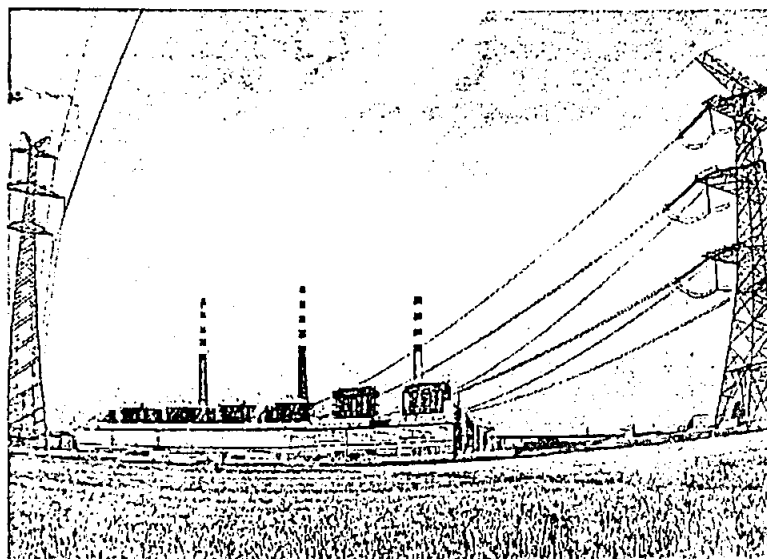


No.	Denitrallon Project	Complation Date
1	China Resources Caofeidian 2X300MW power plant coal-fired Unit 2 installation (including denitration)	2009
2	Huangshi 1X300MW combined heat and power project coal-fired unit installation (including denitration)	2010
3	Huaneng Yueyang power plant Phase III (2×600MW) expansion project Unit 5 installation (including denitration)	2011
4	China Guodian Qingshan Thermal Power Generation Co., Ltd. 2X350MW coal-fired units general contracting project gas denitration work	2010
5	Huaneng Yueyang power plant Phase I boiler gas denitration upgrading work (2×362.5MW coal-fired units)	2012
6	Huaneng Luohuang power plant Phase III (2×600MW) boiler gas denitration upgrading work, Ammonia area and SCR reactor area installation work	2012
7	China Guodian Jiujiang power plant Phase IV 2X660MW gas denitration installation work	2012
8	China Guodian Jiujiang Power Generation Co., Ltd. 2×350MW units technical innovation project gas denitration device EPC general contracting project civil work and installation work	2012
9	China Guodian Changyuan Jinmen Power Generation Co., Ltd. 2×600MW gas denitration civil work and installation work	2013
10	Huaneng Luohuang power plant Phase I and II gas denitration upgrading project installation work bidding section I	2013
11	Vietnam Vinh Tan Phase II 2×622MW thermal power plant general contracting project (including denitration)	2013
12	Turkey ATLAS (1+1) × 600MW Iskenderun thermal power plant project (including denitration)	2013



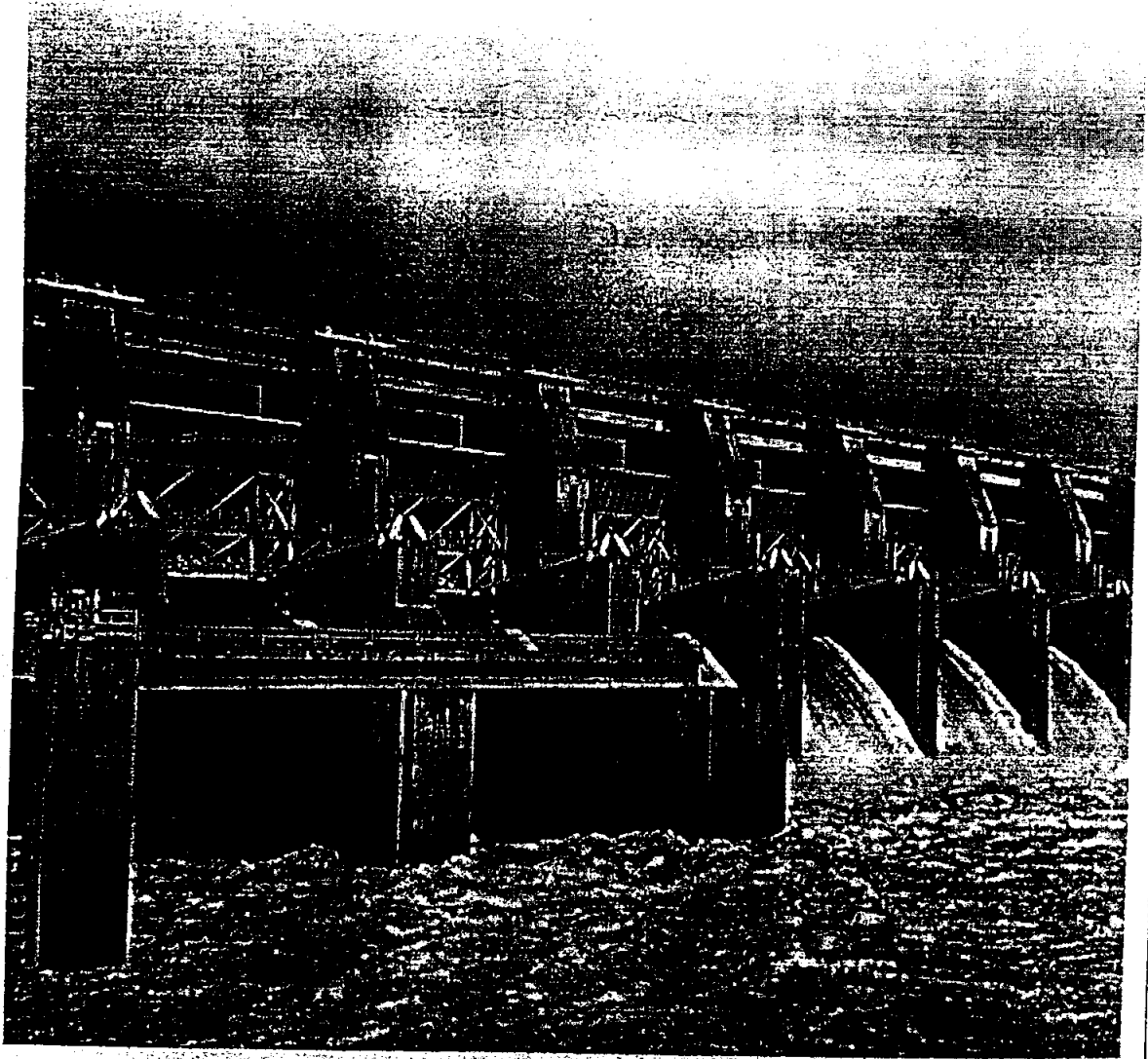
Huaneng Yueyang power plant Phase I boiler gas denitration upgrading work (2×362.5MW coal-fired units), put into operation in 2012

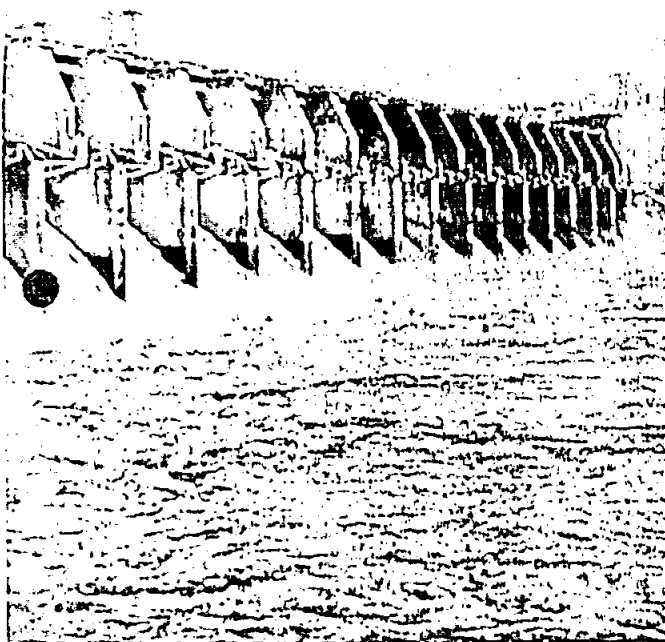
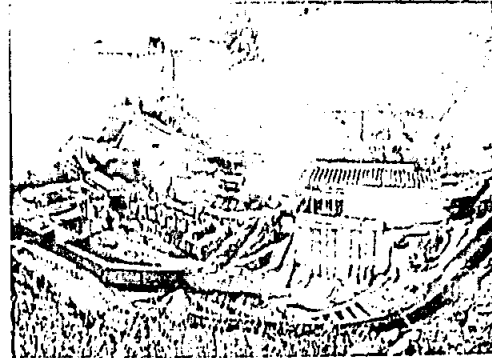
No.	Denitrification Project	Completion Date
1	Hubei Huadian Xiangfan Power Generation Co., Ltd. Xiangfan power plant (2×600MW) Phase II project gas desulphurization work	2007
2	Huaneng Haimen power plant Phase I Unit 1 and 2 (2X1000MW) sea water gas desulphurization installation work	2009
3	Huaneng Yangluo power plant Phase III 2×600MW expansion project desulphurization system installation work	2006
4	China Guodian Fuzhou Power Generation Co., Ltd. Jiangyin power plant Phase I 2×600MW gas desulphurization island installation work	2007
5	China Guodian Changyuan First Power Generation Co., Ltd. 1×300MW gas desulphurization upgrading project civil work and installation work	2008
6	Fujian China Guodian Nanpu Phase II 2×670MW power plant coal-fired project gas desulphurization island installation work	2011
7	Huadian Hubei Xisaishan power plant 2×680MW coal-fired units desulphurization installation work	2013
8	China Resources Puqi power plant Phase II 2×1000MW Unit 4 installation project	2013
9	Vietnam Vinh Tan Phase II 2×622MW thermal power plant general contracting project	2013
10	Turkey ATLAS (1+1) × 600MW iskenderun thermal power plant project	2013



Huaneng Haimen power plant Phase I Unit 1 and 2 (2X1000MW) sea water gas desulphurization installation work, put into operation in 2009

## Hydraulic Power Projects





(2)

(1) Huanglongtan hydroelectric power plant expansion project (2×170MW), put into operation in 2005

(2) Hubei Bailian River hydroelectric power plant project (45MW), put into operation in 1964

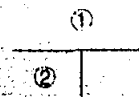
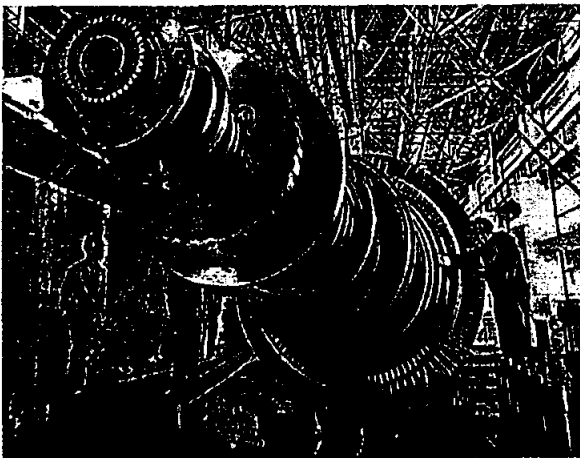
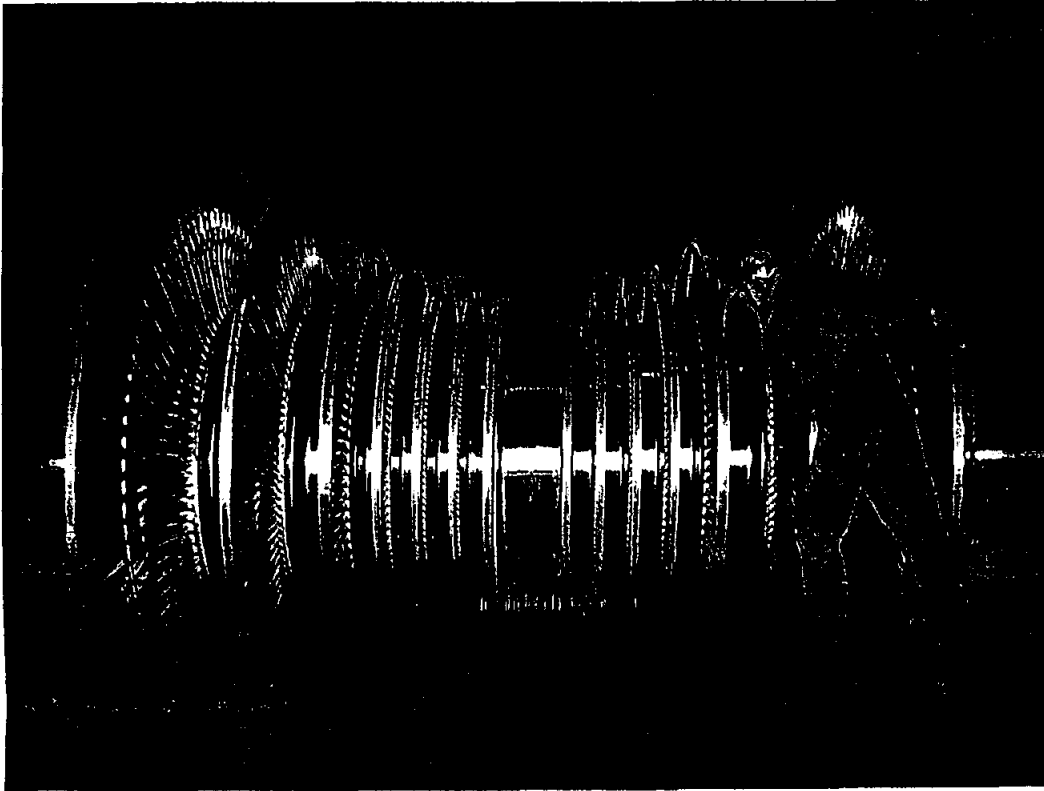
## Overhaul and Maintenance Projects



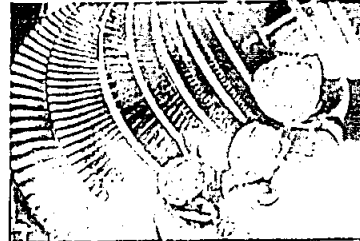
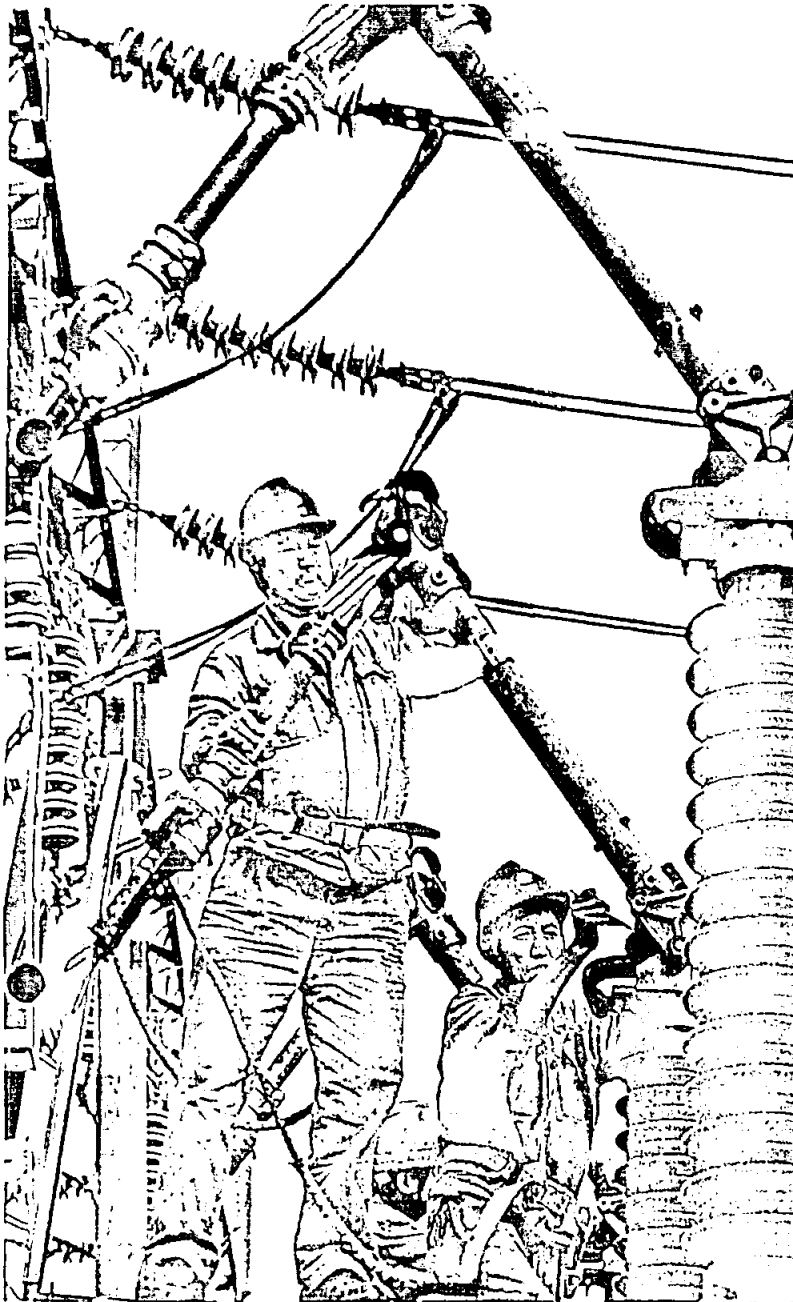
Type	Project	Completion Date
Overhaul and maintenance project	Xiangfan power plant 4×300MW units overhaul project	2009
	WISCO Energy and Power Parent Company thermal power plant 2×50 MW units overhaul and output assurance project	2010
	Wuhan Steel and Electric Power Corporation 2×200 MW units desulphurization system overhaul and output assurance project	2011
	WISCO Energy and Power Parent Company 07 power station 2×6 MW 2×12MW1×25MW units output assurance project	2010
	Hubei Energy Group Ezhou Power Generation Co., Ltd. 2×300 MW 2×600 MW units maintenance and overhaul services of electric part, of some boiler part and of desulphurization system	2011
	China Guodian Yiyang Power Generation Co., Ltd. 2×300 MW 2×600 MW units coal handling system overhaul and maintenance	2011
	Fujian Hongshan Thermal Power Co., Ltd. 2×600 MW supercritical fuel system of steam extraction heat supply unit overhaul and maintenance project	2011
	Wuhan Steel and Electric Power Corporation Energy and Power Parent Company gas turbine thermal power workshop overhaul and output assurance project	2011
Unit major overhaul project	Xiangfan power plant (4×300MW) units major overhaul	2009
	Guangdong Hengyi power plant ((2×50 MW) #2 units major overhaul	2003
	Ezhou power plant (2×300MW/2×600MW) #2 unit turbine island A-level overhaul	2009
	Guangdong Foshan Funeng Power Generation Co., Ltd. #5 and #7 turbine (50MW) and generator major overhaul	2006
	WISCO Energy and Power Parent Company thermal power station (2×50 MW) major overhaul	2010
	Guangdong Sanshui Hengyi power plant (2×60MW) units major overhaul	2010
	Huaneng Hainai Power Generation Co., Ltd. Dongfang power plant (2×35MW) major overhaul	2010
	Guangdong Shaoguan Renhua Huayue Gangue Power Co., Ltd. (2×50MW) #2 unit major overhaul and specialized installation project	2010
	Fujian Mingda power plant gas turbine (2×36 MW+1×37 MW) demolition and overhaul	2010
	Wuchang power plant gas turbine (1×125MW+1×60MW) generator overhaul	2010
	Wuhan Steel and Electric Power Corporation (2×200MW) units major overhaul	2010
	Xiangfan power plant (4×300MW/2×600MW) #1 unit boiler island major overhaul	2010
	Guangzhou Hengyun Thermal Power (D) Plant Co., Ltd. #9 (300MW) equipment first major overhaul	2011
	Xiangfan power plant (4×300MW) minor overhaul and technical innovation	2010
	Jinxiang cement plant 6KV power source construction	2000
	Dongfeng Motor Corporation power plant expansion project flue and gas duct and air duct production	2004

Unit minor overhaul, technical innovation and other assignments	Dongfeng Motor Corporation power plant installation project	2004
	Guangdong Sanshui Hengyi power plant (2×50MW) unit expansion and reform	2006
	Guangzhou China Resources Nansha gas turbine power plant	2006
	Guangzhou Foshan Nanhai first power plant boiler water and coal mixture reform electric system installation	2007
	Wuhan Steel and Electric Power Corporation 2×200 MW desulphurization minor overhaul, #2 boiler furnace repair and economizer retrofit	2008
	Ezhou power plant (2×300 MW 2×600 MW) Unit 1 C-level overhaul	2009
	Wuhan Steel and Electric Power Corporation (2×200 MW) 1# boiler high-temperature reheater change	2009
	Boiler fast repair of WISCO coal carbonization company for 4 times	2009
	Fast boiler flow orifice repair of WISCO measurement control company	2009
	WISCO thermal energy workshop occasional overhaul during major overhaul period	2009
	Guangxi Jingui Paper Corporation power plant (2×670T/H+2×150MW) project general contract installation work (overall plant general service system electric and I & C installation)	2009
	#1 Boiler fast repair of Wuhan Steel and Electric Power Corporation (2×200 MW)	2009
	Change feed-water pumps of WISCO coal carbonization company	2009
	#2 Boiler fast repair of Wuhan Steel and Electric Power Corporation (2×200MW)	2009
	Huaneng Hainan Power Generation Dongfang power plant (2×350MW) unit minor overhaul and technical innovation	2010
	Hunan China Resources Hunan Liyujiang Co., Ltd. (4×300 MW 2×600 MW) #1 boiler precipitator and burner C-level overhaul	2010
	WISCO Energy and Power Parent Company thermal power plant 75T boiler steam water system (The construction of three small boilers comprises three parts. )	2010
	WISCO CSP heat recovery boiler drum and deaerator major overhaul	2010
	Wuhan Steel and Electric Power Corporation (2×200MW) desulphurization minor overhaul	2010
	Guangzhou Wanglong Thermal Power Co., Ltd. (1×12 MW) #1 and #2 boiler end heating surface reform project	2010
	China Resources Hunan Liyujiang Co., Ltd. (4×300 MW 2×600 MW) #2 unit B-level overhaul II, and bidding section (burner and air pre-heater, pulverized system & coal handling system, precipitator and ash-slag disposal system)	2010
	China Guodian Yiyang Power Generation Co., Ltd. (2×300 MW 2×600 MW) unit minor and technical innovation	2010
	Ezhou power plant occasional assignments and technical innovation project in 2010	2010
	China Guodian Yiyang Power Generation Co., Ltd. (2×300 MW 2×600 MW) #1, #2, #3, #4 unit coal pulverizer stairs and platform installation	2011
	China Guodian Yiyang Power Generation Co., Ltd. #2 car dumper retrofit	2011
	Ezhou power plant #3 unit minor overhaul	2011





- ① Fujian Hongshan Thermal Power Co., Ltd.  
2×600 MW supercritical fuel system of steam  
extravtion heat supply unit overhaul and  
maintenance project put into operation in 2011
- ② Guangdong Fashan Funeng Power Generation  
Co., Ltd.#5 and #7 turbin(50MW) and generator  
major overhaul put into operation in 2006



	②
①	③

- ① Jinxiang cement plant 6KV power source construction ,put into operation in 2000
- ② Guangzhou Hengyun Thermal power(D)Plant Co.,Ltd.#9(300MW) equipment first major overhaul, put into operation in 2011
- ③ Guangzhou China Resources Nansha gas turbine power plant,put into operation in 2006

# INTERSEC



INTERSEC

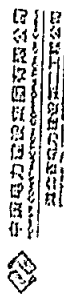
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ANNEXURE - B  
REVISED SCHEDULE OF PRICES

COST OF TURNKEY OPERATION & MAINTENANCE FOR 10 YEARS AND / OR UPTO COMPLETION OF SECOND MAJOR INSPECTION, WHICHEVER IS LATER

Item No	Payment Type	Unit Prices		Total Price (for the term of Agreement for the Complex)		Remarks
		Local Currency Component (PKR)	Foreign Currency Component (USD)	Local Currency Component (PKR)	Foreign Currency Component (USD)	
1	Mobilization cost					
1.1	Mobilization cost (excluding the unfurnished accommodation and necessary equipment as per attached list)				7,000,000.00	One Time Cost Against Advance Payment Bank Guarantee
1.2	Phase-1				2,500,000.00	
1.3	Phase-2				4,500,000.00	
	Sub Total - 1					
2	Operation & Maintenance Cost per month					
2.1	Operation & maintenance cost including routine services, salaries, housing and transportation based on HSFO primary fuel	20,584,121.00	439,103.40	247,129,572.97	5,257,240.75	Monthly Invoicing
2.2	Operation & maintenance cost including routine services, salaries, housing and transportation based on B3AS as primary fuel after one year	18,059,803.65	406,690.00	1,950,456,793.64	43,927,519.85	
2.3	Internal Security costs included in above rates (External Security shall be the responsibility of Owner)	3,090,000.00		370,800,000.00		
2.4	Cost of ISO HEALTH, SAFETY & ENVIRONMENT certification within one year (12 months) costs included in above cost		5,000.00		60,000.00	
2.5	Owner will arrange for all risk and machinery breakdown and business interruption insurance and policy will be provided to O&M Contractor for management. Contractor's workmen compensation and insurance of vehicles in his control is included in Contractor's price					
2.6	Fuel costs by Employer (Only HSD, HSFO or GAS)					
	Sub Total - 2			2,568,383,366.61	49,239,760.61	
3	Scheduled Inspections for GE equipment, Steam turbine/HRSG, BOP & Switchyard					
3.1	GT Combustion Inspection for single unit *		105,731.22	(2)	2,220,353.51	Event Based Invoicing
3.2	GT Hot Gas Path Inspection for single unit *		198,788.71	(2)	1,198,732.27	
3.3	GT Major Inspection for single unit		451,602.02	(2)	2,709,512.14	
3.4	ST & HRSG Major Inspection		77,181.39	(2)	1,389,902.03	
3.5	Scheduled activities on GT Generator during Combustion Inspection for single unit		19,745.48	(2)	416,655.07	
3.6	Scheduled activities on GT Generator during Hot Gas Path Inspection for single unit		29,618.22		177,705.32	
3.7	Scheduled activities on GT Generator during Major Inspection for single unit		89,804.68		533,127.95	
3.8	ST Generator Major Inspection		659,080.41		1,318,160.83	
3.9	ST Generator Minor Inspection		66,692.71		589,904.42	
3.10	Annual inspect Steam turbine/HRSG, BOP and switchyard *		288,122.19		2,961,821.91	
	Sub Total - 3				15,606,399.79	
4	Scheduled Inspections- CONSUMABLES for GE equipment Steam turbine/HRSG, BOP & Switchyard *					
4.1	GT Combustion Inspection for single unit	1,028,959.86		22,628,765.99		

SOP-1



APPENDIX-4  
COST OF TURBINE OPERATION & MAINTENANCE FOR 10 YEARS AND / OR UPTO COMPLETION OF SECOND MAJOR INSPECTION, WHICHEVER IS LATER

Item No	Payment Type	Unit Prices		Total Price (for the term of Agreement for the Contract)		Remarks
		Local Currency Component (PKR)	Foreign Currency Component (USD)	Local Currency Component (PKR)	Foreign Currency Component (USD)	
2.1	GT Hot Gas Path Inspection for single unit	2,781,708.61		16,690,291.68		Event Based Inspection
2.2	GT Major Inspection for single unit	4,041,332.98		24,247,917.88		
2.3	GT & HRSG Major Inspection	3,576,409.87		21,458,439.1		
2.4	GT & HRSG Minor Inspection	755,802.94		21,459,879.47		
2.5	Scheduled activities on GT Generator during Completion Inspection for single unit	122,027.06		7,552,568.34		
2.6	Substituted activities on GT Generator during Hot Gas Path Inspection for single unit	366,081.19		2,196,487.16		
2.7	Substituted activities on GT Generator during Major Inspection for single unit	732,162.38		4,392,972.33		
2.8	Substituted activities on GT Generator during Minor Inspection	5,818,758.86		34,211,111.51		
2.9	Annual Repair Steam turbine/HRSG, BOP and switchyard	588,574.21		3,282,193.85		
2.10	Sub Total - 4	18,300,405.98		18,301,000.63		
3	Schedule Inspections PARTS for GE equipment Steam turbine/HRSG, BOP & Switchyard			151,115,977.13		Event Based Inspection
3.1	GT Combustion Inspection for single unit		574,222.80		12,122,658.29	
3.2	GT Hot Gas Path Inspection for single unit		1,110,715.12		6,562,296.32	
3.3	GT Major Inspection for single unit		1,653,719.77		10,182,372.65	
3.4	GT & HRSG Major Inspection		268,818.90		1,450,913.97	
3.5	GT & HRSG Minor Inspection		128,341.02		3,465,211.67	
3.6	Activities on GT Generator during Completion Inspection for single unit		33,143.50		905,169.21	
3.7	Substituted activities on GT Generator during Hot Gas Path Inspection for single unit		108,875.59		680,293.52	
3.8	Substituted activities on GT Generator during Major Inspection for single unit		201,278.51		1,267,671.05	
3.9	Substituted activities on GT Generator during Minor Inspection		720,465.43		740,458.59	
3.10	Annual Repair Steam turbine/HRSG, BOP and switchyard		116,458.31		1,643,431.97	
3.11	Sub Total - 5		186,554.73		1,865,947.32	
4	Cost of other Chemicals/lubricants/consumables per Kwh				40,066,502.23	Event Based Inspection
4.1	Cost of other Chemicals per Kwh					
4.2	Cost of other Chemicals per Kwh					
5	Relubrication Works for GE Frame 9E Costs					
5.1	Relubrication parts					
5.2	Relubrication pieces					
5.3	Relubrication labor					
5.4	Relubrication material					
5.5	Relubrication					
5.6	Relubrication					
5.7	Relubrication					
6	Sub Total - 6					Event Based Inspection
7	Grand Total					
7.1	Grand Total					
7.2	Grand Total					
7.3	Grand Total					
7.4	Grand Total					
7.5	Grand Total					
7.6	Grand Total					
7.7	Grand Total					
7.8	Grand Total					
7.9	Grand Total					

COST OF TURNKEY OPERATION & MAINTENANCE FOR 10 YEARS AND / OR UPTO COMPLETION OF SECOND MAJOR INSPECTION, WHICHEVER IS LATER

Item No	Payment Type	Unit Prices		Total Price (for the term of Agreement for the Complex)		Remarks
		Local Currency Component (PKR)	Foreign Currency Component (USD)	Local Currency Component (PKR)	Foreign Currency Component (USD)	
7.15	Cross Fire Tube		9,872.74	148,091.10		Inventory
7.16	Cross Fire Tube Support		5,528.73	82,931.01		
7.17	Flow Sleeve		103,663.77	829,310.14		
7.18	TP Block		5,528.73	82,931.01		
	Sub Total - 7.1			3,135,607.61		
7.2	Hot Gas Path Inspection Parts					Event Based Inventory
7.2.1	Transition piece		93,297.39	373,159.56		
7.2.2	Combustion Liner		51,831.88	207,327.54		
7.2.3	First Nozzle		33,172.41	132,659.62		
7.2.4	Bull Horn		22,114.94	85,459.75		
7.2.5	Cross Fire Tube		9,872.74	39,490.96		
7.2.6	Cross Fire Tube Support		5,528.73	22,114.94		
7.2.7	Flow Sleeve		103,663.77	103,663.77		
7.2.8	TP Block		5,528.73	22,114.94		
7.2.9	First Stage Nozzle					
7.2.10	First Stage Bucket					
7.2.11	First Stage Shroud Block					
7.2.12	Second Stage Nozzle					
7.2.13	Second Stage Bucket					
7.2.14	Second Stage Shroud Block					
7.2.15	Third Stage Nozzle					
7.2.16	Third Stage Bucket					
7.2.17	Third Stage Shroud Block					
	Sub Total - 7.2			959,051.07		
7.3	Water Inspection Parts					Event Based Inventory
7.3.1	Transition piece		93,297.39	373,159.56		
7.3.2	Combustion Liner		51,831.88	207,327.54		
7.3.3	First Nozzle		33,172.41	132,659.62		
7.3.4	Bull Horn		22,114.94	85,459.75		
7.3.5	Cross Fire Tube		9,872.74	39,490.96		
7.3.6	Cross Fire Tube Support		5,528.73	22,114.94		
7.3.7	Flow Sleeve		103,663.77	103,663.77		
7.3.8	TP Block		5,528.73	22,114.94		
7.3.9	First Stage Nozzle		148,091.10	592,364.39		
7.3.10	First Stage Bucket		177,709.32	710,837.27		
7.3.11	First Stage Shroud Block		56,866.98	227,467.93		
7.3.12	Second Stage Nozzle		98,727.40	394,909.59		
7.3.13	Second Stage Bucket		116,477.63	473,891.51		
7.3.14	Second Stage Shroud Block		34,554.59	138,218.36		
7.3.15	Third Stage Nozzle		98,727.40	394,909.59		

COST OF TURNKEY OPERATION & MAINTENANCE FOR 10 YEARS AND / OR UP TO COMPLETION OF SECOND MAJOR INSPECTION, WHICHEVER IS LATER

Item No	Payment Type	Unit Prices		Total Price (for the term of Agreement for the Complex)		Remarks
		Local Currency Component (PKR)	Foreign Currency Component (USD)	Local Currency Component (PKR)	Foreign Currency Component (USD)	
7.3.16	Third Stage Bucket		118,472.88		473,891.51	
7.3.17	Third Stage Shroud Block		27,150.03		108,600.14	
	Sub Total - 7.3				4,504,141.35	
	Sub Total - 7 (7.1+7.2+7.3)				8,676,800.04	
8	Fuel Oil Treatment plant					
8.1	Routine maintenance of Fuel Oil Treatment Plant (FOTPs)					Cost excluded under 2.1 above
8.2	Overhaul of FOTPs					
8.3	Schedule maintenance of FOTPs					
	Sub Total - 8					
9	Fuel Handling System					
9.1	Routine maintenance of Fuel Oil Dewatering system					Cost excluded under 2.1 above
9.2	Routine maintenance of Auxiliary steam boilers for fuel oil tank heating and their accessories					
9.3	Schedule maintenance of Auxiliary steam boilers for fuel oil tank heating and their accessories					
9.4	Fuel Oil Testing					Cost excluded under 2.1 above
9.5	Overhaul for auxiliary steam boilers					
	Sub Total - 9					
10	Fuel Additives and make-up items cost per Kwh (Per annum cost at 60% load factor for One (01) Year only) *					Quantity (PKRS) based on kWh dispatched
10.1	Fuel Additives cost per Kwh (Per annum cost at 60% load factor)				0.0121	
	Sub Total - 10				4,692,666.06	
11	Gas Booster System					
11.1	Routine maintenance of Gas booster system	1,016,892.20	9,977.74	9,152,029.60	89,854.66	
11.2	Schedule maintenance of Gas Booster Compressors (3+1 standby) and their accessories	1,220,270.64	11,847.29	10,937,436.76	106,825.59	
11.3	Consumables for Gas booster system	305,067.66	2,961.62	2,745,600.94	26,684.40	
	Sub Total - 11			22,830,074.50	222,136.65	
12	Other Unplanned outages are covered under Clause 4.1.3.3 of O&M Agreement & Schedule-K					No Cost shall be quoted as they are deemed to be included in the overall price
13	Financial obligation Deviations items					
13.1	Item 1					



COST OF TURNKEY OPERATION & MAINTENANCE FOR 10 YEARS AND / OR UPTO COMPLETION OF SECOND MAJOR INSPECTION, WHICHEVER IS LATER

Item No	Payment Type	Unit Prices		Total Price (for the term of Agreement for the Complex)		Remarks
		Local Currency Component (PKR)	Foreign Currency Component (USD)	Local Currency Component (PKR)	Foreign Currency Component (USD)	
12.1	Item 2					Details to be provided by the O&M Contractor / Operator on request
12.2	Item 3					
12.3	Item 4					
12.4	Item 5					
12.5	Item 6					
12.6	Item 7					
12.7	Item 8					
12.8	Item 9					
12.9	Item 10					
12.10	Item 11					
12.11	Item 12					
12.12	Item 13					
12.13	Any other individual obligation placed on the Owner					
Sub Total - 13						
TOTAL BID PRICE (Sub Total 1 to 13)				2,742,304,418.43	150,346,217.28	150,346,217.28
14	Termination Costs					
14.1	Year 1				2,629,139.26	
14.2	Year 2				1,514,139.26	
14.3	Year 3				1,314,139.26	
14.4	Year 4				1,209,426.17	
14.5	Year 5				1,209,426.17	
14.6	Year 6				1,209,426.17	
14.7	Year 7				604,713.08	
14.8	Year 8				604,713.08	
14.9	Year 9				604,713.08	
14.10	Year 10				604,713.08	
Sub Total - 14					11,109,835.50	

Assumptions:

1. Fuel cost: CI, HSPH and MI based on 60% LF on HSFO and 90% LF on Gas for the whole term for all 3 CT Units are as under:  
Combustion Inspections (CI) = 21  
Top Gun Path Inspections (HSPH) = 6  
Major Inspections (MI) = 6
2. Current and future operation during the term (for reference only):  
kWh @ 60% Load Factor on HSFO Operation for One (01) Year = 2,263,407,648 kWh  
kWh @ 90% Load Factor on Gas Operation for Nine (09) Years = 31,764,872,520 kWh  
Total = 34,028,279,568 kWh

Notes:

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130.308 M. 130  
(13.425 B.L.)  
5. 13.425

SCHEDULE - Z

## SCHEDULE 2: ASSUMPTIONS

1. Per annum Operating Hours on HSFO = 5500 → 7000 hours
2. Per annum Operating Hours on Gas = 6500 → 7884 hours
3. Plant load factor on HSFO = 60%.
4. Plant load factor on Gas only Operation = 85%.
5. Gas Turbine Maintenance Factor on HSFO = 3.5 FFH.
6. Gas Turbine Maintenance Factor on HSD = 1.5 FFH.
7. Gas Turbine Maintenance Factor on Gas = 1.0 FFH.
8. Gas Turbine Combustion Inspection after 8000 (Eight Thousand) FFH.
9. Gas Turbine Hot Gas Path Inspection (HGPI) after 24000 (Twenty Four Thousand) FFH.
10. Gas Turbine Generator Minor Inspection during gas turbine HGPI.
11. Gas Turbine Generator Major Inspection (MI) during MI of Gas turbine.
12. Gas Turbine Major Inspection after 48000 (Forty Eight Thousand) FFH.
13. Gas Turbine wash after 250 (Two Hundred & Fifty) hours Operation on HSFO.
14. Compressor wash after 250 (Two Hundred & Fifty) Operating Hours.
15. HRSG wash during Gas turbine Combustion Inspection.
16. HRSG minor inspection, after 24000 (Twenty Four Thousand) FFH of Respective Gas Turbine (during Gas Turbine Hot Gas Path Inspection - HGPI).
17. HRSG Major inspection, After 48000 (Forty Eight Thousand) FFH of Respective Gas turbine (during Gas Turbine Major Inspection - MI).
18. Minor Inspection of Auxiliary Boiler after every Six month.
19. Major inspection of Auxiliary Boiler after every Twelve Months.
20. Annual Inspections of Gas booster compressors.
21. Minor Inspection Maintenance of Steam turbine after 25000 (Twenty Five Thousand) Operating Hours.
22. Major Inspections of Steam turbine after 50000 (Fifty Thousand) Operating Hours.
23. Minor Inspection of steam turbine Generator after 25000 (Twenty Five Thousand) Operating Hours.
24. Major Inspection of Steam turbine Generator after 50000 (Fifty Thousand) Operating Hours.
25. Availability factor with Gas Turbine Operation on gas only = 90%.
26. Availability factor with Gas Turbine Operation on HSFO = 80%.

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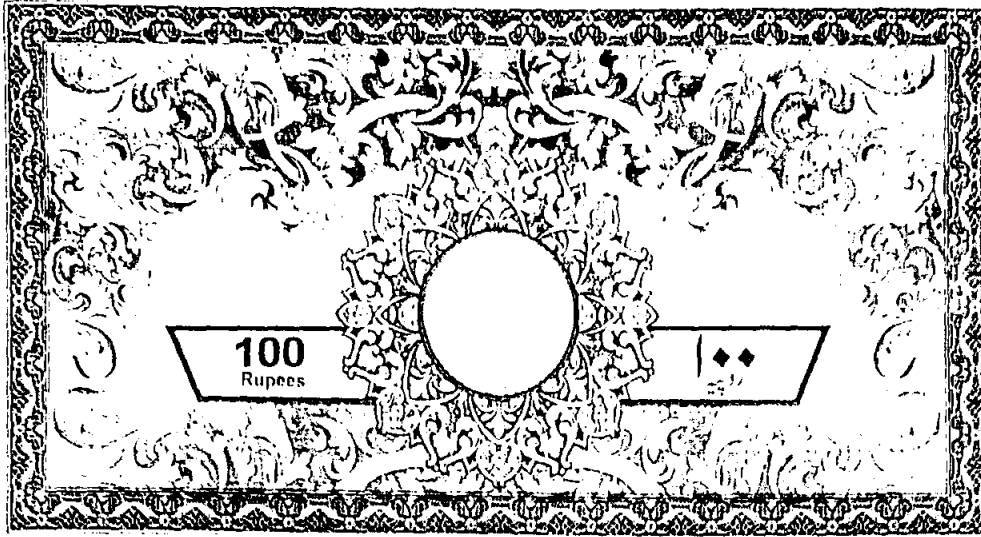
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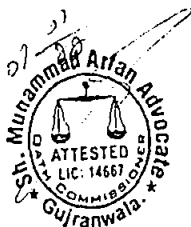
## UNDERTAKING

### BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

I, Naveed Athar, Plant Manager, CCPP Nandipur of Northern Power Generation Company Limited being duly authorized representative / attorney of CCPP Nandipur of Northern Power Generation Company Limited, hereby solemnly undertake that neither the grant of separate Generation License in respect of CCPP Nandipur has been applied nor refused by the by the Authority under the Act.

DEPONENT

(Naveed Athar)  
Plant Manager CCPP Nandipur  
NPGCL



## **INFORMATION REQUIRED UNDER SCHEDULE – II**

(Regulation 3(4)(a)(A)(b) in respect of New Generation Facility (Renewables))

# **FUEL SUPPLY AGREEMENT**



Ref: GMS-938 (LNG)

Dated: May 12, 2017

Engr. Nadeem Ahmed,  
Chief Executive Officer,  
Northern Power Generation Company Ltd.  
Thermal Power Station, Mahmood Kot Road,  
MUZAFFARGARH

Fax: 066-9200166

INTERIM AGREEMENT FOR SUPPLY OF RLNG TO CCPP NANDIPUR

Dear Sir,

This is with reference to your letter no. CEO/NPGCL/NNP/GSA/147-50 dated April 26, 2017, regarding the subject matter, enclosing therewith two sets of Interim Agreement for supply of RLNG to CCPP Nandipur during testing / commissioning period (not exceeding two months), duly signed by authorized signatory on behalf of Nandipur.

We are enclosing herewith one set of Interim Agreement, duly signed by SNGPL, for your further necessary action please.

Regards,

Yours faithfully,  
SUI NORTHERN GAS PIPELINES LIMITED

*Shahid Maqsood*  
**SHAHID MAQSUD**  
General Manager (Sales)  
for MANAGING DIRECTOR

Office of the FD. NPGCL
Diary No 4758
Date 22-5-17
M.F. (CA)
M.F. (CPO)
D.M.A. (CS)
D.M.A. (CPS)
D.M.A. (TSP)
AMA (S&M) P. H.
AMA (Security)
AMA (BTB)
AMA (A)
AMA (R/P)
AMA (Taxes)
AMA (P/H)
AMA (Payroll)
PA Grade-1

*FD*

*Copy to*  
*PD Nandipur*  
*Ad CE-MMS*

*21/5/2017*

NPGCL (GENCO III)
TPS. Muzaffargarh
CEO
CE/IB
HR & AD
Fin Director
Dir (M&IS)
Dir Tech
RF-I
RF-II
RF-IV
RE (P&S)
D.C.A
D.M (Security)
Xen (Civil)
Diary No 3506
Date 19/05/17

Telephones Exch: { +92-42/9002000  
+92-42/9002006

Telephones: { 042-99202338

Fax: 042-99201309

www.sngpl.com.pk

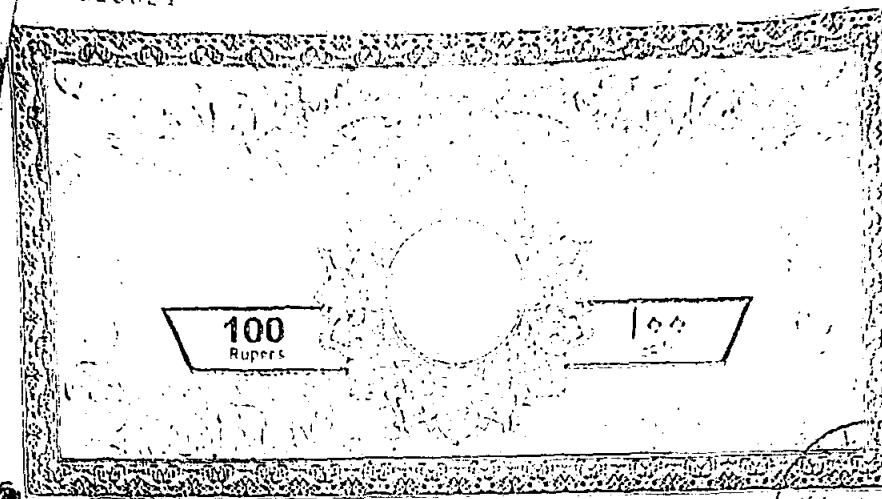


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# INTERIM RLNG SUPPLY AGREEMENT

THIS AGREEMENT is made at Lahore on the 24th day of April, 2017.

## BY AND BETWEEN

Sui Northern Gas Pipelines Limited, a public limited company incorporated under the laws of Pakistan and having its office at Gas House, 21 Kasoori Road, Lahore, Pakistan (hereinafter referred to as the "Seller" or "SNGPL" which expression shall, where the context so admits, mean and include its successors in interest and permitted assigns) of the first part.

AND

Northern Power Generation Company Limited, a company incorporated under the Companies Ordinance, 1984 that is owned by the Government of Pakistan and having its registered office at WAPDA House Shahr-e-Quaid-e-Azam, Lahore, Pakistan (hereinafter referred to as "Buyer", which expression shall, where the context so admits, mean and include its successors in interest and permitted assigns) of the second part.

(SNGPL and Buyer collectively referred to as "Parties" and individually as "Party")

## RECITALS

- A. The Buyer owns and operates, among others, a power generation facility at Nandipur, District Gujranwala, Province of Punjab, Pakistan ("Nandipur Power Plant" / "Plant") which is currently operating at the capacity of 425 MW on furnace oil. The Government of Pakistan had approved the conversion of power plant on gas to have increased capacity and generation of electricity at less cost. The conversion activities have been concluded by the Buyer whereafter the anticipated capacity of the Plant shall be 525 MW (on gas).
- B. Regasified Liquefied Natural Gas ("RLNG") is to be supplied by SNGPL, which is solely authorized and licensed to transmit and distribute gas in the north of Pakistan. For the supply of RLNG to the Buyer, there shall be executed a Gas Supply Agreement ("GSA") between SNGPL and Buyer.
- C. Due to shortage of natural gas in Pakistan, the Government of Pakistan ("GOP") is importing LNG to meet the local requirements, particularly of the gas based power plants. In this regard LNG Sale and Purchase Agreements have been executed by foreign supplier(s) with Pakistan State Oil Company Limited ("PSO") and/or other designated buyer(s) of the GOP. The GOP is intending to increase the quantum of imported LNG. SNGPL is eventually the downstream buyer for onward transmission and distribution to the consumers.

ATTESTED

YASIR ALI MIRZA  
OATH COMMISSIONER  
Lahore High Court, Lahore  
Enrollment No. 1524/2015 (S-156)  
Date: 24.04.2017

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- D. The Parties acknowledge that the supply of gas to the Buyer under GSA shall be based on LNG, or equivalent swapped natural gas, as may be arranged by SNGPL. They further acknowledge that the GOP has decided to allocate to the Buyer 100 MMSCFD (the "Buyer Allocation") of RLNG pursuant to gas allocation letter dated 30<sup>th</sup> November 2015, for which SNGPL is in the process of laying integrating 88 KM gas pipelines of 24" dia under a separate arrangement.
- E. Parties in principle understand that the Buyer is a power project set up under the Government of Pakistan. The Parties will, subject to obtaining of necessary approvals from competent authorities to be obtained by the Buyer, be entering into the GSA to govern the transaction on lines similar to that of the other three Government Power Plants ("GPPs") being setup at Bhikki, Haveli Bahadur Shah and Balloki.
- F. However, owing to current requirements of, and paucity of time before expected commencement of supplies of RLNG to the Buyer, this Interim Agreement is being put in place to govern the supplies of RLNG on as available basis, till such time the necessary approvals for adopting GPP's GSA model are obtained and necessary agreements are executed through the supply chain.

NOW, THEREFORE, in consideration of the mutual benefits to be derived, the Parties have agreed to enter into this binding Interim Agreement, on the following terms and conditions:

- 1) The Seller shall supply up to 30 MMCFD of RLNG or equivalent swapped natural gas at a delivery pressure of minimum 300 psig on as and when available basis to the Buyer in accordance with the terms of this Interim Agreement, during the testing period of the Buyer's Plant. It is contemplated that this quantity shall be increased to 100 MMCFD once the GSA is executed subject to the terms and conditions to be agreed by the Parties in the GSA. Gas specifications attached as Annexure "A".
- 2) The Seller may swap RLNG with natural gas with SSGC, at Zamzama, Sui and/or Sawan gas fields. Under the swap arrangement, natural gas supplied to the Buyer under this Agreement shall be in lieu of supply of RLNG.
- 3) Title and risk of RLNG or swapped natural gas, to be supplied to the Buyer hereunder, shall pass from SNGPL to the Buyer at the Delivery Point i.e. the point or points at which the inlet flange of the Buyer's pipelines meet the pipeline of SNGPL at a billing meter orifice/ ultrasonic meter, or such other point or points at or near the boundary of the facility, as may be agreed in writing by the Buyer and SNGPL.
- 4) RLNG and/or swapped natural gas supplied by the Seller to the Buyer shall be measured at the metering station installed at the Delivery Point. Such metering station, consisting of orifice or ultrasonic meter, flow computer and online chromatograph, shall be calibrated by the Seller, in the presence of Buyer, on a monthly basis, or at an interval mutually agreed by the Parties. Any calibration error shall be corrected and the same beyond +/- 1% of true value shall be adjusted in the subsequent invoice.
- 5) The Buyer shall make payment of RLNG or swapped natural gas supplied by SNGPL in accordance with the RLNG price as determined by Oil and Gas Regulatory Authority ("OGRA") from time to time (the "Notified Price"); and in case there is



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any delay in determining the price of RLNG by OGRA, the price intimated by PSO to OGRA for its onward determination would be considered provisional pricing used for billing and payment purposes until final price determination by OGRA, subject to any future adjustment upon issuance of delayed price determination.

- 6) The Seller shall raise bill for supplies made under this Agreement to the Buyer every seven (7) days ("Billing Cycle") and the Buyer shall make all payments pursuant to such bill within three (3) days of issuance of such bill. All such bills of the Seller will be paid without any deduction or set off or adjustment, provided however, the Buyer shall have the right to dispute any bill after full payment of the same and the dispute shall be resolved in accordance with the provisions of relevant clause of this Agreement.
- 7) If the payment of any bill rendered by the Seller to the Buyer is not made within three (3) days from the date of issuance of invoice, the Buyer shall pay delayed payment charges to the Seller at the rate of one (1) month KIBOR plus two percent (2%) ("Delayed Payment Charges") from such date up to (but not including) the date when payment is made by the Buyer.
- 8) As security for fulfillment of its obligations hereunder, the Buyer shall provide to the Seller cash deposit ("Cash Deposit") before or at the time of signing of this Agreement for the amount of Pak Rs. 943,337,195 (Pakistan Rupees Nine hundred forty three million, three hundred thirty seven thousand and one hundred ninety five only) equivalent to 30 (Thirty) days of RLNG supply of 30 MMCFD which will be replaced by SBLC / Escrow Account equivalent 90 days of Buyer Allocation once the Parties enter into a GSA based on the framework of the GPPs. In the event that the Buyer fails to pay any amount due for RLNG or swapped natural gas supplied to it by the Seller, the Seller shall be entitled to draw such amount(s) from the Cash Deposit.
- 9) The Cash Deposit shall (i) be maintained during the term of this Agreement; and (ii) the amount of the Cash Deposit may be reviewed from time to time with the first review to take place on the expiry of three (03) months after the provision of the Cash Deposit. Provided that the aforesaid review shall only take place if there has been a variation of +/- 10% of RLNG Tariff notified by OGRA from the previous review. For avoidance of doubt, the amount of Cash Deposit shall be adjusted proportionately to the variation in the RLNG Tariff; provided that there has been a variation of at least +/- 10% of the RLNG Tariff notified by OGRA from the previous review and any variation less than +/- 10% shall not lead to adjustment of amount of Cash Deposit.
- 10) In the event of draw down of the Cash Deposit by the Seller, the Cash Deposit shall be replenished to the original amount within 10 business days, and if the replenishment is not made until the time that Cash Deposit equivalent to a Pakistan Rupee equivalent to 14 days of supply remains, then the Seller shall have a right to suspend the supply. There shall be no obligation to supply RLNG/swapped gas unless a Cash Deposit of the amount contemplated herein is in place.
- 11) The Agreement shall be governed by the laws of Pakistan.
- 12) In the event of a dispute arising pursuant to the provisions of this Agreement, the Parties shall settle such dispute in accordance with the provisions of Arbitration Act.



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1940 as amended from time to time by two arbitrators, one to be appointed by each party, at Lahore.

- 13) This Agreement shall be deemed to have come into force and effect on the date of its signing ("Effective Date").
- 14) This Agreement shall be valid for a period of two (2) months from the Effective Date or for any extended period as mutually agreed by the Parties in writing ("testing period"). This agreement shall be replaced with the Gas Supply Agreement to be entered into by the Parties within a period of two months or any extended period, as mutually agreed by the Parties, from the Effective Date.



SUI NORTHERN GAS PIPELINES  
LIMITED (SNGPL)

NORTHERN POWER GENERATION  
COMPANY LIMITED

By: [Signature]

By: [Signature]

Name: Amjad Latif

Name: Eng. Nabeem Ahmed

Title: Managing Director

Title: CEO

Date: 10.05.2017

Date: \_\_\_\_\_

Witnesses:

Witnesses:

1. [Signature]  
2. [Signature]

1. [Signature]  
2. [Signature]

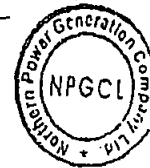
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Annexure "A"

(Gas Specification)

Reference	Characteristics	Limits
1.	Gross Calorific Value	900-1050 BTU/SCF
2.	Carbon dioxide	Not more than 5 mole percent
3.	Oxygen	Not more than 0.2 mole percent
4.	Hydrogen Sulphide	Not more than 1 Grains/100 Scf
5.	Nitrogen	Not more than 12 mole percent
6.	Water Vapors	Not more than 7 Lbs/MMSCF
7.	Total Sulphur	Not more than 20 Grains/100 Scf
8.	Gas Delivery Pressure	Minimum 300 Psig
9.	Base Conditions for measurement	14.65 psia and 60 degree F



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## 2<sup>ND</sup> INTERIM RLNG SUPPLY AGREEMENT

THIS AGREEMENT is made at Lahore on the \_\_\_\_ day of \_\_\_\_\_, 2018.

### BY AND BETWEEN

Sul Northern Gas Pipelines Limited, a public limited company incorporated under the laws of Pakistan and having its office at Gas House, 21 Kashmir Road, Lahore, Pakistan (hereinafter referred to as the "Seller" or "SNGPL," which expression shall, where the context so admits, mean and include its successors in interest and assigns) of the first part;

### AND

Northern Power Generation Company Limited, a company incorporated under the laws of Pakistan that is owned by the Government of Pakistan and having its registered office at WAPDA House Shahrah-e-Quaid-e-Azam Lahore, Pakistan (hereinafter referred to as "Buyer", which expression shall, where the context so admits, mean and include its successors in interest and permitted assigns) of the second part;

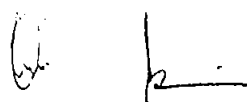
(SNGPL and Buyer collectively referred to as "Parties" and individually as "Party")

### RECITALS

- A. The Buyer owns and operates, among others, the installed power generation facility of 450.4777 MW at Nandipur, Province of Punjab, Pakistan ("Nandipur Power Plant"), which is operated on various fuels including the Natural Gas and High Speed Diesel. There is shortage of the gas in the system. The above mentioned capacity can be better utilized by improving supply of the fuel with certainty.
- B. Due to shortage of natural gas in Pakistan, the Government of Pakistan ("GOP") is importing Regasified Liquefied Natural Gas ("RLNG") to meet the local requirements, particularly of the gas based power plants. In this regard LNG Sale and Purchase Agreements have been executed by foreign supplier(s) with Pakistan State Oil Company Limited ("PSO") and/ or other designated buyer (s) of the GOP. SNGPL is eventually the downstream buyer for onward transmission and distribution to the consumers.
- C. The Parties have entered into 1<sup>st</sup> Interim RLNG Supply Agreement on 21 April, 2017 for a period of 2 months as extended from time to time. Now the Parties have agreed to enter into this 2<sup>nd</sup> Interim RLNG Supply Agreement which shall supersede the first Agreement.
- D. The Parties acknowledge that the GOP has allocated to the Buyer 100 MMCFD (the "Buyer Allocation") pursuant to Ministry of Petroleum & Natural Resources' letter No. NG(II)-16(1)/14-PPIB-Gen-Pt dated 30<sup>th</sup> November 2015.
- E. For the stated reasons, it is mandatory that the Gas Supply Agreement ("GSA"), on interim basis, should be executed with SNGPL, which is to supply RLNG being solely authorized and licensed to transmit and distribute gas in the north of Pakistan.
- F. Subject to the terms hereof Seller has agreed to supply up to 100 MMCFD RLNG or any additional available quantity of RLNG or swapped natural gas on as and when available basis to the Buyer and the Buyer has agreed to purchase the same from Seller on the terms set forth herein.

NOW, THEREFORE, in consideration of the mutual benefits to be derived, the Parties have agreed to enter into this binding Interim Agreement, on the following terms and conditions:

- 1) The Seller shall supply up to 100 MMCFD RLNG, or any additional available quantity, of RLNG or swapped natural gas in lieu thereof on as and when available basis to the Buyer in accordance with the terms of this Interim Agreement. Gas specifications attached as Annexure "A".
- 2) The Seller may swap RLNG with natural gas with SSGC, at Zamzama, Sui and/or Sawan gas fields. Under the swap arrangement, natural gas supplied to the Buyer under this Agreement shall be in lieu of supply of RLNG.
- 3) Title and risk of RLNG or swapped natural gas, to be supplied to the Buyer hereunder, shall pass from SNGPL to the Buyer at the Delivery Point i.e. the point or points at which the inlet flange of the Buyer's pipelines meet the pipeline of SNGPL at a billing meter orifice/ ultrasonic meter, or such other point or points at or near the boundary of the facility, as may be agreed in writing by the Buyer and SNGPL.
- 4) RLNG and/or swapped natural gas supplied by the Seller to the Buyer shall be measured at the metering station installed at the Delivery Point. Such metering station, consisting of orifice or ultrasonic meter, flow computer and online chromatograph, shall be calibrated by the Seller, in the presence of Buyer, on a monthly basis, or at an interval mutually agreed by the Parties. Any calibration error shall be corrected and the same beyond  $\pm 1\%$  of true value shall be adjusted in the subsequent invoice.
- 5) The Buyer shall make payment of RLNG, or swapped natural gas supplied in lieu thereof, by SNGPL in accordance with the RLNG price as determined by Oil and Gas Regulatory Authority ("OGRA") from time to time (the "Notified Price"); and in case there is any delay in determining the price of RLNG by OGRA, the price intimated by PSO to OGRA for its onward determination would be considered provisional pricing used for billing and payment purposes until final price determination by OGRA, subject to any future adjustment upon issuance of delayed price determination.
- 6) The Seller shall raise bill for supplies made under this Agreement to the Buyer every seven (7) days ("Billing Cycle") and the Buyer shall make all payments pursuant to such bill within three (3) days of issuance of such bill. All such bills of the Seller will be paid without any deduction or set off or adjustment; provided however, the Buyer shall have the right to dispute any bill after full payment of the same and the dispute shall be resolved in accordance with the provisions of relevant clause of this Agreement.
- 7) If the payment of any bill rendered by the Seller to the Buyer is not made within three (3) days from the date of issuance of invoice, the Buyer shall pay delayed payment charges to the Seller at the rate of one (1) month KIBOR plus two percent (2%) ("Delayed Payment Charges") from such date up to (but not including) the date when payment is made by the Buyer.
- 8) The Buyer shall provide to the Seller Security Deposit in the form of cash or standby letter of credit ("SBLC") before or at the time of signing of this Agreement for the amount of Rs. 2.087 Billion (Pakistan Rupees Two Billion and Eighty Seven Million) equivalent to 15 days RLNG supplies of 100 MMCFD. In the event that the Buyer fails to pay any due amount to the Seller within due date (i.e. 7+3 days), the Seller reserves the right to encash the SBLC and/or adjust the cash security as the case may be, and may suspend RLNG supplies without any notice. In such an eventuality, RLNG supplies shall only be recommenced subject to clearance of all outstanding dues and replenishment of SBLC/ Cash Deposit. The Buyer undertakes to pay to the Seller all arrears payable prior to the execution of this agreement in respect of system gas on urgent basis.
- 9) The Security Deposit shall (i) be maintained during the term of this Agreement; and (ii) the amount of the Deposit may be reviewed from time to time with the first review to take place on the expiry of three (03) months after the provision of the Security Deposit. Provided that the aforesaid review shall only take place if there has been a variation of  $\pm 10\%$  of RLNG Tariff notified by OGRA from the



previous review. For avoidance of doubt, the amount of Security Deposit shall be adjusted proportionately to the variation in the RLNG Tariff; provided that there has been a variation of at least +/- 10% of the RLNG Tariff notified by OGRA from the previous review and any variation less than +/- 10% shall not lead to adjustment of amount of Security Deposit.

- 10) In the event of draw down of the Security Deposit by the Seller, the Security Deposit shall be replenished to the original amount before recommencement of RLNG supplies. There shall be no obligation to supply RLNG/swapped gas in lieu thereof, unless a Cash Deposit / SBLC of the amount contemplated herein is in place.
- 11) The Agreement shall be governed by the laws of Pakistan.
- 12) In the event of a dispute arising pursuant to the provisions of this Agreement, which remained unresolved by mutual discussion, the Parties shall settle such dispute in accordance with the provisions of Arbitration Act, 1940 as amended from time to time by two arbitrators, one to be appointed by each party, at Lahore.
- 13) This Agreement shall be deemed to have come into force and effect from the date of first supply of RLNG/ swapped gas in lieu thereof ("Effective Date").
- 14) This Agreement shall be valid for a period of one (1) year from the Effective Date or for any extended period as mutually agreed by the Parties in writing. This agreement may be replaced with the Gas Supply Agreement to be entered into by the Parties within a period of one (1) year or any extended period, as mutually agreed by the Parties, from the Effective Date.
- 15) This Agreement shall supersede the Interim RLNG Supply Agreement already executed between the Parties on 21 April, 2017. The Parties hereby acknowledge and agree that all the liabilities accrued and to be accrued at or before the Effective Date of this Agreement shall be covered / dealt with in accordance with the terms of this Agreement.
- 16) This Agreement shall be executed in two (2) counterparts; one to be retained by each Party and the each instrument shall be considered as original and duly executed between the Parties.

SUI NORTHERN GAS PIPELINES  
LIMITED (SNGPL)

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Witnesses:

1. \_\_\_\_\_

2. \_\_\_\_\_

NORTHERN POWER GENERATION  
COMPANY LIMITED

By: \_\_\_\_\_

Name: ALI ASGHAR

Title: CEO, NPGCL

Date: 10-05-2018

Witnesses:

1. \_\_\_\_\_

2. \_\_\_\_\_



## INTERIM RLNG SUPPLY AGREEMENT

THIS AGREEMENT is made at Lahore on the \_\_\_\_\_ day of \_\_\_\_\_, 2018.

BY AND BETWEEN

Sul Northern Gas Pipelines Limited, a public limited company incorporated under the laws of Pakistan and having its office at Gas House, 21 Kashmir Road, Lahore, Pakistan (hereinafter referred to as the "Seller" or "SNGPL" which expression shall, where the context so admits, mean and include its successors in interest and assigns) of the first part;

AND

Northern Power Generation Company Limited, a company incorporated under the laws of Pakistan that is owned by the Government of Pakistan and having its registered office at WAPDA House Shahrah-e-Quaid-e-Azam Lahore, Pakistan (hereinafter referred to as "Buyer", which expression shall, where the context so admits, mean and include its successors in interest and permitted assigns) of the second part;


(SNGPL and Buyer collectively referred to as "Parties" and individually as "Party")

### RECITALS

- A. The Buyer owns and operates, among others, the installed power generation facility of 144 MW (derated 117 MW) at Faisalabad, Province of Punjab, Pakistan ("GTPS Faisalabad"), which is operated on various fuels including the Natural Gas and High Speed Diesel. There is shortage of the gas in the system. The above mentioned capacity can be better utilized by improving supply of the fuel with certainty.
- B. Due to shortage of natural gas in Pakistan, the Government of Pakistan ("GOP") is importing Regasified Liquefied Natural Gas ("RLNG") to meet the local requirements, particularly of the gas based power plants. In this regard LNG Sale and Purchase Agreements have been executed by foreign supplier(s) with Pakistan State Oil Company Limited ("PSO") and/ or other designated buyer (s) of the GOP. SNGPL is eventually the downstream buyer for onward transmission and distribution to the consumers.
- C. After considering the request of NPGCL, in line with its earlier approvals, National Electric Power Regulatory Authority ("NEPRA") allowed for immediate application of RLNG as alternative fuel vide determination dated 12<sup>th</sup> April 2018.
- D. The Parties acknowledge that the GOP has allocated to the Buyer 50 MMCFD (the "Buyer Allocation") pursuant to Ministry of Energy (Petroleum Division) letter dated 2<sup>nd</sup> May 2018.
- E. For the stated reasons, it is mandatory that the Gas Supply Agreement ("GSA"), on interim basis, should be executed with SNGPL, which is to supply RLNG being solely authorized and licensed to transmit and distribute gas in the north of Pakistan.
- F. Subject to the terms hereof Seller has agreed to supply up to 28 MMCFD RLNG or any additional available quantity of RLNG or swapped natural gas on as and when available basis to the Buyer and the Buyer has agreed to purchase the same from Seller on the terms set forth herein.

NOW, THEREFORE, in consideration of the mutual benefits to be derived, the Parties have agreed to enter into this binding Interim Agreement, on the following terms and conditions:

- 1) The Seller shall supply up to 28 MMCFD or any additional available quantity, of RLNG or swapped natural gas in lieu thereof on as and when available basis to the Buyer in accordance with the terms of this Interim Agreement. Gas specifications attached as Annexure "A".



- 2) The Seller may swap RLNG with natural gas with 'Gazit' at Zamzamat, and another 'Gazit' gas fields. Under the swap arrangement, natural gas supplied to the Buyer under this Agreement shall be in lieu of supply of RLNG.
- 3) Title and Risk of RLNG or swapped natural gas, to be supplied to the Buyer hereunder, shall pass from SNGPL to the Buyer at the Delivery Point i.e. the point or points at which the inter-flags of the Buyer's pipelines meet the pipeline of SNGPL at a billing meter, orifice, ultrasonic meter, or such other point or points at or near the boundary of the facility, as may be agreed in writing by the Buyer and SNGPL.
- 4) RLNG and or swapped natural gas supplied by the Seller to the Buyer shall be measured at the metering station installed at the Delivery Point. Such metering station, consisting of orifice or ultrasonic meter, flow computer and online chromatograph, shall be calibrated by the Seller, in the presence of Buyer, on a monthly basis, or at an interval mutually agreed by the Parties. Any calibration error shall be corrected and the same beyond  $\pm 1\%$  of true value shall be adjusted in the subsequent invoice.
- 5) The Buyer shall make payment of RLNG or swapped natural gas supplied in lieu thereof, by SNGPL in accordance with the RLNG price as determined by Oil and Gas Regulatory Authority (OGRA) from time to time (the "Notified Price"), and in case there is any delay in determining the price of RLNG by OGRA, the price intimated by PSO to OGRA for its onward determination would be considered provisional pricing used for billing and payment purposes until final price determination by OGRA, subject to any future adjustment upon issuance of delayed price determination.
- 6) The Seller shall raise bill for supplies made under this Agreement to the Buyer every seven (7) days, ("Billing Cycle") and the Buyer shall make all payments pursuant to such bill within three (3) days of issuance of such bill. All such bills of the Seller will be paid without any deduction or set off or adjustment; provided however, the Buyer shall have the right to dispute any bill after full payment of the same and the dispute shall be resolved in accordance with the provisions of relevant clause of this Agreement.
- 7) If the payment of any bill rendered by the Seller to the Buyer is not made within three (3) days from the date of issuance of invoice, the Buyer shall pay delayed payment charges to the Seller at the rate of one (1) month KIBOR plus two percent (2%) ("Delayed Payment Charges") from such date up to (but not including) the date when payment is made by the Buyer.
- 8) The Buyer shall provide to the Seller Security Deposit in the form of cash or standby letters of credit ("SBLC") before or at the time of signing of this Agreement for the amount of Rs. 631 Million (Pakistan Rupees Six Hundred and Thirty One Million) equivalent to 15 days RLNG supplies of 28 MMCFD. In the event that the Buyer fails to pay any due amount to the Seller within due date (i.e. 7+3 days), the Seller reserves the right to encash the SBLC and/or adjust the cash security as the case may be, and suspend RLNG supplies without any notice. In such an eventuality, RLNG supplies shall only be recommenced subject to clearance of all outstanding dues and replenishment of SBLC/ Cash Deposit. The Buyer undertakes to pay to the Seller all arrears payable prior to the execution of this agreement in respect of system gas on urgent basis.
- 9) The Security Deposit shall (i) be maintained during the term of this Agreement; and (ii) the amount of the Deposit may be reviewed from time to time with the first review to take place on the expiry of three (03) months after the provision of the Security Deposit. Provided that the aforesaid review shall only take place if there has been a variation of  $\pm 10\%$  of RLNG Tariff notified by OGRA from the previous review. For avoidance of doubt, the amount of Security Deposit shall be adjusted proportionately to the variation in the RLNG Tariff; provided that there has been a variation of at least  $\pm 10\%$  of the RLNG Tariff notified by OGRA from the previous review and any variation less than  $\pm 10\%$  shall not lead to adjustment of amount of Security Deposit.



- 10) In the event of draw down of the Security Deposit by the Seller, the Security Deposit shall be replenished to the original amount before recommencement of RLNG supplies. There shall be no obligation to supply RLNG/swapped gas unless a Cash Deposit / SBLC of the amount contemplated herein is in place.
- 11) The Agreement shall be governed by the laws of Pakistan
- 12) In the event of a dispute arising pursuant to the provisions of this Agreement, which remained unresolved by mutual discussion, the Parties shall settle such dispute in accordance with the provisions of Arbitration Act, 1940 as amended from time to time by two arbitrators, one to be appointed by each party, at Lahore.
- 13) This Agreement shall be deemed to have come into force and effect from the date of first supply of RLNG/ swapped gas in lieu thereof ("Effective Date").
- 14) This Agreement shall be valid for a period of one (1) year from the Effective Date or for any extended period as mutually agreed by the Parties in writing. This agreement may be replaced with the Gas Supply Agreement to be entered into by the Parties within a period of one (1) year or any extended period, as mutually agreed by the Parties, from the Effective Date.
- 15) This Agreement shall be executed in two (2) counterparts; one to be retained by each Party and the each instrument shall be considered as original and duly executed between the Parties.

SUI NORTHERN GAS PIPELINES  
LIMITED (SNGPL)

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Witnesses:

1. \_\_\_\_\_

2. \_\_\_\_\_

NORTHERN POWER GENERATION  
COMPANY LIMITED

By: \_\_\_\_\_

Name: ALI ASGHAR

Title: CEO NPGCL

Date: 10-05-2018

Witnesses:

1. \_\_\_\_\_

2. \_\_\_\_\_

## INTERIM RLNG SUPPLY AGREEMENT

THIS AGREEMENT is made at Lahore on the \_\_\_\_\_ day of \_\_\_\_\_, 2018.

### BY AND BETWEEN

Sul Northern Gas Pipelines Limited, a public limited company incorporated under the laws of Pakistan and having its office at Gas House, 21 Kashmir Road, Lahore, Pakistan (hereinafter referred to as the "Seller" or "SNGPL" which expression shall, where the context so admits, mean and include its successors in interest and assigns) of the first part;

### AND

Northern Power Generation Company Limited, a company incorporated under the laws of Pakistan that is owned by the Government of Pakistan and having its registered office at WAPDA House Shahrah-e-Quaid-e-Azam Lahore, Pakistan (hereinafter referred to as "Buyer", which expression shall, where the context so admits, mean and include its successors in interest and permitted assigns) of the second part;

(SNGPL and Buyer collectively referred to as "Parties" and individually as "Party")

### RECITALS

- A. The Buyer owns and operates, among others, the installed power generation facility of 1350 MW (derated 1184.54 MW) at Muzaffargarh, Province of Punjab, Pakistan ("TPS Muzaffargarh"), which is operated on various fuels including the High Sulphur Furnace Oil (HSFO) and Natural Gas. There is cut in supply of HSFO while shortage of the gas in the system. The above mentioned capacity can be better utilized by improving supply of the fuel with certainty.
- B. Due to shortage of natural gas in Pakistan, the Government of Pakistan ("GOP") is importing Regasified Liquefied Natural Gas ("RLNG") to meet the local requirements, particularly of the gas based power plants. In this regard LNG Sale and Purchase Agreements have been executed by foreign supplier(s) with Pakistan State Oil Company Limited ("PSO") and/ or other designated buyer (s) of the GOP. SNGPL is eventually the downstream buyer for onward transmission and distribution to the consumers.
- C. After considering the request of NPGCL, in line with its earlier approvals, National Electric Power Regulatory Authority ("NEPRA") allowed for immediate application of RLNG as alternative fuel vide determination dated 12<sup>th</sup> April 2018.
- D. The Parties acknowledge that the GOP has allocated to the Buyer 200 MMCFD (the "Buyer Allocation") pursuant to Ministry of Energy (Petroleum Division) letter dated 2<sup>nd</sup> May 2018.
- E. For the stated reasons, it is mandatory that the Gas Supply Agreement ("GSA"), on interim basis, should be executed with SNGPL, which is to supply RLNG being solely authorized and licensed to transmit and distribute gas in the north of Pakistan.
- F. Subject to the terms hereof Seller has agreed to supply up to 200 MMCFD RLNG or any additional available quantity of RLNG or swapped natural gas on as and when available basis to the Buyer and the Buyer has agreed to purchase the same from Seller on the terms set forth herein.

NOW, THEREFORE, in consideration of the mutual benefits to be derived, the Parties have agreed to enter into this binding Interim Agreement, on the following terms and conditions:

- 1) The Seller shall supply up to 200 MMCFD RLNG, or any additional available quantity, of RLNG or swapped natural gas in lieu thereof on as and when available basis to the Buyer in accordance with the terms of this Interim Agreement. Gas specifications attached as Annexure "A".
- 2) The Seller may swap RLNG with natural gas with SSGC, at Zamzama, Sui and/or Sawai gas fields. Under the swap arrangement, natural gas supplied to the Buyer under this Agreement shall be in lieu of supply of RLNG.
- 3) Title and risk of RLNG or swapped natural gas, to be supplied to the Buyer hereunder, shall pass from SNGPL to the Buyer at the Delivery Point i.e. the point or points at which the inlet flange of the Buyer's pipelines meet the pipeline of SNGPL at a billing meter orifice/ ultrasonic meter, or such other point or points at or near the boundary of the facility, as may be agreed in writing by the Buyer and SNGPL.
- 4) RLNG and/or swapped natural gas supplied by the Seller to the Buyer shall be measured at the metering station installed at the Delivery Point. Such metering station, consisting of orifice or ultrasonic meter, flow computer and online chromatograph, shall be calibrated by the Seller, in the presence of Buyer, on a monthly basis, or at an interval mutually agreed by the Parties. Any calibration error shall be corrected and the same beyond +/- 1% of true value shall be adjusted in the subsequent invoice.
- 5) The Buyer shall make payment of RLNG, or swapped natural gas supplied in lieu thereof, by SNGPL in accordance with the RLNG price as determined by Oil and Gas Regulatory Authority ("OGRA") from time to time (the "Notified Price"); and in case there is any delay in determining the price of RLNG by OGRA, the price intimated by PSO to OGRA for its onward determination would be considered provisional pricing used for billing and payment purposes until final price determination by OGRA, subject to any future adjustment upon issuance of delayed price determination.
- 6) The Seller shall raise bill for supplies made under this Agreement to the Buyer every seven (7) days ("Billing Cycle") and the Buyer shall make all payments pursuant to such bill within three (3) days of issuance of such bill. All such bills of the Seller will be paid without any deduction or set off or adjustment; provided however, the Buyer shall have the right to dispute any bill after full payment of the same and the dispute shall be resolved in accordance with the provisions of relevant clause of this Agreement.
- 7) If the payment of any bill rendered by the Seller to the Buyer is not made within three (3) days from the date of issuance of invoice, the Buyer shall pay delayed payment charges to the Seller at the rate of one (1) month KIBOR plus two percent (2%) ("Delayed Payment Charges") from such date up to (but not including) the date when payment is made by the Buyer.
- 8) The Buyer shall provide to the Seller Security Deposit in the form of cash or standby letter of credit ("SBLC") before or at the time of signing of this Agreement for the amount of Rs. 4.173 Billion (Pakistan Rupees Four Billion One Hundred and Seventy Three Million) equivalent to 15 days RLNG supplies of 200 MMCFD. In the event that the Buyer fails to pay any due amount to the Seller within due date (i.e. 7+3 days), the Seller reserves the right to encash the SBLC and/or adjust the cash security as the case may be, and may suspend RLNG supplies without any notice. In such an eventuality, RLNG supplies shall only be recommenced subject to clearance of all outstanding dues and replenishment of SBLC/ Cash Deposit. The Buyer undertakes to pay to the Seller all arrears payable prior to the execution of this agreement in respect of system gas on urgent basis.
- 9) The Security Deposit shall (i) be maintained during the term of this Agreement; and (ii) the amount of the Deposit may be reviewed from time to time with the first review to take place on the expiry of three (03) months after the provision of the Security Deposit. Provided that the aforesaid review shall only take place if there has been a variation of +/- 10% of RLNG Tariff notified by OGRA from the

previous review. For avoidance of doubt, the amount of Security Deposit shall be adjusted proportionately to the variation in the RLNG Tariff, provided that there has been a variation of at least +/- 10% of the RLNG Tariff notified by OGRA from the previous review and any variation less than +/- 10% shall not lead to adjustment of amount of Security Deposit.

- 10) In the event of draw down of the Security Deposit by the Seller, the Security Deposit shall be replenished to the original amount before recommencement of RLNG supplies. There shall be no obligation to supply RLNG/swapped gas in lieu thereof, unless a Cash Deposit / SMLC of the amount contemplated herein is in place.
- 11) The Agreement shall be governed by the laws of Pakistan.
- 12) In the event of a dispute arising pursuant to the provisions of this Agreement, which remained unresolved by mutual discussion, which remained unresolved by mutual discussion, the Parties shall settle such dispute in accordance with the provisions of Arbitration Act, 1940 as amended from time to time by two arbitrators, one to be appointed by each party, at Lahore.
- 13) This Agreement shall be deemed to have come into force and effect from the date of first supply of RLNG/ swapped gas in lieu thereof ("Effective Date").
- 14) This Agreement shall be valid for a period of one (1) year from the Effective Date or for any extended period as mutually agreed by the Parties in writing. This agreement may be replaced with the Gas Supply Agreement to be entered into by the Parties within a period of one (1) year or any extended period, as mutually agreed by the Parties, from the Effective Date.
- 15) This Agreement shall be executed in two (2) counterparts; one to be retained by each Party and the each instrument shall be considered as original and duly executed between the Parties.

SUI NORTHERN GAS PIPELINES  
LIMITED (SNGPL)

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Witnesses:

1. \_\_\_\_\_

2. \_\_\_\_\_

NORTHERN POWER GENERATION  
COMPANY LIMITED

By: \_\_\_\_\_

Name: ALI ASGHAR

Title: CEO NPGCL

Date: 10-05-2018

Witnesses:

1. \_\_\_\_\_

2. \_\_\_\_\_

Ref: GMS: 938 (LNG)

February 3, 2021

Chief Executive Officer  
 Northern Power Generation Company Ltd,  
 Thermal Power Station, MUZAFFARGARH

Attn: Plant Manager, CCPP,  
 Nandipur Gujranwala

**REVALIDATION OF INTERIM RLNG AGREEMENT**

Dear Sir,

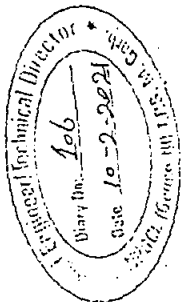
Reference your letter No. PM/NP/SNGPL/1635-37 dated 20.09.2019 regarding the subject cited above.

We are pleased to inform that OGRA vide its letter No. OGRA-9(459)/2017 dated 11.01.2021 has approved First Addendum to 2<sup>nd</sup> Interim RLNG Supply Agreement for supply of RLNG to Nandipur Power Plant.

One (1) set of *Addendum in original*, duly signed by SNGPL, is enclosed for your record. As per terms of the agreement NPGCL is requested to furnish requisite *Security Deposit Rs. 2.087 Billion* (i.e additional amount of Rs. 1.144 billion to make up requisite amount) in accordance with clause 8 of the Interim Agreement executed between SNGPL and Northern Power Generation Company Limited for ensuring RLNG supply per terms of Agreement.

Meanwhile, assuring you of our best services and cooperation at all times.

Yours faithfully,  
 SUI NORTHERN GAS PIPELINES LIMITED



**MAJID HUSSAIN**

General Manager (BD-Corporate)  
 for MANAGING DIRECTOR

NPGCL (GENCO-III)	
TPS, Muzaffargarh.	
CEO	
CE/ID	
HR & AD	
Fin Director	
Off. In-charge	
Dir. Tech	
RF-I	
RF-II	
RF-III	
RF-IV	
RF-V	
RF-VI	
RF-VII	
RF-VIII	
RF-IX	
RF-X	
RF-XI	
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D.M.A (CA)	
D.M.A (SFC)	
D.M.A (Tax)	
AMA (Adm.)	
AMA (Bd.)	
AMA (B. & L.)	
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AMA (IR)	
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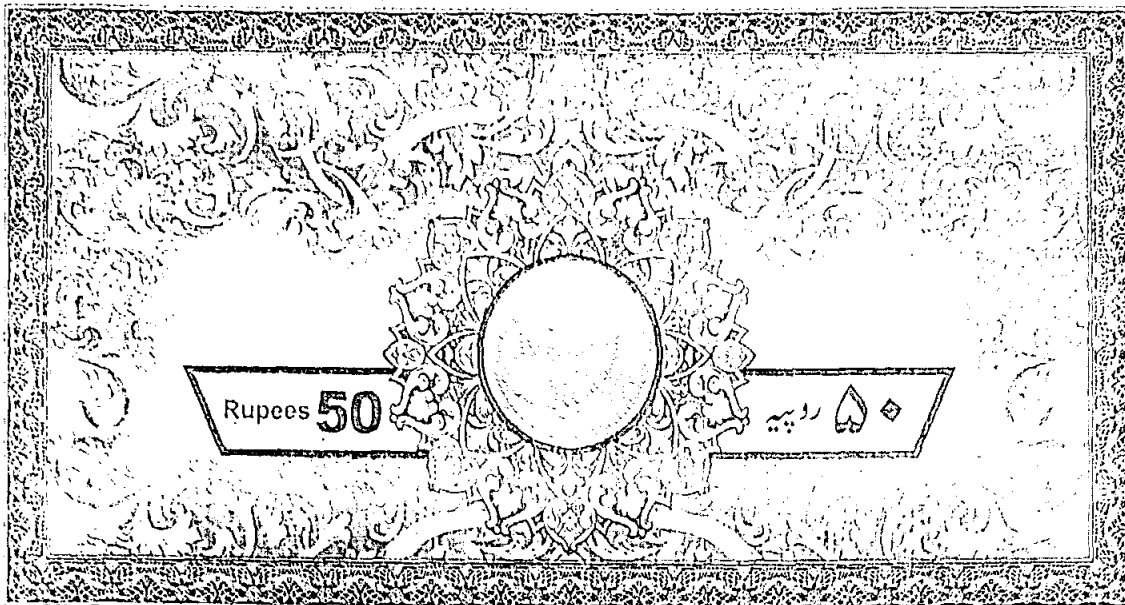
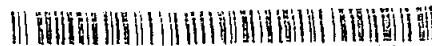
Telephones Exch: (+92-42)9902000  
 (+92-42)9992000

Telephones: 042-99201055

Fax: 042-99201209

www.sngpl.com.pk





**NOW, THEREFORE,** In consideration of the mutual benefits to be derived the Parties hereby enter into this First Addendum to the Agreement and intending to be legally bound and the Seller and the Buyer hereby agree as follows:

1) Clause 14 of the Agreement shall be amended to read as follow:-

**"This Agreement shall be valid till execution of detailed RLNG Supply Agreement between the Parties".**

- 2) This Addendum shall come into force with effect from the date of expiry of 2<sup>nd</sup> Interim RLNG Supply Agreement and shall be construed as part of the Agreement.
- 3) The Parties hereby acknowledge and agree that the execution of this Addendum shall be limited only to the extent of amendment in Clause 14 of the Agreement and shall have no bearing on the remaining terms and conditions of the Agreement executed earlier between the Parties, which shall remain unchanged.
- 4) This Addendum shall be signed in two (2) counterparts; one (1) to be retained by each Party and each Instrument shall be considered as original and duly executed between the Parties.
- 5) **IN WITNESS WHEREOF,** the representatives of the Parties being duly authorized hereto have signed, sealed and stamped these presents on the day, month and year first mentioned herein above.

**SUI NORTHERN GAS PIPELINES  
LIMITED (SNGPL)**

By: [Signature]

Name: AMER TUFAIL

Title: MANAGING DIRECTOR

Date: \_\_\_\_\_ in \_\_\_\_\_

**NORTHERN POWER GENERATION  
COMPANY LIMITED**

By: [Signature]

Name: Sabeek H Zaman Farooqi

Title: Chief Executive Officer

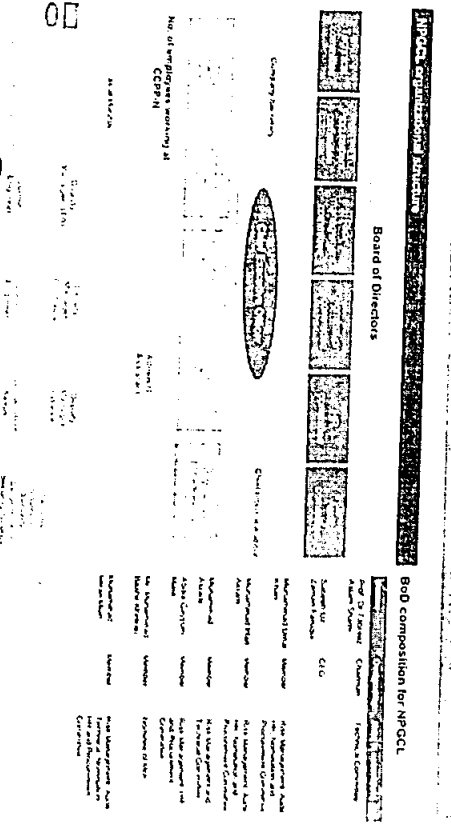
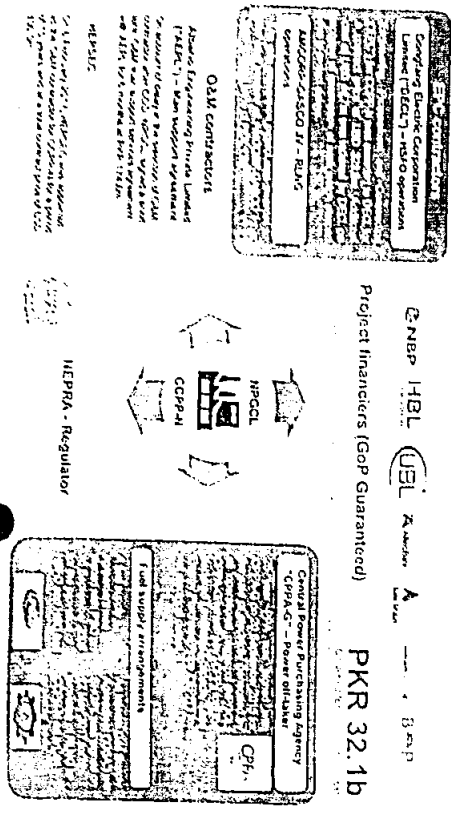
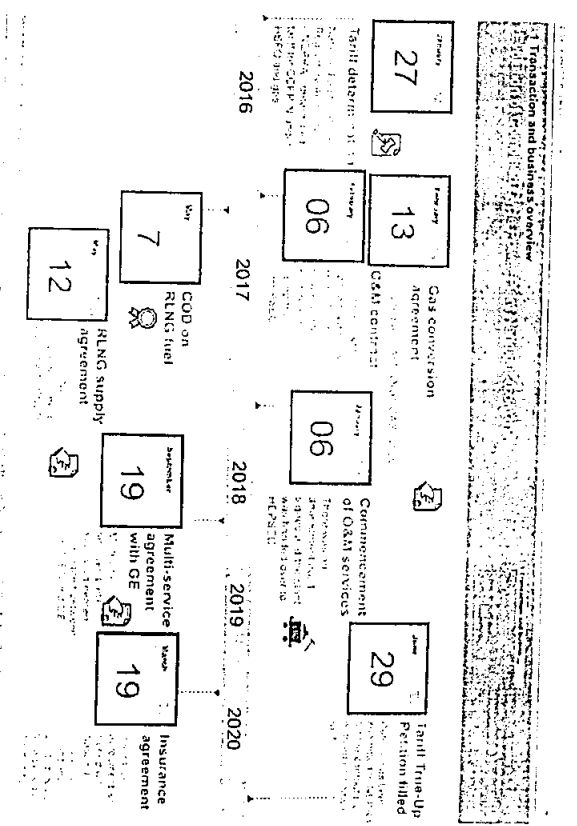
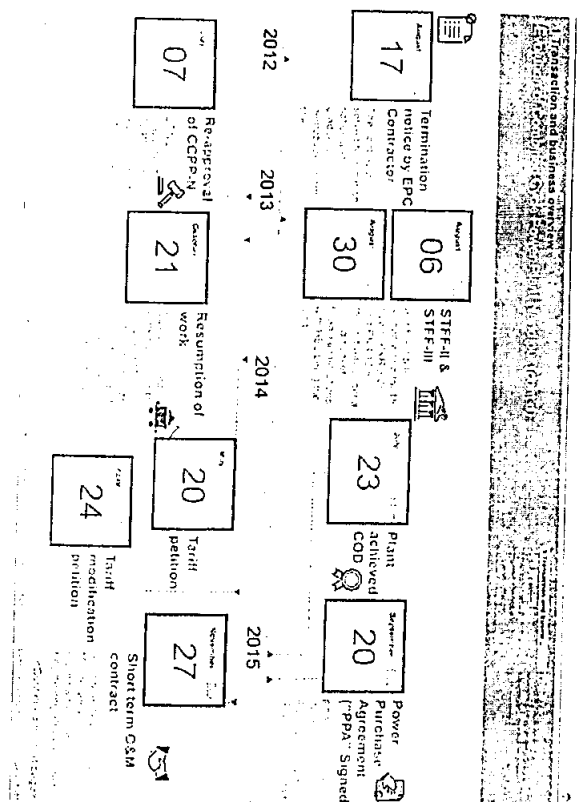
Date: \_\_\_\_\_ in \_\_\_\_\_





# **DUE DILIGENCE REPORT**





# Transaction and business overview

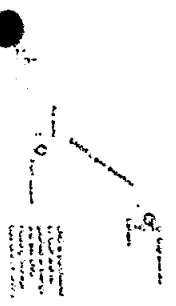
## Business Overview

Category	Value
Revenue	1000000
Cost of Sales	600000
Gross Profit	400000
Operating Expenses	200000
Operating Profit	200000
Net Profit	150000

## FTN - Gas connection operations

Category	Value
Revenue	1000000
Cost of Sales	600000
Gross Profit	400000
Operating Expenses	200000
Operating Profit	200000
Net Profit	150000

## Operating cost breakdown

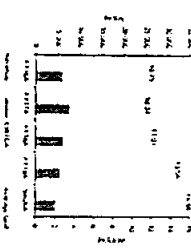


# Transaction and business overview

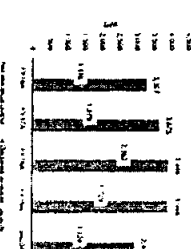
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## Average tariff analysis



## Net electrical output and declared capacity



## Operating cost breakdown

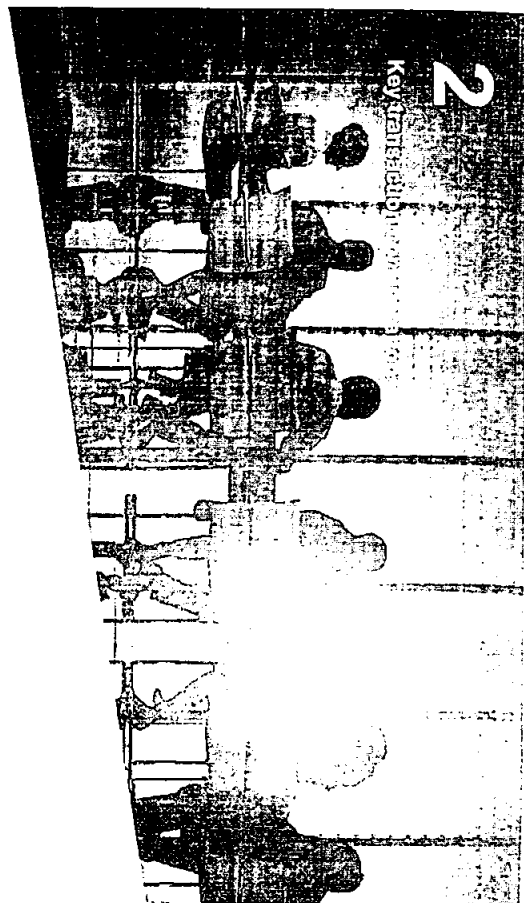


## Business Overview

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## Reference tariff by average revenue / unit

Category	Value
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## 2

### Key/transition considerations

2 Key transition considerations

1. The transition from the current state to the target state is a complex process that involves many factors. The following are some of the key considerations:

- **Communication:** It is essential to communicate the transition plan to all stakeholders, including employees, customers, and partners. This should be done in a clear, concise, and timely manner.
- **Resource Allocation:** The transition plan should specify the resources required, including personnel, equipment, and materials. These resources should be allocated in a way that ensures the transition is completed on time and within budget.
- **Risk Management:** The transition plan should identify the risks associated with the transition and develop strategies to mitigate these risks. This includes identifying potential problems, assessing their impact, and developing contingency plans.
- **Monitoring and Evaluation:** The transition plan should include a system for monitoring progress and evaluating the results. This will allow the organization to identify any issues early and make adjustments as needed.

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### Action plan

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2 Key transaction considerations	

Driver	Responsible party
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Key transaction considerations	<p>The transaction is a sale of a business unit, which is a significant event for the company. It involves the transfer of assets, liabilities, and personnel. The transaction is subject to regulatory review and approval. The company is committed to ensuring a smooth transition and maintaining the integrity of the transaction.</p> <p>The transaction is a sale of a business unit, which is a significant event for the company. It involves the transfer of assets, liabilities, and personnel. The transaction is subject to regulatory review and approval. The company is committed to ensuring a smooth transition and maintaining the integrity of the transaction.</p>	<p>SPOT 10.10.2020</p>
Action plan	<p>The company will ensure that the transaction is completed in a timely and efficient manner. It will provide regular updates to the relevant parties and ensure that all regulatory requirements are met. The company will also ensure that the transition is smooth and that all personnel are properly trained and supported.</p>	<p>SPOT 10.10.2020</p>

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## Earnings overview

Item	2019	2018	2017	2016	2015
Sales of energy	17,262.0	19,044.1	29,942.4	26,155.9	26,551.0
Cost of sales	12,913.2	13,073.9	24,956.4	24,364.9	17,411.6
Gross profit	4,348.8	5,970.2	4,986.0	1,790.9	9,139.4
Profit after tax	3,785.3	5,009.7	2,476.4	953.3	3,142.2
Revenue Growth	16.1%	36.8%	13.1%	26.1%	
Gross margin	25.1%	31.0%	16.6%	6.8%	34.4%
Net margin	16.1%	26.0%	8.3%	3.6%	11.8%
EBITDA margin	25.1%	31.0%	16.6%	6.8%	34.4%
Generation (GWh)	1,195.7	1,279.0	1,381.7	1,729.1	1,124.1
OPC (GWh)	3,367.3	3,674.0	3,846.3	3,946.2	2,973.2
EPF (GWh)	8.35	7.46	6.79	11.40	11.36
CPF (GWh)	1.40	2.34	1.33	1.14	1.19

In the absence of firm gas allocation, the company is likely to face more losses on account of operation in an unprofitable level of fuel efficiency. This would mean that the company is likely to face losses on account of operation in an unprofitable level of fuel efficiency.

2 Key transaction considerations

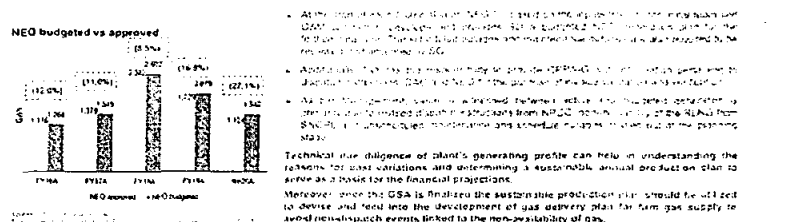
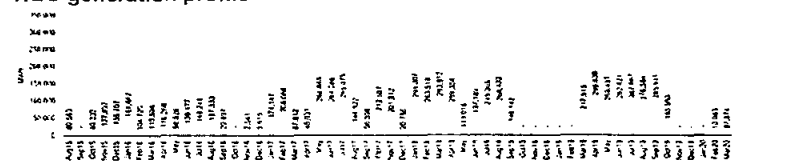
## EBITDA adjustments

	2019	2020	2021	2022	2023
EBITDA	6,317	7,768	6,462	5,787	6,539
Revenue adjustments					
Unsettled revenue	(1)	26	26	26	26
Delayed revenue	(12,231)	114	(3,561)	(225)	(27)
CO2 penalty & credits	(1)	1	1	1	1
Insurance compensation	(6)	476	1,760	369	369
Other revenue adjustments	(1)	1	1	292	1
Non-revenue income	(126)	74	80	76	(107)
Cost adjustments					
Acceleration of depreciation	(1,188)	121	(175)	(174)	174
Start-up and commissioning cost	(1)	1	1	1	1
Acquisitions	(3,863)	11,427	(796)	(272)	293
Adjusted EBITDA	2,214	9,329	3,796	5,674	6,531
Adjusted EBITDA margin	35.1%	120.4%	58.7%	97.9%	100.0%
Adjusted EBITDA margin	35.1%	120.4%	58.7%	97.9%	100.0%

EBITDA adjustments are calculated based on the Adjusted EBITDA margin.

2 Key transaction considerations

## NEO generation profile

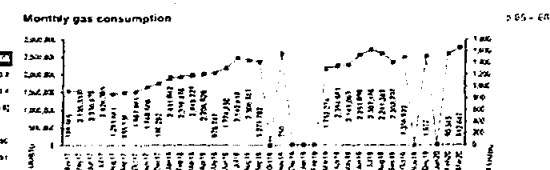


Technical due diligence of plant's generating profile can help in understanding the reasons for past variations and determining a sustainable annual production plan to serve as a basis for the financial projections.

2 Key transaction considerations

## Fuel consumption

	2019	2020	2021	2022	2023
Net sales	10,475	12,252	377	2,215	19,684
Fuel cost	10,497	10,478	18	11,522	11,281
Operating expenses	2,548	2,503	46	6,120	2,473
Other income	(26)	26	14	18	14
Interest	2,550	2,500	14	2,595	2,311
Taxation	1,293	1,251	444	3,646	1,332
Net profit	7,616	10,116	2,556	1,669	207,406
NEO (GWh)	1,289	1,118	(152)	1,348	1,378



The following table provides a summary of the fuel consumption data for the period from April 2019 to April 2023. The data shows a steady increase in gas consumption over time, with a significant jump in 2021 and 2022. The fuel cost is also shown, which is a significant portion of the total cost. The operating expenses and other income are also shown, providing a comprehensive view of the fuel consumption data.

2 Key transaction considerations

## Budget vs Actual

	2019	2020	2021	2022	2023
Net sales	10,475	12,252	377	2,215	19,684
Fuel cost	10,497	10,478	18	11,522	11,281
Operating expenses	2,548	2,503	46	6,120	2,473
Other income	(26)	26	14	18	14
Interest	2,550	2,500	14	2,595	2,311
Taxation	1,293	1,251	444	3,646	1,332
Net profit	7,616	10,116	2,556	1,669	207,406
NEO (GWh)	1,289	1,118	(152)	1,348	1,378

The following table provides a summary of the budget vs actual data for the period from April 2019 to April 2023. The data shows a steady increase in budget vs actual over time, with a significant jump in 2021 and 2022. The fuel cost is also shown, which is a significant portion of the total cost. The operating expenses and other income are also shown, providing a comprehensive view of the budget vs actual data.









## Key considerations on project documents

### Implementation agreement

- The contract (COPI) will be reviewed by the Government of Punjab (GoP) and the Government of India (GoI) to ensure that it is in line with the relevant laws and regulations.

It will be noted that potential bidders will expect a security package, which should be at par with other PPAs being negotiated under GoP's prevailing policies. Any deviation from this expectation may carry adverse implications for investor interest and subsequently on the viability of the project.

### GSA

- The GSA will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The GSA will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

Under the existing contract, the GoP will be responsible for the maintenance and operation of the plant. The GoP will be responsible for the maintenance and operation of the plant. The GoP will be responsible for the maintenance and operation of the plant.

### PPA

- The PPA will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The PPA will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

Under the existing contract, the GoP will be responsible for the maintenance and operation of the plant. The GoP will be responsible for the maintenance and operation of the plant. The GoP will be responsible for the maintenance and operation of the plant.

## 2 Key transaction considerations

## Tax Provision

- The tax provision will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The tax provision will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

Through the day-to-day tax provision, as computed by EY and the provision required by the management, it is highlighted here that the gross tax liability is significantly reduced with the amount of tax credit under section 80B of the ITO, 2001. Please note that such credit is subject to verification and detailed scrutiny by the tax department. Further, as per the judgments of superior courts, tax credit is admissible only in respect of amounts spent on purchase of land and machinery and only in respect of amounts spent on purchase of land and machinery and only in respect of amounts spent on purchase of land and machinery.

## IT WHT

- The IT WHT will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The IT WHT will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

According to the computation, a significant difference of PKR 143.00 million is observed in respect of IT WHT. The difference is observed due to the difference in the computation of the IT WHT. The difference is observed due to the difference in the computation of the IT WHT.

## 2 Key transaction considerations

## Exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001

- The exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001 will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001 will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

The exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001 will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001 will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

The exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001 will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001 will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

The exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001 will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001 will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

Therefore, if the prospective investor intends to avail the exemption under clause (132) of Part I of the Second Schedule to the ITO, 2001, it will be imperative to approach the Federal Board of Revenue (FBR) or Ministry of Finance (MoF) to obtain specific exemptions, and, if required, to request the MoF to make recommendations for the necessary amendments in clause (132).

## 2 Key transaction considerations

## IT WHT Proceedings

- The IT WHT proceedings will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The IT WHT proceedings will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

Every withholding agent making a deduction of IT WHT is liable to pay the same by way of advance payment to the tax department. The tax department will be responsible for the collection and remittance of the IT WHT.

## Deferred tax liability (DTL)

- The DTL will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The DTL will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

We have computed DTL amounting to PKR 143.00 million on the basis of temporary & deductible temporary difference details of which are discussed in the ensuing slides.

## Non WHT of Punjab ST

- The Non WHT of Punjab ST will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations. The Non WHT of Punjab ST will be reviewed by the GoP and the GoI to ensure that it is in line with the relevant laws and regulations.

NPQGL may be exempted from the tax liability, amounting to PKR 143.00 million on account of non-withholding of Punjab ST tax.

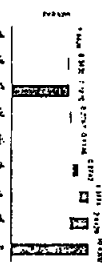


**5.1 Self-modifying**

[illegible]

**COD stage tariff true-up petition**

Gas tariff determined at not capacity of \$00.5/MWh

[illegible]

5. Test analysis

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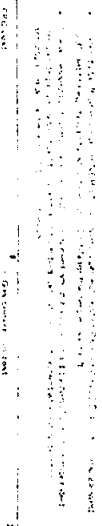
The following table shows the average number of units of the following products sold in the United Kingdom in the year ending 31st March 1997.	
Product	1996-97
1. Beer	1,200,000
2. Wine	1,000,000
3. Spirits	1,000,000
4. Soft drinks	1,000,000
5. Other beverages	1,000,000
6. Total	5,200,000

*[The page contains extremely faint, illegible text, likely bleed-through from the reverse side.]*

### 3. Tenth redox potential

Reference (all in average revenue/unit)	1974-1975	1975-1976	1976-1977	1977-1978	1978-1979	1979-1980	1980-1981	1981-1982	1982-1983	1983-1984	1984-1985	1985-1986	1986-1987	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031	2031-2032	2032-2033	2033-2034	2034-2035	2035-2036	2036-2037	2037-2038	2038-2039	2039-2040	2040-2041	2041-2042	2042-2043	2043-2044	2044-2045	2045-2046	2046-2047	2047-2048	2048-2049	2049-2050	2050-2051	2051-2052	2052-2053	2053-2054	2054-2055	2055-2056	2056-2057	2057-2058	2058-2059	2059-2060	2060-2061	2061-2062	2062-2063	2063-2064	2064-2065	2065-2066	2066-2067	2067-2068	2068-2069	2069-2070	2070-2071	2071-2072	2072-2073	2073-2074	2074-2075	2075-2076	2076-2077	2077-2078	2078-2079	2079-2080	2080-2081	2081-2082	2082-2083	2083-2084	2084-2085	2085-2086	2086-2087	2087-2088	2088-2089	2089-2090	2090-2091	2091-2092	2092-2093	2093-2094	2094-2095	2095-2096	2096-2097	2097-2098	2098-2099	2099-2100	2100-2101	2101-2102	2102-2103	2103-2104	2104-2105	2105-2106	2106-2107	2107-2108	2108-2109	2109-2110	2110-2111	2111-2112	2112-2113	2113-2114	2114-2115	2115-2116	2116-2117	2117-2118	2118-2119	2119-2120	2120-2121	2121-2122	2122-2123	2123-2124	2124-2125	2125-2126	2126-2127	2127-2128	2128-2129	2129-2130	2130-2131	2131-2132	2132-2133	2133-2134	2134-2135	2135-2136	2136-2137	2137-2138	2138-2139	2139-2140	2140-2141	2141-2142	2142-2143	2143-2144	2144-2145	2145-2146	2146-2147	2147-2148	2148-2149	2149-2150	2150-2151	2151-2152	2152-2153	2153-2154	2154-2155	2155-2156	2156-2157	2157-2158	2158-2159	2159-2160	2160-2161	2161-2162	2162-2163	2163-2164	2164-2165	2165-2166	2166-2167	2167-2168	2168-2169	2169-2170	2170-2171	2171-2172	2172-2173	2173-2174	2174-2175	2175-2176	2176-2177	2177-2178	2178-2179	2179-2180	2180-2181	2181-2182	2182-2183	2183-2184	2184-2185	2185-2186	2186-2187	2187-2188	2188-2189	2189-2190	2190-2191	2191-2192	2192-2193	2193-2194	2194-2195	2195-2196	2196-2197	2197-2198	2198-2199	2199-2200	2200-2201	2201-2202	2202-2203	2203-2204	2204-2205	2205-2206	2206-2207	2207-2208	2208-2209	2209-2210	2210-2211	2211-2212	2212-2213	2213-2214	2214-2215	2215-2216	2216-2217	2217-2218	2218-2219	2219-2220	2220-2221	2221-2222	2222-2223	2223-2224	2224-2225	2225-2226	2226-2227	2227-2228	2228-2229	2229-2230	2230-2231	2231-2232	2232-2233	2233-2234	2234-2235	2235-2236	2236-2237	2237-2238	2238-2239	2239-2240	2240-2241	2241-2242	2242-2243	2243-2244	2244-2245	2245
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### 3. Profit analysis

TABLE 1  
Reference rainfall vs average recorded rainfall

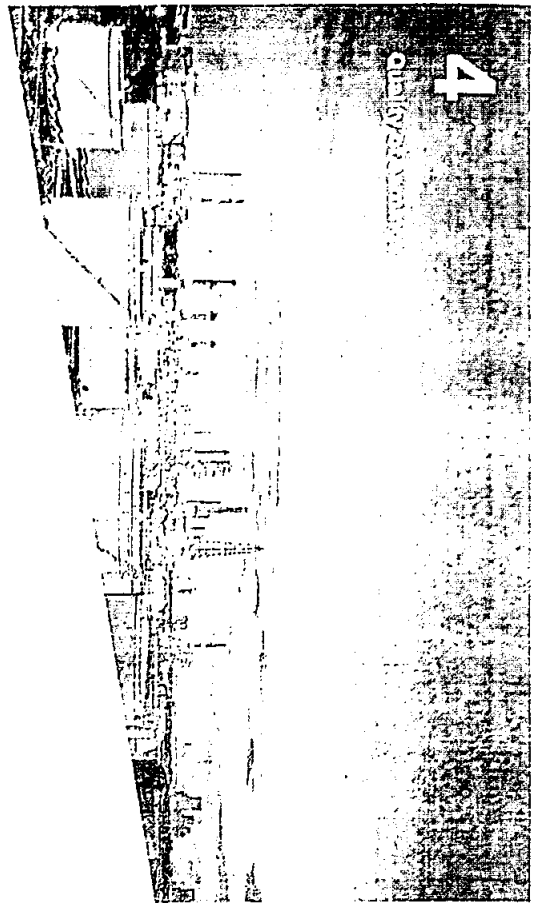
Station	Reference rainfall (mm)	Average recorded rainfall (mm)
1	1000	1000
2	1000	1000
3	1000	1000
4	1000	1000
5	1000	1000
6	1000	1000
7	1000	1000
8	1000	1000
9	1000	1000
10	1000	1000
11	1000	1000
12	1000	1000
13	1000	1000
14	1000	1000
15	1000	1000
16	1000	1000
17	1000	1000
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67	1000	1000
68	1000	1000
69	1000	1000
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79	1000	1000
80	1000	1000
81	1000	1000
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88	1000	1000
89	1000	1000
90	1000	1000
91	1000	1000
92	1000	1000
93	1000	1000
94	1000	1000
95	1000	1000
96	1000	1000
97	1000	1000
98	1000	1000
99	1000	1000
100	1000	1000

**COO stage tariff petition**

True up / Review of the proposed tariff and associated duties and taxes to be levied on imports from the countries of origin of the proposed tariff and capital structure cannot be finalized. A timely and positive determination on the COO stage tariff petition is required to proceed with the tariff and capital structure and to finalize the petition process and to finalize the tariff and capital structure.

**CO2 abate tariff petition**

Thus far, given the high project cost, not associated with using CO<sub>2</sub> as an important attribute without which the project cost and capital structure cannot be reduced. A tariff and provide determination on the CO<sub>2</sub> abate tariff petition adjustment may be taking the transaction to market will facilitate the privatization process and provide clarity in the markets.



## Earnings overview

[illegible]

1

**ENRICA MARGIN**

The following table shows the results of the 1998 survey of the 100 largest U.S. corporations, ranked by total revenue in 1997. The table shows the percentage of each company's revenue that came from international sales, and the percentage of each company's revenue that came from international sales.

Company	1998	1997	1996	1995	1994	1993
General Electric	20.1	19.8	19.5	19.2	18.9	18.6
IBM	19.5	19.2	18.9	18.6	18.3	18.0
Boeing	18.7	18.4	18.1	17.8	17.5	17.2
Walt Disney	18.3	18.0	17.7	17.4	17.1	16.8
Microsoft	17.9	17.6	17.3	17.0	16.7	16.4
Johnson & Johnson	17.5	17.2	16.9	16.6	16.3	16.0
Merck	17.1	16.8	16.5	16.2	15.9	15.6
Amgen	16.7	16.4	16.1	15.8	15.5	15.2
Novartis	16.3	16.0	15.7	15.4	15.1	14.8
Glaxo	15.9	15.6	15.3	15.0	14.7	14.4
Novartis	15.5	15.2	14.9	14.6	14.3	14.0
Novartis	15.1	14.8	14.5	14.2	13.9	13.6
Novartis	14.7	14.4	14.1	13.8	13.5	13.2
Novartis	14.3	14.0	13.7	13.4	13.1	12.8
Novartis	13.9	13.6	13.3	13.0	12.7	12.4
Novartis	13.5	13.2	12.9	12.6	12.3	12.0
Novartis	13.1	12.8	12.5	12.2	11.9	11.6
Novartis	12.7	12.4	12.1	11.8	11.5	11.2
Novartis	12.3	12.0	11.7	11.4	11.1	10.8
Novartis	11.9	11.6	11.3	11.0	10.7	10.4
Novartis	11.5	11.2	10.9	10.6	10.3	10.0
Novartis	11.1	10.8	10.5	10.2	9.9	9.6
Novartis	10.7	10.4	10.1	9.8	9.5	9.2
Novartis	10.3	10.0	9.7	9.4	9.1	8.8
Novartis	9.9	9.6	9.3	9.0	8.7	8.4
Novartis	9.5	9.2	8.9	8.6	8.3	8.0
Novartis	9.1	8.8	8.5	8.2	7.9	7.6
Novartis	8.7	8.4	8.1	7.8	7.5	7.2
Novartis	8.3	8.0	7.7	7.4	7.1	6.8
Novartis	7.9	7.6	7.3	7.0	6.7	6.4
Novartis	7.5	7.2	6.9	6.6	6.3	6.0
Novartis	7.1	6.8	6.5	6.2	5.9	5.6
Novartis	6.7	6.4	6.1	5.8	5.5	5.2
Novartis	6.3	6.0	5.7	5.4	5.1	4.8
Novartis	5.9	5.6	5.3	5.0	4.7	4.4
Novartis	5.5	5.2	4.9	4.6	4.3	4.0
Novartis	5.1	4.8	4.5	4.2	3.9	3.6
Novartis	4.7	4.4	4.1	3.8	3.5	3.2
Novartis	4.3	4.0	3.7	3.4	3.1	2.8
Novartis	3.9	3.6	3.3	3.0	2.7	2.4
Novartis	3.5	3.2	2.9	2.6	2.3	2.0
Novartis	3.1	2.8	2.5	2.2	1.9	1.6
Novartis	2.7	2.4	2.1	1.8	1.5	1.2
Novartis	2.3	2.0	1.7	1.4	1.1	0.8
Novartis	1.9	1.6	1.3	1.0	0.7	0.4
Novartis	1.5	1.2	0.9	0.6	0.3	0.0
Novartis	1.1	0.8	0.5	0.2	0.0	0.0
Novartis	0.7	0.4	0.1	0.0	0.0	0.0
Novartis	0.3	0.0	0.0	0.0	0.0	0.0
Novartis	0.0	0.0	0.0	0.0	0.0	0.0

Source: Novartis Institute for Biomedical Research, 1998.

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### EDITORIAL adjustments

[illegible]

4. Quality of service

Inventory Description		Net energy purchase price (EPP)	
Item #	Item Name	Unit	Price
1	100% 100% 100% 100% 100%	100%	100%
2	100% 100% 100% 100% 100%	100%	100%
3	100% 100% 100% 100% 100%	100%	100%
4	100% 100% 100% 100% 100%	100%	100%
5	100% 100% 100% 100% 100%	100%	100%
6	100% 100% 100% 100% 100%	100%	100%
7	100% 100% 100% 100% 100%	100%	100%
8	100% 100% 100% 100% 100%	100%	100%
9	100% 100% 100% 100% 100%	100%	100%
10	100% 100% 100% 100% 100%	100%	100%
11	100% 100% 100% 100% 100%	100%	100%
12	100% 100% 100% 100% 100%	100%	100%
13	100% 100% 100% 100% 100%	100%	100%
14	100% 100% 100% 100% 100%	100%	100%
15	100% 100% 100% 100% 100%	100%	100%
16	100% 100% 100% 100% 100%	100%	100%
17	100% 100% 100% 100% 100%	100%	100%
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62	100% 100% 100% 100% 100%	100%	100%
63	100% 100% 100% 100% 100%	100%	100%
64	100% 100% 100% 100% 100%	100%	100%
65	100% 100% 100% 100% 100%	100%	100%

Quality of earnings

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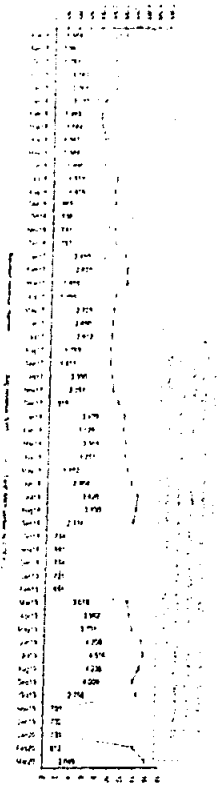
Figure 1 consists of five panels, labeled (a) through (e), each showing a flow cytometry histogram. The x-axis for all panels is 'FLUORESCENCE' and the y-axis is 'COUNT'. Each panel has two bars: a control bar (C) and a treated bar (T). Panel (a) shows a decrease in CD34 expression in the treated sample. Panel (b) shows an increase in CD33 expression in the treated sample. Panel (c) shows an increase in CD11b expression in the treated sample. Panel (d) shows an increase in CD11c expression in the treated sample. Panel (e) shows an increase in CD15 expression in the treated sample.

Country	Quality of earnings
Algeria	1.00
Angola	1.00
Argentina	1.00
Armenia	1.00
Australia	1.00
Austria	1.00
Azerbaijan	1.00
Bahrain	1.00
Bangladesh	1.00
Barbados	1.00
Belarus	1.00
Belgium	1.00
Belize	1.00
Bhutan	1.00
Bolivia	1.00
Bosnia and Herzegovina	1.00
Brazil	1.00
Bulgaria	1.00
Burkina Faso	1.00
Burundi	1.00
Cambodia	1.00
Cameroon	1.00
Canada	1.00
Cape Verde	1.00
Casakhstan	1.00
Cayman Islands	1.00
Czechia	1.00
Dominica	1.00
Dominican Republic	1.00
DRC	1.00
Ecuador	1.00
Egypt	1.00
El Salvador	1.00
Equatorial Guinea	1.00
Estonia	1.00
Ethiopia	1.00
Fiji	1.00
Finland	1.00
France	1.00
Gabon	1.00
Gambia	1.00
Germany	1.00
Ghana	1.00
Greece	1.00
Guatemala	1.00
Honduras	1.00
Hong Kong	1.00
Hungary	1.00
India	1.00
Indonesia	1.00
Iran	1.00
Ireland	1.00
Israel	1.00
Italy	1.00
Jamaica	1.00
Japan	1.00
Jordan	1.00
Kazakhstan	1.00
Kenya	1.00
Korea	1.00
Kuwait	1.00
Kyrgyzstan	1.00
Laos	1.00
Latvia	1.00
Lebanon	1.00
Lesotho	1.00
Lithuania	1.00
Luxembourg	1.00
Macao	1.00
Macedonia	1.00
Madagascar	1.00
Malawi	1.00
Malaysia	1.00
Maldives	1.00
Mali	1.00
Malta	1.00
Mexico	1.00
Moldova	1.00
Morocco	1.00
Mozambique	1.00
Myanmar	1.00
Nicaragua	1.00
Niger	1.00
Nigeria	1.00
Norway	1.00
Oman	1.00
Pakistan	1.00
Panama	1.00
Papua New Guinea	1.00
Paraguay	1.00
Peru	1.00
Philippines	1.00
Poland	1.00
Portugal	1.00
Romania	1.00
Russia	1.00
Rwanda	1.00
Saudi Arabia	1.00
Senegal	1.00
Serbia	1.00
Seychelles	1.00
Singapore	1.00
Slovakia	1.00
Slovenia	1.00
South Africa	1.00
South Korea	1.00
Spain	1.00
Sri Lanka	1.00
St. Kitts and Nevis	1.00
St. Lucia	1.00
St. Vincent and the Grenadines	1.00
Sweden	1.00
Switzerland	1.00
Taiwan	1.00
Tanzania	1.00
Togo	1.00
Tonga	1.00
Turkey	1.00
Turkmenistan	1.00
Uganda	1.00
Ukraine	1.00
United Kingdom	1.00
United States	1.00
Uruguay	1.00
Uzbekistan	1.00
Venezuela	1.00
Yemen	1.00
Zambia	1.00
Zimbabwe	1.00

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Time	Alt	Pressure	Temp	Humidity	Wind	Clouds	Visibility	Remarks
0000	1000	1013	15.0	85	000	000	10	Clear
0100	1000	1013	14.5	85	000	000	10	Clear
0200	1000	1013	14.0	85	000	000	10	Clear
0300	1000	1013	13.5	85	000	000	10	Clear
0400	1000	1013	13.0	85	000	000	10	Clear
0500	1000	1013	12.5	85	000	000	10	Clear
0600	1000	1013	12.0	85	000	000	10	Clear
0700	1000	1013	11.5	85	000	000	10	Clear
0800	1000	1013	11.0	85	000	000	10	Clear
0900	1000	1013	10.5	85	000	000	10	Clear
1000	1000	1013	10.0	85	000	000	10	Clear
1100	1000	1013	9.5	85	000	000	10	Clear
1200	1000	1013	9.0	85	000	000	10	Clear
1300	1000	1013	8.5	85	000	000	10	Clear
1400	1000	1013	8.0	85	000	000	10	Clear
1500	1000	1013	7.5	85	000	000	10	Clear
1600	1000	1013	7.0	85	000	000	10	Clear
1700	1000	1013	6.5	85	000	000	10	Clear
1800	1000	1013	6.0	85	000	000	10	Clear
1900	1000	1013	5.5	85	000	000	10	Clear
2000	1000	1013	5.0	85	000	000	10	Clear
2100	1000	1013	4.5	85	000	000	10	Clear
2200	1000	1013	4.0	85	000	000	10	Clear
2300	1000	1013	3.5	85	000	000	10	Clear

[illegible]

1. The first part of the document is a title page. It contains the title of the document, the author's name, and the date of the document. The title is "The First Part of the Document". The author's name is "John Doe". The date is "12/12/2023".

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0 10 20 30 40 50 60 70 80 90 100

PULMONARIA

the 1990s, the number of people in the United States who are obese has increased by 50% (1). Obesity is a risk factor for a number of chronic diseases, including type 2 diabetes, coronary heart disease, stroke, and certain types of cancer (2). The prevalence of obesity in the United States is estimated to be 30% in adults (3). The prevalence of obesity in children is estimated to be 15% (4). The prevalence of obesity in adolescents is estimated to be 10% (5). The prevalence of obesity in the elderly is estimated to be 20% (6). The prevalence of obesity in the United States is estimated to be 30% in adults (3). The prevalence of obesity in children is estimated to be 15% (4). The prevalence of obesity in adolescents is estimated to be 10% (5). The prevalence of obesity in the elderly is estimated to be 20% (6).

[illegible]

Quality of testimony

[illegible][illegible]

*[The page contains extremely faint, illegible vertical text.]*

Field name	10/01/77	11/01/77	12/01/77	01/01/78
Employee name	6463	5616	3713	3257
Project Dates	2	00170	7260	19067.3
Organization	13106	13064	13013	23072.3
Department	3	02		
Job Description	91			2007

Field name	10/01/77	11/01/77	12/01/77	01/01/78
Employee name	6463	5616	3713	3257
Project Dates	2	00170	7260	19067.3
Organization	13106	13064	13013	23072.3
Department	3	02		
Job Description	91			2007

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397</
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1. What is the purpose of the document?  
 The purpose of this document is to provide a detailed account of the events surrounding the [redacted] case, including the investigation, the trial, and the final verdict.

2. What are the key facts of the case?  
 The case involves the [redacted] of [redacted] on [redacted] at [redacted]. The victim was [redacted] and the suspect was [redacted]. The crime was [redacted] and the suspect was [redacted].

3. What is the timeline of events?  
 The events of the case began on [redacted] when [redacted] was [redacted]. The investigation was conducted by [redacted] and the trial took place on [redacted]. The final verdict was reached on [redacted].

4. What is the evidence?  
 The evidence in this case includes [redacted] and [redacted]. The evidence was collected by [redacted] and presented to the jury during the trial.

5. What is the conclusion?  
 The conclusion of the case is that [redacted] is guilty of [redacted] and was sentenced to [redacted].

[illegible][illegible][illegible]

the 1990s, the number of people in the world who are undernourished has declined from 1.1 billion to 800 million. The number of people who are malnourished has declined from 1.5 billion to 1 billion. The number of people who are obese has increased from 100 million to 300 million. The number of people who are overweight has increased from 100 million to 300 million. The number of people who are obese and overweight has increased from 100 million to 300 million. The number of people who are obese and overweight has increased from 100 million to 300 million.

#### 4 Quality of earnings

### Administrative expenses

Category	1985	1986	1987	1988	1989	1990
Energy use (quads)	14.5	14.7	23.9	34.7	52.9	62.9
Transportation	3.4	3.9	3.6	3.6	3.6	3.6
Manufacturing	2.5	2.4	4.5	3.6	3.6	3.6
Buildings	4.1	4.1	3.6	3.6	3.6	3.6
Electricity	4.1	4.1	3.6	3.6	3.6	3.6
Other	4.1	4.1	3.6	3.6	3.6	3.6
Total	14.5	14.7	23.9	34.7	52.9	62.9

## Administrative Expenses

1. **Employee cost**

## 2. Travelling and conveyance

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

### 3 Utilities

[illegible]

## 1. Repair and maintenance and O&amp;M cost

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

### 5 Transportation and communication

- **Prevalence** is the proportion of the population that has a disease at a particular point in time. It is a measure of the burden of disease in a population.
- **Incidence** is the number of new cases of a disease that occur in a population over a specific period of time. It is a measure of the risk of developing a disease.
- **Prevalence** is the sum of all cases (new and old) of a disease in a population at a particular point in time. It is a measure of the total burden of disease in a population.
- **Incidence** is the number of new cases of a disease that occur in a population over a specific period of time. It is a measure of the risk of developing a disease.

#### 4 Quality of earnings

Administrative expenses

	1985	1986	1987	1988	1989
Employee cost	16.5	17.7	22.3	24.7	17.7
Transport	3.6	3.8	3.6	0.6	1.1
Utilities	3.9	4.8	4.5	3.0	1.1
RAIL	11.7	13.3	1.0	0.8	5.4
Other changes	-	-	20.2	0.9	-
Transportation	7.7	8.4	5.8	1.3	0
Loyalty and profit share	7	14	10.9	3.2	0.6
Others	6	3.3	5.4	1.2	0.8
Total	44.5	54.3	109.8	39.6	13.3

**Abstract** The purpose of this study was to determine the effect of a 12-week training program on the physical fitness of 10-year-old children. The study was conducted in a primary school in Ankara, Turkey. The children were divided into two groups: a control group and an experimental group. The experimental group participated in a 12-week training program that included aerobic, strength, and flexibility exercises. Physical fitness was measured using a series of tests, including a 1000m run, a 15m shuttle run, a 1min sit-up test, a 1min plank test, and a 1min heel sit test. The results showed that the experimental group had significantly higher scores than the control group in all tests. The 12-week training program had a positive effect on the physical fitness of 10-year-old children.

## 7 Legal and professional

1. The law of tort is a branch of law, which deals with the wrongs and remedies.
2. Tort is a civil wrong, which is not a crime. It is a breach of a duty, which is owed to a person, and which results in damage to his person or property.
3. The law of tort is a branch of law, which deals with the wrongs and remedies. It is a civil wrong, which is not a crime. It is a breach of a duty, which is owed to a person, and which results in damage to his person or property.
4. The law of tort is a branch of law, which deals with the wrongs and remedies. It is a civil wrong, which is not a crime. It is a breach of a duty, which is owed to a person, and which results in damage to his person or property.
5. The law of tort is a branch of law, which deals with the wrongs and remedies. It is a civil wrong, which is not a crime. It is a breach of a duty, which is owed to a person, and which results in damage to his person or property.

\* Others

Subsequent studies on the same subjects have confirmed the results of the present study. By using the same procedure, it was found that 65.6% of the subjects had a significant improvement in their symptoms after the treatment with the same procedure. The results of the present study are in line with the results of the previous studies.

#### Breakdown of other expenses

Total ad sales	455	215	-	77	5
Subscriptions	42	13	-	-	-
Printing	1,179	517	645	136	5
Auditor's exp.	-	-	-	475	-
Adjusted net	913	1,508	-	-	-
Market average	1,181	1,125	326	45	-
Total	3,831	3,378	1,191	783	10

#### 4 Quality of earnings

Employee cost:

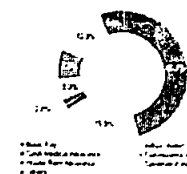
Feature	1994	1995	1996	1997	1998
Suburban	1	100.0	100.0	100.0	100.0
Urban	2	100.0	100.0	100.0	100.0
Total	100.0	100.0	100.0	100.0	100.0
Percentage	100.0	100.0	100.0	100.0	100.0
Mean Value	100.0	100.0	100.0	100.0	100.0
Standard Deviation	100.0	100.0	100.0	100.0	100.0

**Employee cost**

- The primary goal of the research is to determine the effect of the independent variable on the dependent variable.
- The independent variable is the variable that is manipulated or changed by the researcher.
- The dependent variable is the variable that is measured or observed by the researcher.
- The control group is the group of subjects that does not receive the treatment or intervention.
- The experimental group is the group of subjects that receives the treatment or intervention.
- The random assignment is the process of assigning subjects to the control or experimental group.
- The double-blind design is a design in which neither the researcher nor the subjects know which group is the control group and which group is the experimental group.
- The single-blind design is a design in which only the researcher knows which group is the control group and which group is the experimental group.
- The pretest-posttest design is a design in which the dependent variable is measured before and after the treatment or intervention.
- The posttest-only design is a design in which the dependent variable is measured only after the treatment or intervention.
- The Solomon four-group design is a design in which there are four groups of subjects, each of which receives a different combination of the independent variable and the pretest.

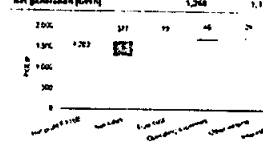
**Human resource function**

In view of proposed penalization and possible curtail of CCEPRs, HR related synergies being availed by the Company may not be available. Moreover, the new driver adjustment upon CO<sub>2</sub> may leave little room in the tariff for the potential increase in other market based compensation structures. The findings of this exercise may identify blurring and compensation gaps, which require careful attention in the next stage of valuation.

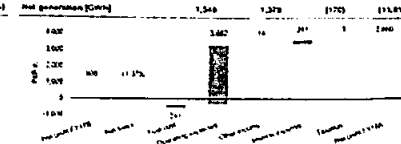


**Budgeted vs. actual earnings summary: – FY16**

Gale's vs. actual earnings summary - FY 1999		
Net sales	18,875	17.2%
Fuel Cost	18,493	16.4%
Operating expenses	2,546	3.5%
EBITDA	-	-
Interest	2,360	2.5%
Taxation	-	-
Net profit	1,283	5.7%
NP margin	7.6%	10.1%



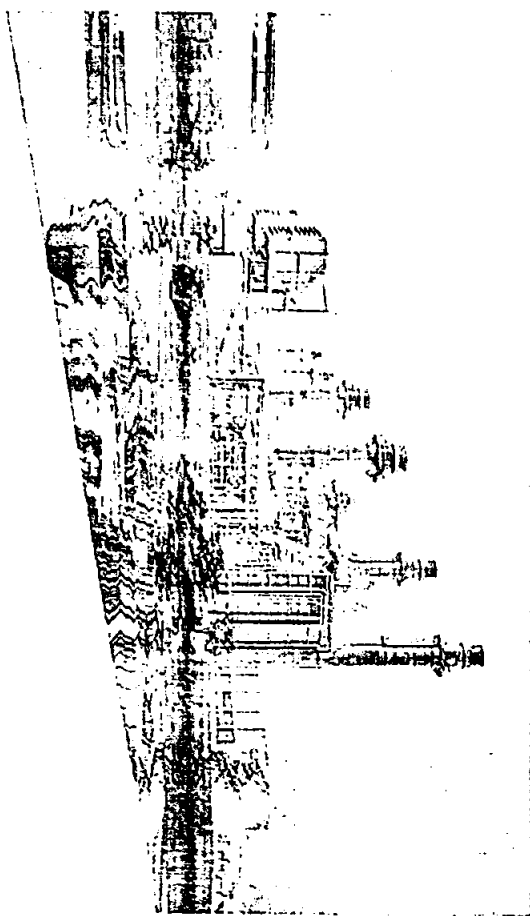
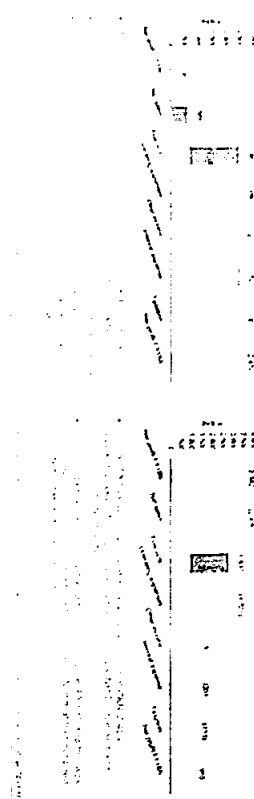
	Budget	Actual	% Diff
Net sales	21,056	19,466	(13.7%)
Costs	11,522	11,281	2.1%
Operating expenses	6.15	2.47	3.662
Other income	-	16	16
Interest	2,595	2,290	311
Taxation	-	-	-
Net profit	668	3,666	2,652
EPS margin	3.8%	14.6%	287.4%





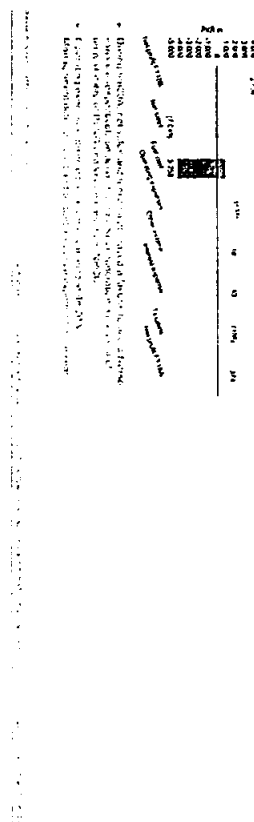
Disbursed vs actual earnings summary - 1/1/18

Category	Disbursed	Actual	Ratio
Operating	1,000	1,000	1.00
Non-Operating	1,000	1,000	1.00
Total	2,000	2,000	1.00



Disbursed vs actual earnings summary - 2/1/18

Category	Disbursed	Actual	Ratio
Operating	1,000	1,000	1.00
Non-Operating	1,000	1,000	1.00
Total	2,000	2,000	1.00



Disbursed vs actual earnings summary - 3/1/18

Category	Disbursed	Actual	Ratio
Operating	1,000	1,000	1.00
Non-Operating	1,000	1,000	1.00
Total	2,000	2,000	1.00

5 Quality of net assets

[illegible]

1. *Chrysomelidae*

Cotton Corporation of America		Plant and machinery (30%)	
	1953		1953
1. Cotton	100.00	2. Plant and machinery	100.00
3. Other	0.00	4. Other	0.00
5. Total	100.00	6. Total	100.00
7. Cotton	100.00	8. Plant and machinery	100.00
9. Other	0.00	10. Other	0.00
11. Total	100.00	12. Total	100.00
13. Cotton	100.00	14. Plant and machinery	100.00
15. Other	0.00	16. Other	0.00
17. Total	100.00	18. Total	100.00
19. Cotton	100.00	20. Plant and machinery	100.00
21. Other	0.00	22. Other	0.00
23. Total	100.00	24. Total	100.00

PKR 46.7b

[illegible]

5. Quality of the Asset

## PKR 2.9b

PKR 2.9b

	2003	2004	2005	2006	2007
Budgetary and non-budgetary	2,043.4	2,085.6	2,045.8	2,095.5	2,216.2
Other outlays	287	292	259	254	258
Estimated liabilities	3,043.1	3,061.1	3,145.1	3,253.1	3,473.9
Debt payments				2,466.1	2,908.5
State-contingent	0.2	0.2	1,150.9	1,250.6	1,620.8
Unemployment insurance			24.7	26.1	27.6
Other	0.5	0.3	4.6	4.6	5.9
Total	52	66	1,580.2	1,760.2	4,492.7

PKR4.0b

**Inventory and repair parts**

**PKR 1.8b**

72% Cash/38% Inventory

**Inventory and spare parts**

**PKR 1.8b**

72% Cash/38% Inventory

**2006 Sales: 2,725.5 Volume: 2,505.5 Units: 7,133**

**Stoves, spares and repair tools**


• The company has a large inventory of spare parts for its stoves, which are sold through a network of dealers and repair shops. The company also has a fleet of trucks for transporting the stoves and spare parts to the dealers and repair shops.

**Agencies, stores and dealers**

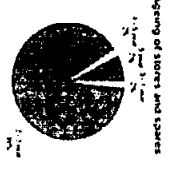
• The company has a large network of agencies, stores and dealers across the country. The company also has a fleet of trucks for transporting the stoves and spare parts to the dealers and repair shops.

**Full stock**

• The company has a full stock of stoves and spare parts, which are sold through a network of dealers and repair shops. The company also has a fleet of trucks for transporting the stoves and spare parts to the dealers and repair shops.



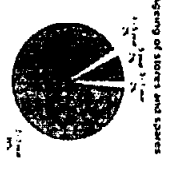
Category	Percentage
Cash	72%
Inventory	38%
Other	10%



1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific information required.

[illegible]

A pie chart showing the distribution of the population by sex and age group. The chart is divided into four segments: Male (50%), Female (50%), and two smaller segments representing age groups (10% and 5%).





5. Quality of int assets

Report working capital requirement

Item	Value	Unit
Working capital requirement	1000	USD
Fixed capital requirement	2000	USD
Total capital requirement	3000	USD

Trade working capital

Item	Value	Unit
Inventory	1000	USD
Accounts receivable	1000	USD
Accounts payable	1000	USD
Other working capital	0	USD
Total working capital	1000	USD

5. Quality of int assets

Report working capital requirement

Item	Value	Unit
Working capital requirement	1000	USD
Fixed capital requirement	2000	USD
Total capital requirement	3000	USD

Trade working capital

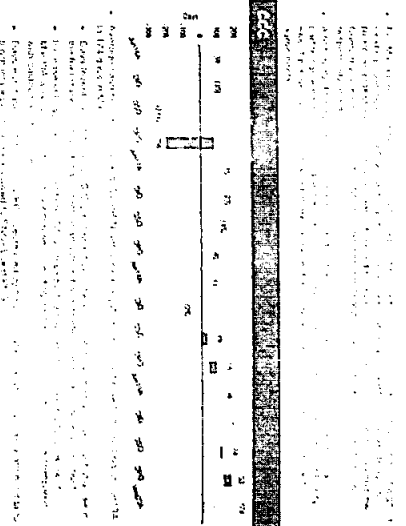
Item	Value	Unit
Inventory	1000	USD
Accounts receivable	1000	USD
Accounts payable	1000	USD
Other working capital	0	USD
Total working capital	1000	USD

5. Quality of int assets

Report working capital requirement

Item	Value	Unit
Working capital requirement	1000	USD
Fixed capital requirement	2000	USD
Total capital requirement	3000	USD

Working capital management

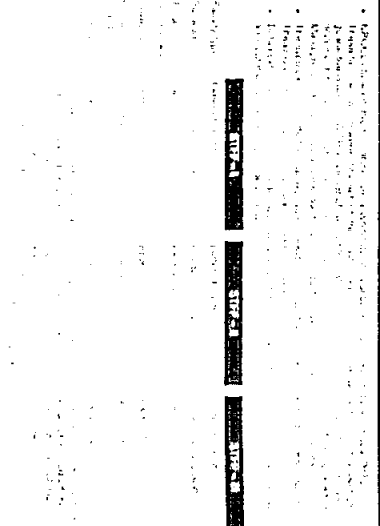


5. Quality of int assets

Report working capital requirement

Item	Value	Unit
Working capital requirement	1000	USD
Fixed capital requirement	2000	USD
Total capital requirement	3000	USD

Working capital management



[illegible][illegible]

*Handwritten:* The following are the names of the persons who have been named as witnesses in the above captioned case.

**RESEARCH** The researchers found that the average age of the 100,000 people who died in the 1990s was 74.5 years old. The average age of the 100,000 people who died in the 1980s was 73.5 years old. The average age of the 100,000 people who died in the 1970s was 72.5 years old. The average age of the 100,000 people who died in the 1960s was 71.5 years old. The average age of the 100,000 people who died in the 1950s was 70.5 years old. The average age of the 100,000 people who died in the 1940s was 69.5 years old. The average age of the 100,000 people who died in the 1930s was 68.5 years old. The average age of the 100,000 people who died in the 1920s was 67.5 years old. The average age of the 100,000 people who died in the 1910s was 66.5 years old. The average age of the 100,000 people who died in the 1900s was 65.5 years old.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)	(62)	(63)	(64)	(65)	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)	(93)	(94)	(95)	(96)	(97)	(98)	(99)	(100)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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**Adjusted not stated**

### 5 Quality of net assets

5179-1	5179-2	5179-3	5179-4
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【参考文献】

## References

● 日本橋

the 1990s, the number of people who have been convicted of crimes has increased. In 1990, there were 1.5 million people in prison in the United States. By 2000, that number had increased to 2.2 million. In 2010, there were 2.5 million people in prison in the United States. In 2015, there were 2.7 million people in prison in the United States. In 2020, there were 2.9 million people in prison in the United States. In 2025, there were 3.1 million people in prison in the United States. In 2030, there were 3.3 million people in prison in the United States. In 2035, there were 3.5 million people in prison in the United States. In 2040, there were 3.7 million people in prison in the United States. In 2045, there were 3.9 million people in prison in the United States. In 2050, there were 4.1 million people in prison in the United States. In 2055, there were 4.3 million people in prison in the United States. In 2060, there were 4.5 million people in prison in the United States. In 2065, there were 4.7 million people in prison in the United States. In 2070, there were 4.9 million people in prison in the United States. In 2075, there were 5.1 million people in prison in the United States. In 2080, there were 5.3 million people in prison in the United States. In 2085, there were 5.5 million people in prison in the United States. In 2090, there were 5.7 million people in prison in the United States. In 2095, there were 5.9 million people in prison in the United States. In 2100, there were 6.1 million people in prison in the United States.

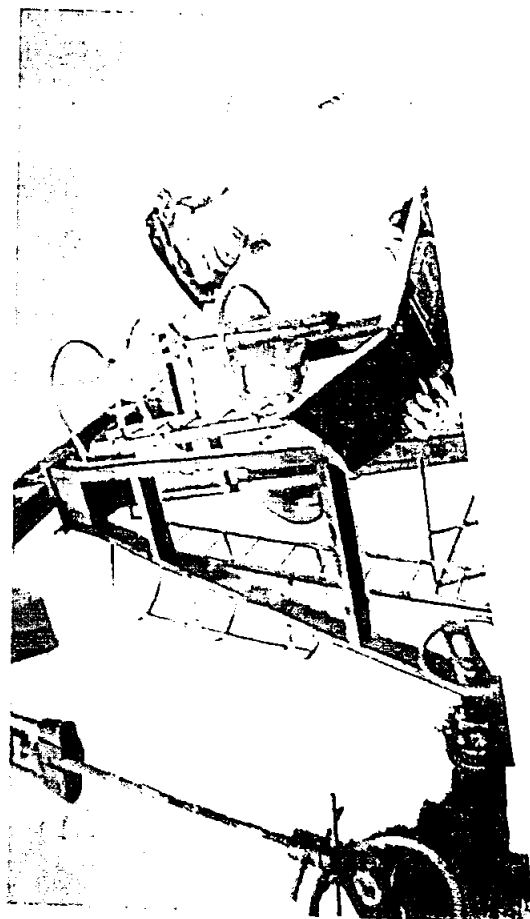
Comments to the SEC on the proposed amendments to Rule 10b-18 and other amendments to the SEC's Securities Exchange Act of 1934 ("Exchange Act") and the Securities and Exchange Commission's ("SEC") Securities Exchange Act Regulations ("SEARs") are invited. Comments should be submitted to the SEC by March 1, 2007. Comments may be submitted by electronic filing at [www.sec.gov](http://www.sec.gov) or by mail to the SEC, Office of the Secretary, 400 Capitol Mall, S.W., Portland, Oregon 97208-3002. Comments may also be submitted by hand to the SEC, Office of the Secretary, 1700 Bank of America Tower, 100 Bank of America Plaza, New York, New York 10022. Comments may also be submitted by e-mail to [comment@sec.gov](mailto:comment@sec.gov). Comments should be submitted in English.

## 2. Quality of cash flows

Cash Flow Statement				
	1991	1990	1989	1988
Operating Activities:				
Net income	1,781	3,640	2,500	1,110
Depreciation	7,915	10,197	8,140	6,100
Amortization	12,950	12,752	12,750	12,200
Loss on sale of assets	11	171	(5)	201
Change in working capital	11	1,276	(10)	(400)
Operating cash flow	22,668	27,976	23,285	10,011
Investing Activities:				
Capital expenditures	(8,305)	(3,722)	(8,112)	(1,170)
Acquisition of subsidiaries	(26,411)	(1,700)	(1,700)	(1,300)
Proceeds from sale of assets	10	12	3	2
Investing cash flow	(34,706)	(5,410)	(10,809)	(2,468)
Financing Activities:				
Net change in debt	3,600	3,620		
Change in equity	(1,000)	(1,570)	(1,700)	(1,100)
Financing cash flow	2,600	2,050	(1,700)	(1,100)
Change in cash	(9,438)	20,616	10,776	6,443
Free cash flow	14,363	24,254	15,173	8,841

**Cash flow statement**

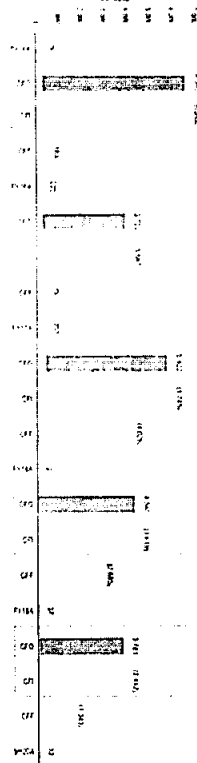
**Cash flow statements components**



# 6. Quality of cash flows

## Cash flow bridge

### Cash flow bridge

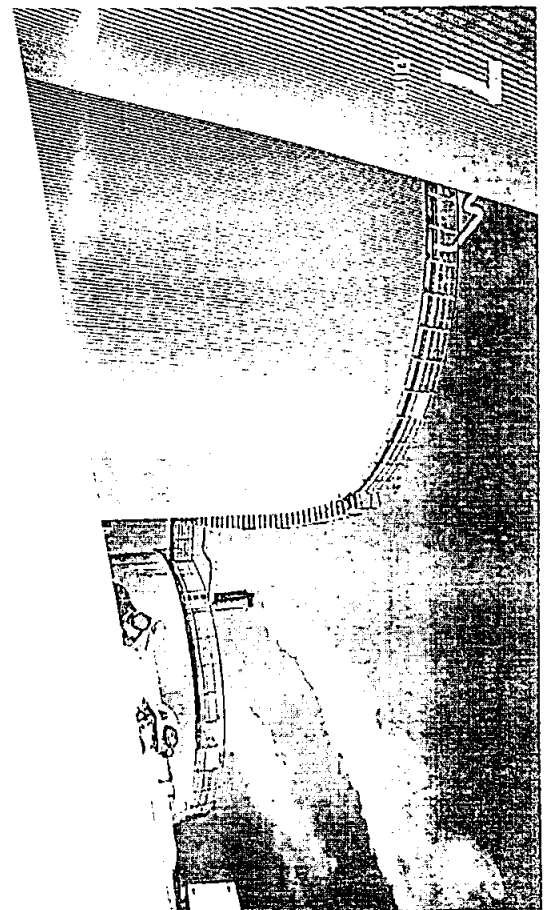


# 7. Direct Tax

## Scope of TDO

The scope of the TDO is defined by the following criteria:

- The TDO is applicable to all companies that are subject to corporate income tax in Germany.
- The TDO is applicable to all companies that are subject to corporate income tax in Germany.
- The TDO is applicable to all companies that are subject to corporate income tax in Germany.



# 7. Direct Tax

- The scope of the TDO is defined by the following criteria:
- The TDO is applicable to all companies that are subject to corporate income tax in Germany.
- The TDO is applicable to all companies that are subject to corporate income tax in Germany.
- The TDO is applicable to all companies that are subject to corporate income tax in Germany.

# 7. Direct Tax

The scope of the TDO is defined by the following criteria:

- The TDO is applicable to all companies that are subject to corporate income tax in Germany.
- The TDO is applicable to all companies that are subject to corporate income tax in Germany.
- The TDO is applicable to all companies that are subject to corporate income tax in Germany.





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• *For example, the 1990s saw a 10% increase in the number of people aged 65 and over in the United States, while the number of people aged 18 and under decreased by 10%.*

It is important to note that the results of the regression analysis are not statistically significant for the majority of the variables. This suggests that the model is not well specified and that the variables are not good predictors of the dependent variable. The results of the regression analysis are not statistically significant for the majority of the variables. This suggests that the model is not well specified and that the variables are not good predictors of the dependent variable.

We understand that following payments may not attract WHT provisions of ITC 2001:

**ASSOCIATES**

PKR 3.216m

The management has not recorded any Deferred

electric power generation facilities already in existence and allowing expansion under the

[illegible]

U 132 sub, not signed the temporary certificate, relating to CCPP-N

**W. J. S. (continued)**

**Supplements**

6. The authors claim that the majority of the individuals who are HIV-positive are concentrated in the 10-14 age group, which is not supported by the data. The authors also claim that the majority of the individuals who are HIV-positive are concentrated in the 10-14 age group, which is not supported by the data.

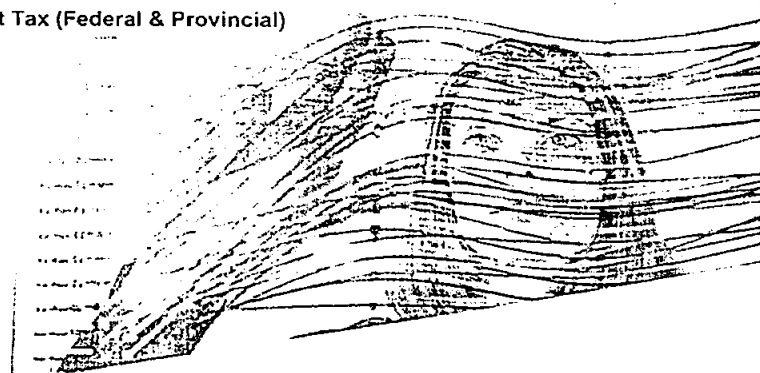
We understand that you wish to know more about

However, it is imperative to highlight here that a case CCGP-IN had withheld the income tax at the time of recording the expenses, then the tax measure would be limited in default of a contrary

under section 205 of the ITC 2001. In such a scenario, the taxpayer can argue that it has available ST refunds and therefore the default surcharge w/s 205 of the ITC 2001 may not be

- a. Control group with a placebo treatment showed a slight but not significant increase in the percentage exposure of PKA-103 to the

5. 2. 2. 200



# 8 Indirect Tax (Federal & Provincial)

Company Purchased Price (CPP)	19,711
Company Purchased Price (CPP)	6,445
Total Revenue As per Financial Statements	26,156
Total Revenue Reported in SI data - CCPRM	(17,711)
Difference	8,445
Reconciliation of Difference	
Company Purchased Price (CPP)	(8,445)
Unreconciled Difference	

Limitation  
 Such tax computations for FY 2017-2018, 2018 & 2020 have not been provided by the company and are unable to comment on the same.  
 We have not been provided with the details of total sales received in sales tax returns to identify the CCPRM amount.

# 9 Income Tax (Federal & Provincial)

Company Income Tax (Federal & Provincial)	
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The management has informed us that the lowest assessment specifically pertains to CCPRM.

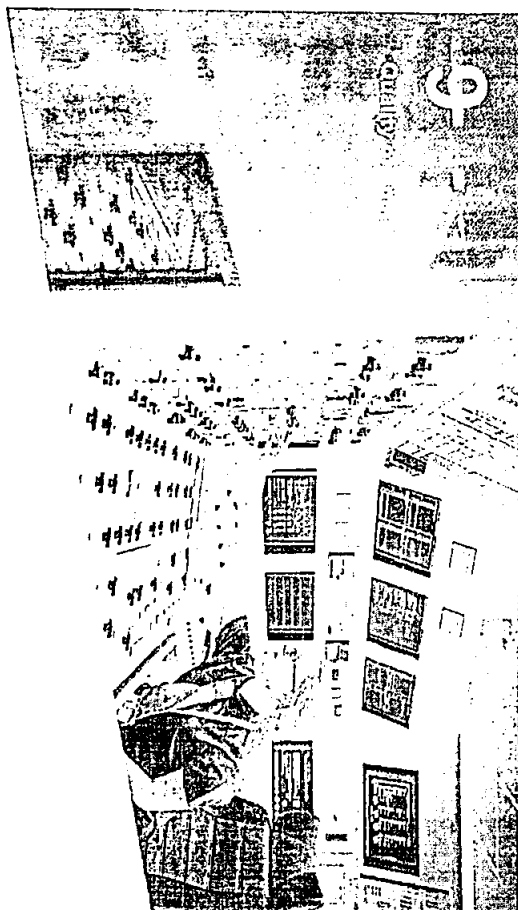
## Conclusion

We understand that the company, while making payment to another company whose name is appearing on I.T. is not required to withhold tax. The company has not provided any evidence that the subject payments were made to unregistered party & therefore, CCPRM is a provision to set off against the liability of PWD. The tax is not a provision to reimbursement of PWD's tax.

# 8 Indirect Tax (Federal & Provincial)

Company Purchased Price (CPP)	19,711
Company Purchased Price (CPP)	6,445
Total Revenue As per Financial Statements	26,156
Total Revenue Reported in SI data - CCPRM	(17,711)
Difference	8,445
Reconciliation of Difference	
Company Purchased Price (CPP)	(8,445)
Unreconciled Difference	

The management has informed us that the lowest assessment specifically pertains to CCPRM.







### Construction/purchase of house plots

10

10

10

**References**

## Appendices

Aggression (B): Fund supply to prison ward

**Experiments 1 and 2**

Scanned with CamScanner



10 Appendix

### III. Policy questions

[illegible][illegible]

98 Appendix 1

126 of approximately 1,000

[illegible]

10 Appendix

#### OAM agreement

[illegible]

10 Appendix

ORM approved (cont.)

[illegible]



## 19 Appendices

## O&amp;M agreement (if any): \_\_\_\_\_

[illegible]

## Appendices

## LFC contract

Accounting date	Year	Accounting date	Year
1/1/2000	2000	1/1/2000	2000
1/1/2001	2001	1/1/2001	2001
1/1/2002	2002	1/1/2002	2002
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1/1/2080	2080	1/1/2080	2080

10 Appendices

## D&amp;M agreement (cont.)

[illegible]

Man Support Services Agreement with Albario Engineering Private Limited (AEPL)

Date	27th November 2015
Time	4:00pm
Contract Price	£42,171.600.000
Payment mechanism	Quarterly (paid 10% of the contract price as mobilisation advance within two weeks of the commencement date)
	Contract price shall be payable through monthly instalments on the 15th of each calendar month after the submission of a monthly invoice (MI) by the service provider by the 15th day of the following calendar month, pending a due within 15 days of submission.
	Any delay or non-payment beyond the 15th date and within the same period as referred to in the mobilisation advance at a rate of 0.3% and interest.
	The contract price is inclusive of mobilisation advance fee.

10 Appendices

## EPC contract (Cont.)

Item	PGC - 17.3	Item	Item	Item
1. Quantity Damages for on-site damage during construction		If the planned duration of construction duration of each damage is longer than the amount obtained in Schedule 1, the contractor will pay quantity damages as set forth.		
			Excessive Damages (PDR)	Unit
		GI damage	300.000	per damage
		GI duration	150.000	per hour
		Steam turbine damage	750.000	per damage
		Steam turbine duration	150.000	per hour
		HRSG damage	250.000	per damage
		HRSG duration	50.000	per hour
		The quantity damages for HRSG when steam turbine is under damage. (Amounts include PDR of steam turbine during repair.)		
2. Subcontract		Unit	Per of damages obtained	Contracting Point
		Gas turbine CCM repair/replace	1	100
		Steam turbine	2	100
		HRSG for CCM repair/replace	1	100
3. Quantity Damages for failure of performance of quality	PGC - 17.4	When taking into account the PDR, there has been the performance of quality has been in the contract of the contractor will pay quantity damages as		
		Item	Excessive Damages	Maximum permissible deficiency before rejection
		1. 1% of the value of the contract	1. 1% of the value of the contract	2.5%
		2. 1% of the value of the contract	2. 1% of the value of the contract	2.5%
		3. 1% of the value of the contract	3. 1% of the value of the contract	2.5%
		4. 1% of the value of the contract	4. 1% of the value of the contract	2.5%
		5. 1% of the value of the contract	5. 1% of the value of the contract	2.5%
		6. 1% of the value of the contract	6. 1% of the value of the contract	2.5%
		7. 1% of the value of the contract	7. 1% of the value of the contract	2.5%
		8. 1% of the value of the contract	8. 1% of the value of the contract	2.5%
		9. 1% of the value of the contract	9. 1% of the value of the contract	2.5%
		10. 1% of the value of the contract	10. 1% of the value of the contract	2.5%
		11. 1% of the value of the contract	11. 1% of the value of the contract	2.5%
		12. 1% of the value of the contract	12. 1% of the value of the contract	2.5%
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# 10 Appendixes

## Work Order to SNGPL for laying of gas pipeline

Sl. No.	Description of Work	Quantity	Rate	Total
1	Laying of gas pipeline	1000	1000	1000000
2	Excavation	1000	1000	1000000
3	Backfilling	1000	1000	1000000
4	Construction of gas pipeline	1000	1000	1000000
5	Construction of gas pipeline	1000	1000	1000000
6	Construction of gas pipeline	1000	1000	1000000
7	Construction of gas pipeline	1000	1000	1000000
8	Construction of gas pipeline	1000	1000	1000000
9	Construction of gas pipeline	1000	1000	1000000
10	Construction of gas pipeline	1000	1000	1000000

## Gas Connection Agreement

Sl. No.	Description of Work	Quantity	Rate	Total
1	Gas Connection Agreement	1000	1000	1000000
2	Gas Connection Agreement	1000	1000	1000000
3	Gas Connection Agreement	1000	1000	1000000
4	Gas Connection Agreement	1000	1000	1000000
5	Gas Connection Agreement	1000	1000	1000000
6	Gas Connection Agreement	1000	1000	1000000
7	Gas Connection Agreement	1000	1000	1000000
8	Gas Connection Agreement	1000	1000	1000000
9	Gas Connection Agreement	1000	1000	1000000
10	Gas Connection Agreement	1000	1000	1000000

# 10 Appendixes

## Work Order to CE for gas connection for CCEP-4

Sl. No.	Description of Work	Quantity	Rate	Total
1	Gas Connection Agreement	1000	1000	1000000
2	Gas Connection Agreement	1000	1000	1000000
3	Gas Connection Agreement	1000	1000	1000000
4	Gas Connection Agreement	1000	1000	1000000
5	Gas Connection Agreement	1000	1000	1000000
6	Gas Connection Agreement	1000	1000	1000000
7	Gas Connection Agreement	1000	1000	1000000
8	Gas Connection Agreement	1000	1000	1000000
9	Gas Connection Agreement	1000	1000	1000000
10	Gas Connection Agreement	1000	1000	1000000

Sl. No.	Description of Work	Quantity	Rate	Total
1	Gas Connection Agreement	1000	1000	1000000
2	Gas Connection Agreement	1000	1000	1000000
3	Gas Connection Agreement	1000	1000	1000000
4	Gas Connection Agreement	1000	1000	1000000
5	Gas Connection Agreement	1000	1000	1000000
6	Gas Connection Agreement	1000	1000	1000000
7	Gas Connection Agreement	1000	1000	1000000
8	Gas Connection Agreement	1000	1000	1000000
9	Gas Connection Agreement	1000	1000	1000000
10	Gas Connection Agreement	1000	1000	1000000

# 10 Appendixes

## Gas Connection Agreement (Contd.)

Sl. No.	Description of Work	Quantity	Rate	Total
1	Gas Connection Agreement	1000	1000	1000000
2	Gas Connection Agreement	1000	1000	1000000
3	Gas Connection Agreement	1000	1000	1000000
4	Gas Connection Agreement	1000	1000	1000000
5	Gas Connection Agreement	1000	1000	1000000
6	Gas Connection Agreement	1000	1000	1000000
7	Gas Connection Agreement	1000	1000	1000000
8	Gas Connection Agreement	1000	1000	1000000
9	Gas Connection Agreement	1000	1000	1000000
10	Gas Connection Agreement	1000	1000	1000000

# 10 Appendixes

## Synthesized Term Finance Facility Agreement - 1

Sl. No.	Description of Work	Quantity	Rate	Total
1	Synthesized Term Finance Facility Agreement	1000	1000	1000000
2	Synthesized Term Finance Facility Agreement	1000	1000	1000000
3	Synthesized Term Finance Facility Agreement	1000	1000	1000000
4	Synthesized Term Finance Facility Agreement	1000	1000	1000000
5	Synthesized Term Finance Facility Agreement	1000	1000	1000000
6	Synthesized Term Finance Facility Agreement	1000	1000	1000000
7	Synthesized Term Finance Facility Agreement	1000	1000	1000000
8	Synthesized Term Finance Facility Agreement	1000	1000	1000000
9	Synthesized Term Finance Facility Agreement	1000	1000	1000000
10	Synthesized Term Finance Facility Agreement	1000	1000	1000000



# 10 Appendices

## Synthetic Term Finance Facility Agreement - III

Section	Page
Appendix A	1
Appendix B	2
Appendix C	3
Appendix D	4
Appendix E	5
Appendix F	6
Appendix G	7
Appendix H	8
Appendix I	9
Appendix J	10
Appendix K	11
Appendix L	12
Appendix M	13
Appendix N	14
Appendix O	15
Appendix P	16
Appendix Q	17
Appendix R	18
Appendix S	19
Appendix T	20
Appendix U	21
Appendix V	22
Appendix W	23
Appendix X	24
Appendix Y	25
Appendix Z	26
Appendix AA	27
Appendix AB	28
Appendix AC	29
Appendix AD	30
Appendix AE	31
Appendix AF	32
Appendix AG	33
Appendix AH	34
Appendix AI	35
Appendix AJ	36
Appendix AK	37
Appendix AL	38
Appendix AM	39
Appendix AN	40
Appendix AO	41
Appendix AP	42
Appendix AQ	43
Appendix AR	44
Appendix AS	45
Appendix AT	46
Appendix AU	47
Appendix AV	48
Appendix AW	49
Appendix AX	50
Appendix AY	51
Appendix AZ	52
Appendix BA	53
Appendix BB	54
Appendix BC	55
Appendix BD	56
Appendix BE	57
Appendix BF	58
Appendix BG	59
Appendix BH	60
Appendix BI	61
Appendix BJ	62
Appendix BK	63
Appendix BL	64
Appendix BM	65
Appendix BN	66
Appendix BO	67
Appendix BP	68
Appendix BQ	69
Appendix BR	70
Appendix BS	71
Appendix BT	72
Appendix BU	73
Appendix BV	74
Appendix BW	75
Appendix BX	76
Appendix BY	77
Appendix BZ	78
Appendix CA	79
Appendix CB	80
Appendix CC	81
Appendix CD	82
Appendix CE	83
Appendix CF	84
Appendix CG	85
Appendix CH	86
Appendix CI	87
Appendix CJ	88
Appendix CK	89
Appendix CL	90
Appendix CM	91
Appendix CN	92
Appendix CO	93
Appendix CP	94
Appendix CQ	95
Appendix CR	96
Appendix CS	97
Appendix CT	98
Appendix CU	99
Appendix CV	100
Appendix CW	101
Appendix CX	102
Appendix CY	103
Appendix CZ	104
Appendix DA	105
Appendix DB	106
Appendix DC	107
Appendix DD	108
Appendix DE	109
Appendix DF	110
Appendix DG	111
Appendix DH	112
Appendix DI	113
Appendix DJ	114
Appendix DK	115
Appendix DL	116
Appendix DM	117
Appendix DN	118
Appendix DO	119
Appendix DP	120
Appendix DQ	121
Appendix DR	122
Appendix DS	123
Appendix DT	124
Appendix DU	125
Appendix DV	126
Appendix DW	127
Appendix DX	128
Appendix DY	129
Appendix DZ	130
Appendix EA	131
Appendix EB	132
Appendix EC	133
Appendix ED	134
Appendix EE	135
Appendix EF	136
Appendix EG	137
Appendix EH	138
Appendix EI	139
Appendix EJ	140
Appendix EK	141
Appendix EL	142
Appendix EM	143
Appendix EN	144
Appendix EO	145
Appendix EP	146
Appendix EQ	147
Appendix ER	148
Appendix ES	149
Appendix ET	150
Appendix EU	151
Appendix EV	152
Appendix EW	153
Appendix EX	154
Appendix EY	155
Appendix EZ	156
Appendix FA	157
Appendix FB	158
Appendix FC	159
Appendix FD	160
Appendix FE	161
Appendix FF	162
Appendix FG	163
Appendix FH	164
Appendix FI	165
Appendix FJ	166
Appendix FK	167
Appendix FL	168
Appendix FM	169
Appendix FN	170
Appendix FO	171
Appendix FP	172
Appendix FQ	173
Appendix FR	174
Appendix FS	175
Appendix FT	176
Appendix FU	177
Appendix FV	178
Appendix FW	179
Appendix FX	180
Appendix FY	181
Appendix FZ	182
Appendix GA	183
Appendix GB	184
Appendix GC	185
Appendix GD	186
Appendix GE	187
Appendix GF	188
Appendix GG	189
Appendix GH	190
Appendix GI	191
Appendix GJ	192
Appendix GK	193
Appendix GL	194
Appendix GM	195
Appendix GN	196
Appendix GO	197
Appendix GP	198
Appendix GQ	199
Appendix GR	200
Appendix GS	201
Appendix GT	202
Appendix GU	203
Appendix GV	204
Appendix GW	205
Appendix GX	206
Appendix GY	207
Appendix GZ	208
Appendix HA	209
Appendix HB	210
Appendix HC	211
Appendix HD	212
Appendix HE	213
Appendix HF	214
Appendix HG	215
Appendix HH	216
Appendix HI	217
Appendix HJ	218
Appendix HK	219
Appendix HL	220
Appendix HM	221
Appendix HN	222
Appendix HO	223
Appendix HP	224
Appendix HQ	225
Appendix HR	226
Appendix HS	227
Appendix HT	228
Appendix HU	229
Appendix HV	230
Appendix HW	231
Appendix HX	232
Appendix HY	233
Appendix HZ	234
Appendix IA	235
Appendix IB	236
Appendix IC	237
Appendix ID	238
Appendix IE	239
Appendix IF	240
Appendix IG	241
Appendix IH	242
Appendix II	243
Appendix IJ	244
Appendix IK	245
Appendix IL	246
Appendix IM	247
Appendix IN	248
Appendix IO	249
Appendix IP	250
Appendix IQ	251
Appendix IR	252
Appendix IS	253
Appendix IT	254
Appendix IU	255
Appendix IV	256
Appendix IW	257
Appendix IX	258
Appendix IY	259
Appendix IZ	260
Appendix JA	261
Appendix JB	262
Appendix JC	263
Appendix JD	264
Appendix JE	265
Appendix JF	266
Appendix JG	267
Appendix JH	268
Appendix JI	269
Appendix JJ	270
Appendix JK	271
Appendix JL	272
Appendix JM	273
Appendix JN	274
Appendix JO	275
Appendix JP	276
Appendix JQ	277
Appendix JR	278
Appendix JS	279
Appendix JT	280
Appendix JU	281
Appendix JV	282
Appendix JW	283
Appendix JX	284
Appendix JY	285
Appendix JZ	286
Appendix KA	287
Appendix KB	288
Appendix KC	289
Appendix KD	290
Appendix KE	291
Appendix KF	292
Appendix KG	293
Appendix KH	294
Appendix KI	295
Appendix KJ	296
Appendix KK	297
Appendix KL	298
Appendix KM	299
Appendix KN	300
Appendix KO	301
Appendix KP	302
Appendix KQ	303
Appendix KR	304
Appendix KS	305
Appendix KT	306
Appendix KU	307
Appendix KV	308
Appendix KW	309
Appendix KX	310
Appendix KY	311
Appendix KZ	312
Appendix LA	313
Appendix LB	314
Appendix LC	315
Appendix LD	316
Appendix LE	317
Appendix LF	318
Appendix LG	319
Appendix LH	320
Appendix LI	321
Appendix LJ	322
Appendix LK	323
Appendix LL	324
Appendix LM	325
Appendix LN	326
Appendix LO	327
Appendix LP	328
Appendix LQ	329
Appendix LR	330
Appendix LS	331
Appendix LT	332
Appendix LU	333
Appendix LV	334
Appendix LW	335
Appendix LX	336
Appendix LY	337
Appendix LZ	338
Appendix MA	339
Appendix MB	340
Appendix MC	341
Appendix MD	342
Appendix ME	343
Appendix MF	344
Appendix MG	345
Appendix MH	346
Appendix MI	347
Appendix MJ	348
Appendix MK	349
Appendix ML	350
Appendix MN	351
Appendix MO	352
Appendix MP	353
Appendix MQ	354
Appendix MR	355
Appendix MS	356
Appendix MT	357
Appendix MU	358
Appendix MV	359
Appendix MW	360
Appendix MX	361
Appendix MY	362
Appendix MZ	363
Appendix NA	364
Appendix NB	365
Appendix NC	366
Appendix ND	367
Appendix NE	368
Appendix NF	369
Appendix NG	370
Appendix NH	371
Appendix NI	372
Appendix NJ	373
Appendix NK	374
Appendix NL	375
Appendix NM	376
Appendix NO	377
Appendix NP	378
Appendix NQ	379
Appendix NR	380
Appendix NS	381
Appendix NT	382
Appendix NU	383
Appendix NV	384
Appendix NW	385
Appendix NX	386
Appendix NY	387
Appendix NZ	388
Appendix OA	389
Appendix OB	390
Appendix OC	391
Appendix OD	392
Appendix OE	393
Appendix OF	394
Appendix OG	395
Appendix OH	396
Appendix OI	397
Appendix OJ	398
Appendix OK	399
Appendix OL	400
Appendix OM	401
Appendix ON	402
Appendix OO	403
Appendix OP	404
Appendix OQ	405
Appendix OR	406
Appendix OS	407
Appendix OT	408
Appendix OU	409
Appendix OV	410
Appendix OW	411
Appendix OX	412
Appendix OY	413
Appendix OZ	414
Appendix PA	415
Appendix PB	416
Appendix PC	417
Appendix PD	418
Appendix PE	419
Appendix PF	420
Appendix PG	421
Appendix PH	422
Appendix PI	423
Appendix PJ	424
Appendix PK	425
Appendix PL	426
Appendix PM	427
Appendix PN	428
Appendix PO	429
Appendix PP	430
Appendix PQ	431
Appendix PR	432
Appendix PS	433
Appendix PT	434
Appendix PU	435
Appendix PV	436
Appendix PW	437
Appendix PX	438
Appendix PY	439
Appendix PZ	440
Appendix QA	441
Appendix QB	442
Appendix QC	443
Appendix QD	444
Appendix QE	445
Appendix QF	446
Appendix QG	447
Appendix QH	448
Appendix QI	449
Appendix QJ	450
Appendix QK	451
Appendix QL	452
Appendix QM	453
Appendix QN	454
Appendix QO	455
Appendix QP	456
Appendix QQ	457
Appendix QR	458
Appendix QS	459
Appendix QT	460
Appendix QU	461
Appendix QV	462
Appendix QW	463
Appendix QX	464
Appendix QY	465
Appendix QZ	466
Appendix RA	467
Appendix RB	468
Appendix RC	469
Appendix RD	470
Appendix RE	471
Appendix RF	472
Appendix RG	473
Appendix RH	474
Appendix RI	475
Appendix RJ	476
Appendix RK	477
Appendix RL	478
Appendix RM	479
Appendix RN	480
Appendix RO	481
Appendix RP	482
Appendix RQ	483
Appendix RR	484
Appendix RS	485
Appendix RT	486
Appendix RU	487
Appendix RV	488
Appendix RW	489
Appendix RX	490
Appendix RY	491
Appendix RZ	492
Appendix SA	493
Appendix SB	494
Appendix SC	495
Appendix SD	496
Appendix SE	497
Appendix SF	498
Appendix SG	499
Appendix SH	500
Appendix SI	501
Appendix SJ	502
Appendix SK	503
Appendix SL	504
Appendix SM	505
Appendix SN	506
Appendix SO	507
Appendix SP	508
Appendix SQ	509
Appendix SR	510
Appendix SS	511
Appendix ST	512
Appendix SU	513
Appendix SV	514
Appendix SW	515
Appendix SX	516
Appendix SY	517
Appendix SZ	518
Appendix TA	519
Appendix TB	520
Appendix TC	521
Appendix TD	522
Appendix TE	523
Appendix TF	524
Appendix TG	525
Appendix TH	526
Appendix TI	527
Appendix TJ	528
Appendix TK	529
Appendix TL	530
Appendix TM	531
Appendix TN	532
Appendix TO	533
Appendix TP	534
Appendix TQ	535
Appendix TR	536
Appendix TS	537
Appendix TT	538
Appendix TU	539
Appendix TV	540
Appendix TW	541
Appendix TX	542
Appendix TY	543
Appendix TZ	544
Appendix UA	545
Appendix UB	546
Appendix UC	547
Appendix UD	548
Appendix UE	549
Appendix UF	550
Appendix UG	551
Appendix UH	552
Appendix UI	553
Appendix UJ	554
Appendix UK	555
Appendix UL	556
Appendix UM	557
Appendix UN	558
Appendix UO</	

10 Appendices	10 Appendices

# Consultancy agreement

Section	Section	Section
1.1	1.2	1.3
1.4	1.5	1.6
1.7	1.8	1.9
1.10	1.11	1.12
1.13	1.14	1.15
1.16	1.17	1.18
1.19	1.20	1.21
1.22	1.23	1.24
1.25	1.26	1.27
1.28	1.29	1.30
1.31	1.32	1.33
1.34	1.35	1.36
1.37	1.38	1.39
1.40	1.41	1.42
1.43	1.44	1.45
1.46	1.47	1.48
1.49	1.50	1.51
1.52	1.53	1.54
1.55	1.56	1.57
1.58	1.59	1.60
1.61	1.62	1.63
1.64	1.65	1.66
1.67	1.68	1.69
1.70	1.71	1.72
1.73	1.74	1.75
1.76	1.77	1.78
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1.82	1.83	1.84
1.85	1.86	1.87
1.88	1.89	1.90
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1.94	1.95	1.96
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1.103	1.104	1.105
1.106	1.107	1.108
1.109	1.110	1.111
1.112	1.113	1.114
1.115	1.116	1.117
1.118	1.119	1.120
1.121	1.122	1.123
1.124	1.125	1.126
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1.133	1.134	1.135
1.136	1.137	1.138
1.139	1.140	1.141
1.142	1.143	1.144
1.145	1.146	1.147
1.148	1.149	1.150
1.151	1.152	1.153
1.154	1.155	1.156
1.157	1.158	1.159
1.160	1.161	1.162
1.163	1.164	1.165
1.166	1.167	1.168
1.169	1.170	1.171
1.172	1.173	1.174
1.175	1.176	1.177
1.178	1.179	1.180
1.181	1.182	1.183
1.184	1.185	1.186
1.187	1.188	1.189
1.190	1.191	1.192
1.193	1.194	1.195
1.196	1.197	1.198
1.199	1.199	1.199

10 Appendices	10 Appendices

# Consultancy agreement (cont.)

Section	Section	Section
1.1	1.2	1.3
1.4	1.5	1.6
1.7	1.8	1.9
1.10	1.11	1.12
1.13	1.14	1.15
1.16	1.17	1.18
1.19	1.20	1.21
1.22	1.23	1.24
1.25	1.26	1.27
1.28	1.29	1.30
1.31	1.32	1.33
1.34	1.35	1.36
1.37	1.38	1.39
1.40	1.41	1.42
1.43	1.44	1.45
1.46	1.47	1.48
1.49	1.49	1.49

11 Appendices	11 Appendices

# Appendix E (Form E-1)

Section	Section	Section
1.1	1.2	1.3
1.4	1.5	1.6
1.7	1.8	1.9
1.10	1.11	1.12
1.13	1.14	1.15
1.16	1.17	1.18
1.19	1.20	1.21
1.22	1.23	1.24
1.25	1.26	1.27
1.28	1.29	1.30
1.31	1.32	1.33
1.34	1.35	1.36
1.37	1.38	1.39
1.40	1.41	1.42
1.43	1.44	1.45
1.46	1.47	1.48
1.49	1.49	1.49

10 Appendices	10 Appendices

# Appendix E (Form E-IV)

Section	Section	Section
1.1	1.2	1.3
1.4	1.5	1.6
1.7	1.8	1.9
1.10	1.11	1.12
1.13	1.14	1.15
1.16	1.17	1.18
1.19	1.20	1.21
1.22	1.23	1.24
1.25	1.26	1.27
1.28	1.29	1.30
1.31	1.32	1.33
1.34	1.35	1.36
1.37	1.38	1.39
1.40	1.41	1.42
1.43	1.44	1.45
1.46	1.47	1.48
1.49	1.49	1.49



# **OPERATIONAL RECORDS**

Year	Gross Generation KWH	Net Generation KWH	Efficiency %	Availability Factor %	Utilization Factor %	Load Factor %
2016-17	1,433,929,645	1,378,366,000	39.62	52.39	38.52	35.82
2017-18	2,463,947,345	2,381,701,000	43.95	88.44	61.15	53.47
2018-19	1,784,286,981	1,729,245,000	46.02	90.81	39.1	36.31
2019-20	1,527,659,779	1,475,569,000	46.87	95.31	33.38	32.15
2020-21	1,539,492,515	1,481,980,000	46.53	95.03	33.73	32.48



● **INSTALLED AND DE RATED CAPACITY  
AND  
EXPECTED REMAINING LIFE**

●

## INSTALLED CAPACITY AND DE RATED CAPACITY

Power Station	Unit Detail	Installed Capacity (MW)	De-Rated capacity (MW)	Auxiliary Consumption (% age of De Rated Capacity)	Net Capacity after Auxiliary Consumption (MW)
CCPP Nandipur /Plant-III	Unit No. 1-3	366.30	331.51	2.419	323.49
	Unit No. 4	199.35	182	2.747	177
	Total	565.65	513.51	2.53	500.49

## EXPECTED USE FULL LIFE OF CCPP NANDIPUR

	Expected useful life of the Generation Facility from Commercial Operation Date 23-07-2015	Unit No. 1	Unit No. 2	Unit No. 3	Unit No. 4
i.		30 Years	30 Years	30 Years	30 ears
ii.	Expected Useful Life of the Generation Facility at the time of Modification III of Generation License May 05, 2018)	27 Years	27 Years	27 Years	27 Years
iii.	Expected Useful Life of the Generation Facility at the time of submitting application for the grant of separate Generation License 19-01-2022	23 Years	23 Years	23 Years	23 Years

# **MAINTENANCE PLANS**

## SCHEDULE T: AGREEMENT PRICE AND PAYMENT TERMS

If the Complex operates on HFSO for longer than one year from the Commencement Date, the Operator shall continue to receive fixed and Event Based Payments applicable during the HFSO Payment period, however the Contractor shall receive fixed and Event Based payments applicable to Gas operations when the Complex is operating on Gas and from the date on which the Complex starts operating on Gas.

The Revised Schedule of Prices attached with the Agreement as Annexure 'C' shall be read as an integral part of this Schedule T.

### Notes:

Caps for Unplanned Maintenance:  
As per Schedule-K.

Basis for Fee for Unplanned Maintenance:  
Refer Clause 4.1.3.3 and Schedule-K.

### Note on USD Payment:

All payment denominated in USD hereinabove shall be acknowledged in USD, but shall be paid to the Operator in equivalent PKR by applying the exchange rate applicable on the 1<sup>st</sup> day of the relevant month of payment.

Indexation Mechanism  
As per PPA

*[Handwritten signature]*

*[Handwritten signature]*

Payment Fee For		[Bi-fuel]				[Tri-fuel/Gas]				Applicable Currency of Payment	Applicable Indexation	Mode of Payment
		Fixed Component		Variable Component		Fixed Component		Variable component				
		USD	PKR	USD	PKR	USD	PKR	USD	PKR			
Monthly	Planning, In-flight Support Services, Mobilization Services	N/A		N/A		N/A		N/A				
Monthly	Monthly fee for Planned Maintenance, Parts, Consumables including unplanned Maintenance up to specified caps	418103.40	2059413.108			406690.00	1805980.365				FO&M (REV) = Rs.XXX / kWh x CPI (REV) / 198.50 FORM (REV) = Rs.XXX / kWh x US CPI (REV)/236.1 S1a ER (REV)/103	1 time payment against APG Payable through (Mode of payment: as per Clause 6.6)
Payments for the following items shall be event based:												
Sr No.	Type of inspection	Factor	Fired Hours(FH)	Operating Hours								
1	Combustion Turbine	5000			683953.47	1088989.85		683953.47	1088989.86		V O&M (REV) = Rs.XXX / kWh x US CPI (REV)/236.1 S1a ER (REV)/103	
2	Hot Gas Path inspection	24000			1310504.85	2781702.61		1310504.85	2781702.61			

*Signature*



# **PROJECT COST INFORMATION**

## PROJECT COST

### SOURCES AND AMOUNTS OF EUIY AND DEBT

Equity Capitalized	= 31,288.738 M. Rs
Debt from Local Banks' Syndicate	= 32,118.290 M. Rs
Total Project Cost	= 63,407.08 M.Rs

Note: The amount capitalized is as per Financial Statement year ended June 2021.



# **TRAINING AND DEVELOPMENT**

by the Facility Completion Contractors, during the latent defects notification period under the relevant contract.

#### 4.1.4 Deputation & Training

4.1.4.1 To ensure and implement an exit strategy, the Operator shall induct twenty five Percent (25%) of its overall personnel requirement for the Operation & Maintenance of the Complex from the Owner's staff, which, shall be deputed by the Owner to Operator.

4.1.4.2 The Owner and the Operator shall jointly select the personnel to be deputed by the Owner to the Operator from a list of suitably qualified personnel prepared and submitted by the Owner, however, once a staff member has been deputed by the Owner to the Operator, the Owner shall not have the right to remove such member from the Operator's team without the prior written consent of the Operator, which shall not be unreasonably withheld.

4.1.4.3 Unless otherwise agreed to by the Owner, a deputed staff member shall serve on deputation with the Operator for a term of three (03) years provided however that such term for any individual deputed staff member may be extended for such period as the Owner and the Operator may mutually agree. The deputed staff member shall report to and be bound by the instructions of the Operator and shall be bound by the Operator's human resource policies including matters relating to work hours, discipline, reporting lines, promotion, demotions, holidays and leave.

4.1.4.4 The Operator shall have the right to repatriate such seconded staff back to the Owner if such deputed staff member merits dismissal in accordance with the Operator's human resource policy.

4.1.4.5 The Operator shall pay the seconded staff members their salary, benefits and any dues under labour laws or any other law at par with the Operator's similarly placed staff members, however, in the event of dismissal or retirement the Owner shall be fully responsible for all future payments due to the seconded staff member and shall indemnify and hold the Operator harmless from all claims, damages, losses and suits in relation to such seconded staff member.

4.1.4.6 The Operator shall ensure adequate training and development of such deputed staff members. Furthermore, the Operator shall



ensure that at the end of the Term adequate numbers of the Owner's staff are trained to operate and maintain the Complex. Such training shall be provided at the Site and shall be for a period of no longer than two (2) months.

4.1.4.7 The Parties acknowledge that the Operator will be subcontracting part of the Works and therefore in order to comply with the provisions of this sub-clause the Operator shall procure that its sub-contractor(s) employ the relevant members of the Owner's staff where required. In such an event all references to the Operator shall be read as the sub-contractor in this clause.

#### 4.1.5 Safety or Alert Works

The Operator shall be responsible for and shall perform the Safety or Alert Works.

#### 4.1.6 Parts, Consumables and Spare Parts

The Operator shall, at its own costs, be responsible for the procurement, transportation, delivery, supply and maintenance of all Parts and Consumables required to carry out the Works, other than Extra Works.

Prior to expiry of the Operating Period the Operator shall replenish all parts used and consumed from the Owner's Initial Spare Parts by the Operator. Such replenished parts shall be in as nearly as possible the equivalent condition as the Initial Spare Part when the Operator received it from the Employer.

#### 4.1.7 Extra Works

The Operator shall perform the Extra Works in accordance with Section 18 (Extra Works).

#### 4.2 OPERATOR PERMITS

The Operator shall be responsible for obtaining and maintaining, at its own cost, all Operator Permits (whether within Pakistan or outside Pakistan). The Operator shall obtain all Operator Permits in reasonable time taking account of the Applicable Laws and the timelines set out in this Agreement for (i) performance of its obligations under this Agreement and (ii) the completion of the Works. The Owner shall provide all reasonable assistance to the Operator in the procurement of the Operator Permits in accordance with this Section 4.2, provided such assistance shall not

