



Lucky Electric  
Power Company

luckyelectricpower.com

REF NO: LEPCL/CEO/353

Dated: April 15, 2021

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

**Subject: License Proposed Modification in the Generation License Application - on behalf of Lucky Electric Power Company Limited (the "Company")**

Dear Sir,

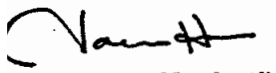
I, Naeem Kasbati, Chief Financial Officer of the Company is the duly authorized representative on behalf of the Company by virtue of a Board Resolution, appended herewith, hereby apply to the National Electric Power Regulatory Authority ("NEPRA or Authority") for the modification of our Generation License for the Company bearing # IGSP/L/66/2016 dated March 3, 2016 subsequently modified dated November 20, 2017 (the "Generation License") in respect of the Company's imported/local coal (Thar) coal based thermal generation facility located at Deh Ghangario, Bin Qasim Town, Karachi in the Province of Sindh with installed Gross Capacity of 660 MW (the "Project") pursuant to Regulation 10(2) of the National Electric Power Regulatory Authority (Application and Modification Procedure) Regulations, 1999 (the "AMPR").

I certify that the documents-in-support attached with this application are prepared and submitted in conformity with the provisions of the NEPRA (Application and Modification Procedure) Regulations, 1999. 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 belief.

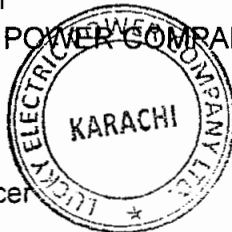
A bank drafts in the sum of Pakistan Rs. 934,720/- being the non-refundable license application and modification of generation license fee calculated in accordance with Schedule II to the Regulations for the modification of the license, is also attached herewith.

Yours Sincerely

For and on behalf of  
LUCKY ELECTRIC POWER COMPANY LIMITED

  
(Naeem Kasbati)

Chief Financial Officer



## Extract of Board of Resolution



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Power Company

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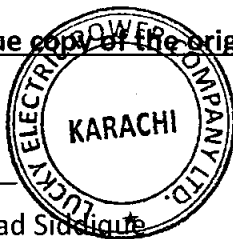
**EXTRACTS OF BOARD RESOLUTION PASSED BY THE BOARD OF DIRECTORS OF LUCKY ELECTRIC  
POWER COMPANY LIMITED IN MEETING HELD ON 13 APRIL 2021**

*“RESOLVED that an Application License Proposed Modification be filed with the National Power Regulatory Authority to update License details under Detail of Generation Facility/Power Plant under Generation License No. IGSP/66/2016 issued by the NEPRA on 03 March, 2016 and modified to incorporate the Thar Coal provision vide NEPRA order dated November 20, 2017.*

*“FURTHER RESOLVED that each of Mr. Intisar ul Haq Haqqi, CEO, Naeem Kasbati, Chief Financial Officer, Khurram Muhammad Siddique, Company Secretary are hereby authorized acting singly to prepare and file the necessary documentation, pay the necessary filing fees, pay the necessary license fee, appear before NEPRA as needed, provide any information required by NEPRA in respect of the Project, and do all acts and things necessary for the processing, completion and finalization of the aforementioned Application for Modification in Generation License including sign and certify copies of this Resolution to be true copies of the original; and (ii) receive/collect the original generation license and related documents, from “NEPRA.”*

**Certified to be a true copy of the original**

*Khurram*

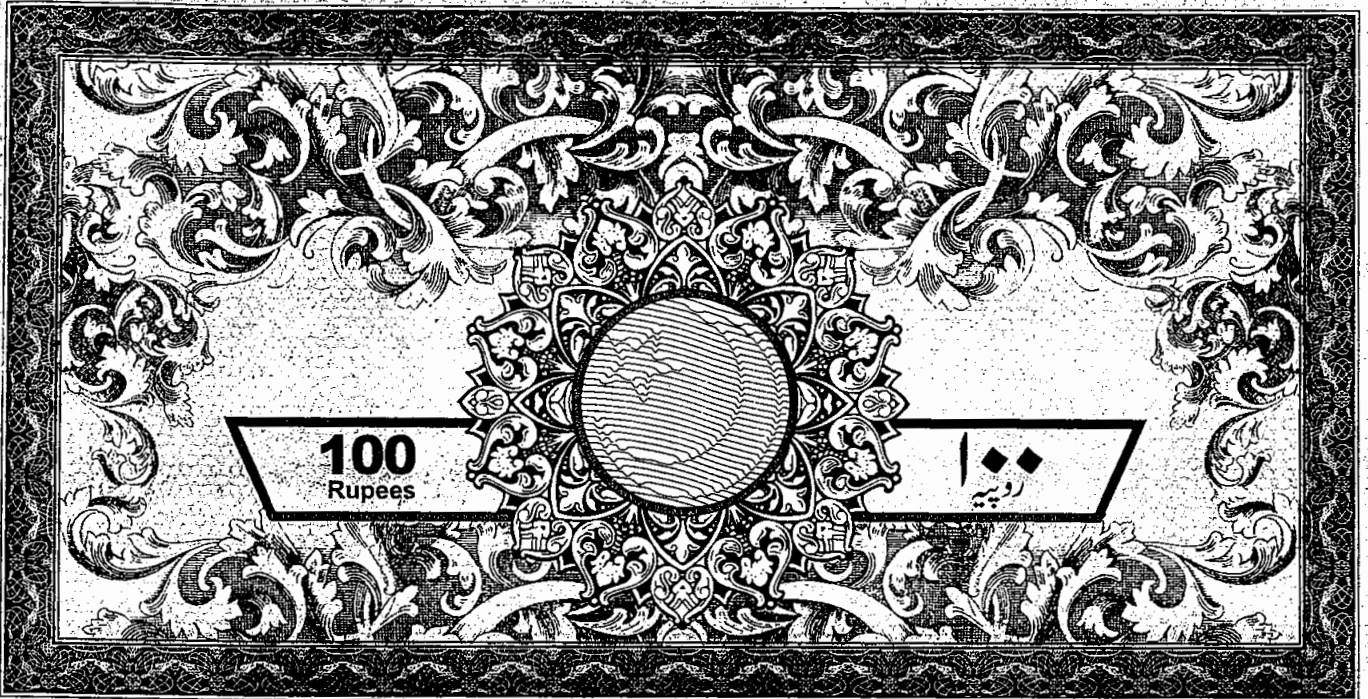


Khurram Muhammad Siddique  
Company Secretary,  
Lucky Electric Power Company Limited

Date: 15 April, 2021

**Affidavit of Director /  
Authorized Representative**

T914364



**DANISH KHAN STAMP VENDOR**  
 .ic. 37 Sop No.L-2/375 A-1 Area Malir Colony Karachi  
 S. No.....Date.....  
 Issued To With Address.....**AKRAM AZHAR**.....  
 Through With Address.....**L. NO. 597**.....  
 Purpose.....  
 Value Rs.....**100**..... Attested.....  
 Stamp Vendor Signatures.....  
 Not For Used Free Will & Divorce Deed  
 Vendor Not Responsible **AKY FARZ** Documents

01 APR 2021

RUPEES ONE HUNDRED ONLY



BEFORE

THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

AFFIDAVIT

I, Naeem Kasbati s/o Hussain having CNIC number 42000-2261979-7, the Chief Financial Officer of Lucky Electric Power Company Limited hereby solemnly affirm and declare on oath that the contents of the License Proposed Modification Application (the "LPM Application") including all attached documents-in-support are true and correct to the best of my knowledge and belief and that nothing has been concealed.

DEPONENT

Signature:



**Petition for Licensee Proposed**

**Modification of License**

**PETITION FOR LICENSEE PROPOSED MODIFICATION OF LICENSE**  
**No. IGSPL/66/2016**

**ON BEHALF OF**  
**Lucky Electric Power Company Limited**

**1. Background:**

- 1.1 The Company was incorporated on 13<sup>th</sup> June, 2014, and a generation license was granted under Section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997 (XL of 1997), for its Imported Coal Based Thermal Generation Facility Located at Deh Ghangario, Bin Qasim Town, Karachi in the Province of Sindh with installed Gross Capacity of 660 MW (**the “Project”**).
- 1.2 In view of the Government preference to use indigenous resources for power generation, the Company has been advised by the Government of Pakistan through Private Power Infrastructure Board (the “PPIB”) to change Thar Coal as primary fuel for the Project. After the technical review and considering Government’s desire, the sponsors of the Project have agreed to use Thar Coal as primary fuel for the Project.
- 1.3 Lucky Electric Power Company Limited in pursuance of inter alia, Regulation 10(2) of the (Application and Modification Procedure) Regulations, 1999 (the “Licensing Regulations”) submitted its application for the Licensee Proposed Modification Application (the “LPM”) primarily to change the primary fuel of the project to Thar Lignite Coal as desired by the Government of Pakistan. The Authority vide its letter No. NEPRA/R/LAG-290/18985-89 dated November 20,2017 conveyed its approval on the Modification-I in the Generation License No. IGSPL/66/2016.

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2. **License Proposed Modification:**

- 2.1 Lucky Electric Power Company Limited in pursuance of inter alia, Regulation 10(2) of the (Application and Modification Procedure) Regulations, 1999 (the "Licensing Regulations") and other submits this application for the Licensee Proposed Modification Application (the "LPM") in respect of its Generation License No. IGSP/66/2016.
- 2.2 Lucky Electric Power Company Limited (the "Company") request for modification in a license.
- 2.3 The Company, pursuant to Licensing Regulations, hereby seeks to apply for modification of the Generation License granted for the Project to cater the following changes :
- i. Configuration of Generation Facility: The changes are primarily to incorporate the precise description of a) Steam Turbine i.e. Ultra-Super critical, Reheat, Tandem compound four Cylinders, four flow exhausts, condensing Steam Turbine (GE-Alstom) and b) Boiler of Ultra Supercritical steam generator, once through, single pass, reheat, balanced draft, dry bottom-Alstom.
  - ii. COD of the Generation Facility: In view of the non-provision of the interconnection facility by the Power Purchaser, anticipated COD of the Generation Facility/Power Plant is in third quarter 2021; and
  - iii. Change in Fuel/ Raw Material Details:- The changes have been made in primary fuel to incorporate the provision of usage of imported Lignite Coal, which company will be using until phase III, of Thar Block II being operated by Sindh Engro Coal Mining Company Limited is completed or the same is not available for one or another reason as per the decision of the Private Power



Infrastructure Board. Moreover, the storage capacity of the tank has also been revised based on the actual storage facility.

- iv. Plant Characteristics: The changes have been Generation Voltage based on finalized design along with the actual and precise details of Automatic Generation Control besides inserting Ramping Rate and time required to Synchronize to Grid under very cold start, cold start, warm start and hot start.

2.4 Consequently to effect this change a modification in the existing generation license of the Company is required.

3. Pursuant to the proposed change, the following parameters of the license are required to be updated and incorporated.

3.1 **General Information**

(i).	Name of Company/ Licensee	Lucky Electric Power Company Limited
(ii).	Registered/Business Office	6-A, A.Aziz HashimTabba Street, Muhammad Ali Housing Society, Karachi-75350, Pakistan
(iii).	Location of the Generation Facility/ Power Plant	Deh Ghangario Bin Qasim Town, Karachi, in the Province of Sindh.
(iv).	Type of Generation Facility/ Power Plant	Thermal Generation Facility

3.2 **Configuration of Generation Facility**

(i).	Installed Capacity/Size of the Generation Facility/ Power Plant	660.00 MW	
(ii).	Type of Technology	Conventional Thermal Power Generation Facility with Ultra Supercritical Steam Generator and Steam Turbine	
(iii).	Number of Units/Size (MW)	1 x 660 MW	
(iv).	Unit Make/Model/Type & Year of Manufacture Etc.	Steam Turbine	Ultra-Super-critical, Reheat, Tandem compound four Cylinders, four flow exhausts, condensing Steam Turbine (GE – Alstom)
		Boiler	Ultra-Supercritical steam generator, once through, single pass, reheat, balanced draft, dry bottom (GE-Alstom).
(v).	COD of the Generation Facility/Power Plant	Third Quarter, 2021(Anticipated)	
(vi).	Expected Useful Life of the Generation Facility/ Power Plant from COD	30 years	

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## 3.3

**Fuel/Raw Material Details**

(i).	Primary Fuel	Thar Coal / Imported Lignite Coal*	
(ii).	Start-Up Fuel	High Speed Diesel (HSD)	
(iv).	Fuel Source for each of the above (i.e. Thar Coal)	Thar Coal/Imported Lignite Coal	Indigenous/Imported
(v).	Fuel Supplier for each of the above	Sind Engro Coal Mining Company (SECMC) and Imported Lignite Coal Supplier	Shell Pakistan/Pakistan State Oil or Any other OMC Company
(vi).	Supply Arrangement for each of the above Fuels	Through Rail/Road	Through Oil Tankers
(vii).	No of Storage Bunkers/Tanks/ Open Yard	One open yard	Two oil tank
(viii).	Storage Capacity of each Bunkers/Tanks/ Open Yard	About 600,000 Tons	2 x 1200 m <sup>3</sup>
(ix).	Gross Storage	About 600,000 Tons	2400 m <sup>3</sup>

\* The Company will be using imported lignite coal for its operation if the Thar Lignite Coal is not available to the Company from SECMC.

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### 3.4 Emission Values

		Primary Fuel	Start-Up Fuel
(i).	SO <sub>x</sub> (mg/Nm <sup>3</sup> )	As per NEQS	As per NEQS
(ii).	NO <sub>x</sub> (mg/Nm <sup>3</sup> )	As per NEQS -	As per NEQS -
(iii).	CO <sub>2</sub> (%)	As per NEQS -	As per NEQS

### 3.5 Cooling System

(i).	Cooling Water Source/Cycle	The cooling water is from adjacent sea channel of Port Qasim south of the site. Induced Draft cooling tower with circulation system will be adopted for cooling water system.
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### 3.6 Plant Characteristics

(i).	Generation Voltage	22Kv
(ii).	Frequency	50Hz
(iii).	Power Factor	0.85 (lagging) / 0.95(leading)
(iv).	Automatic Generation Control (AGC) (MW control is the general practice)	AGC function is included in the NCS, and AGC can accept load increase/decrease command signal from Despatch. Load increase/decrease command will be transmitted through digital signals (increase/decrease) and load feedback will be read from generator output (MW/MVAR) on SCADA.

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(v).	Ramping Rate (MW/min)		under 30% MCR	from 30% to 50% MCR	from 50% to 100% MCR
		Hot start (MW/Min)	19.0	4.0	5.0
		Warm start (MW/Min)	9.0	4.0	4.0
		Cold start (MW/Min)	2.5	3.0	4.0
		Very cold start (MW/Min)	4.0	3.0	4.0
(vi)	Time required to Synchronize to Grid (minutes)	for Very Cold Start	For Cold Start	for Warm Start	for Hot Start
		570	470	400	140

4. **Rationale for Proposed Modifications:**

The proposed modification is required to be incorporated to update the configuration of Generation Facility, plant COD, provision of imported coal under Fuel Details and updating plant characteristics.

5. **A Statement of the impact on the tariff, quality of service and the performance by the license of its obligations under the license**

5.1 **Impact on Tariff**

The Company has opted for Upfront Coal Tariff for 660 MW Coal Power Plant issued by NEPRA. Since the upfront tariff is a fixed tariff, the proposed modification to the Company's Generation License will have no impact on the tariff.

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5.2 **Impact on Quality of Service**

The Company hereby certifies that the upfront tariff is fully acceptable to the Company of its obligations under the Generation License or tariff will not be affected by the proposed modification to its Generation License.

5.3 **Impact on the obligations of the Company under the License**

The proposed modification would facilitate the Company in fulfilling its obligations under the License.

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**PRAYER**

**License Proposed Modifications Petition**

It is most humbly prayed to the esteemed Authority as follows:

- A. That the Authority shall approve the modifications proposed in its generation license for the development of the Project.
- B. That the Authority may be pleased to treat the Company's request for the grant of this LPM on a non-discriminatory basis.
- C. Any further and better relief that the Authority may deem appropriate in the circumstances may kindly be granted to the Company.

We hope the information/explanation provided above meets the Authority's requirements and remain available to assist the Authority in further queries/clarifications.



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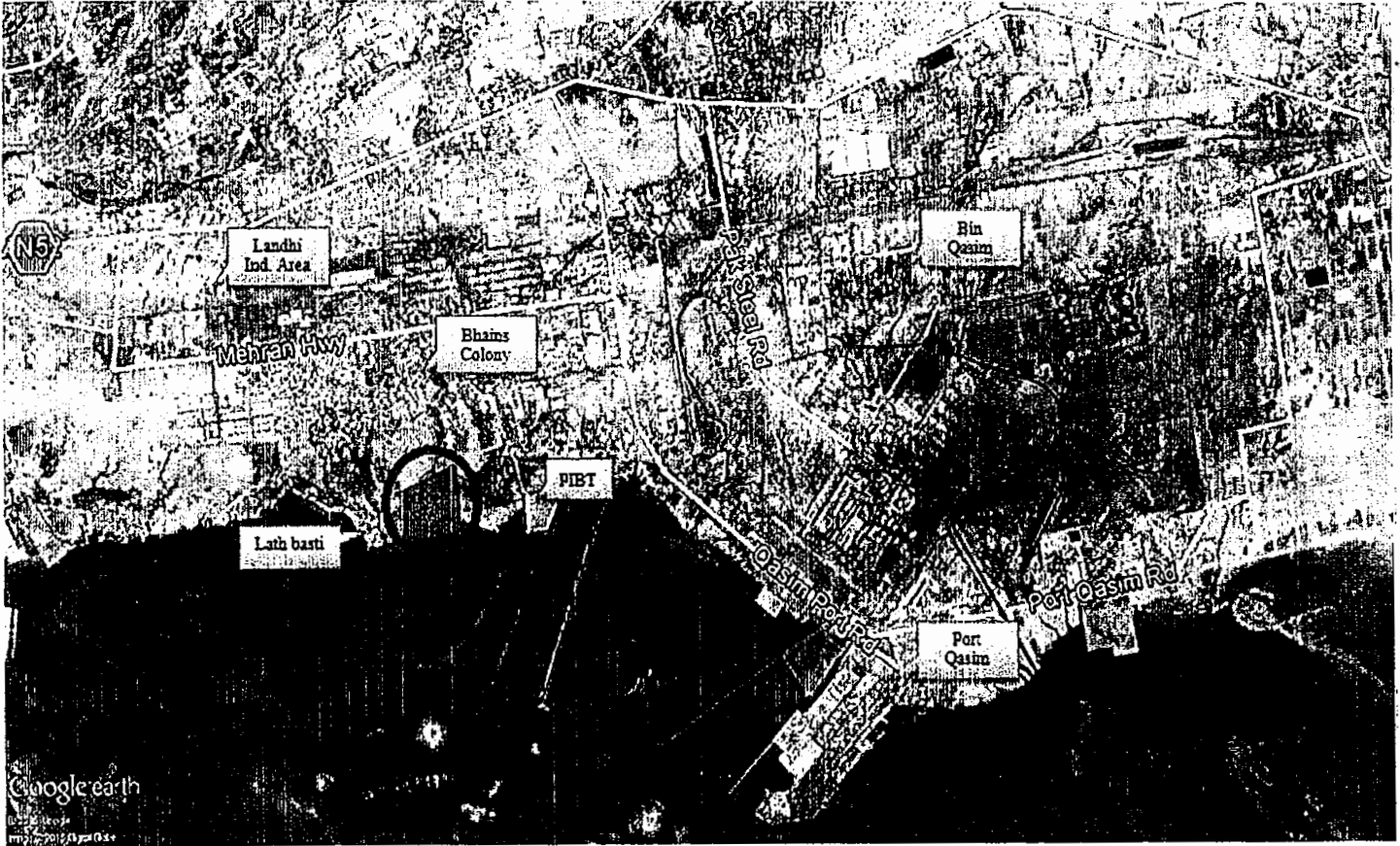
Sincerely,  
Lucky Electric Power Company Limited  
April 15, 2021

## **SCHEDULE-I**

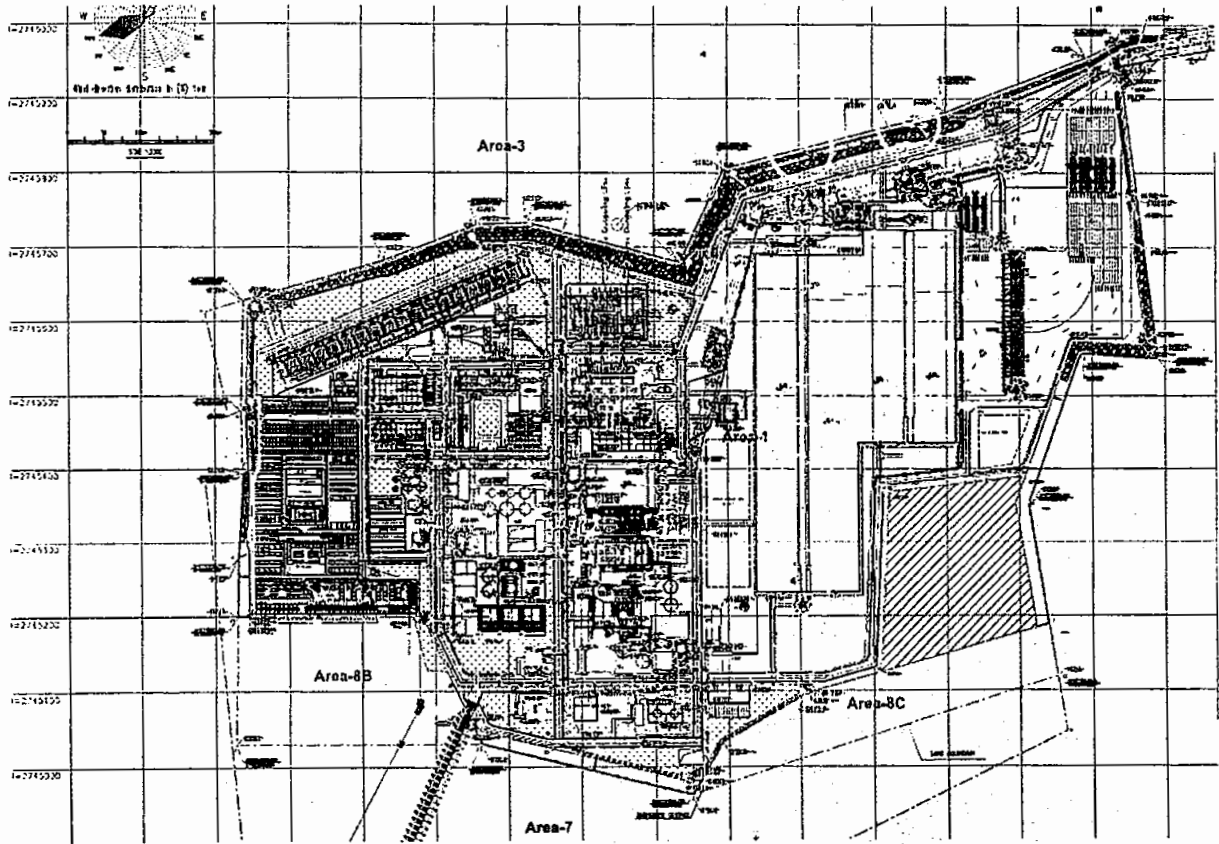
The Location, Size (i.e. Capacity in MW), Type of Technology, Interconnection Arrangements, Technical Limits, Technical/Functional Specifications and other details specific to the Generation Facilities of the Licensee are described in this Schedule



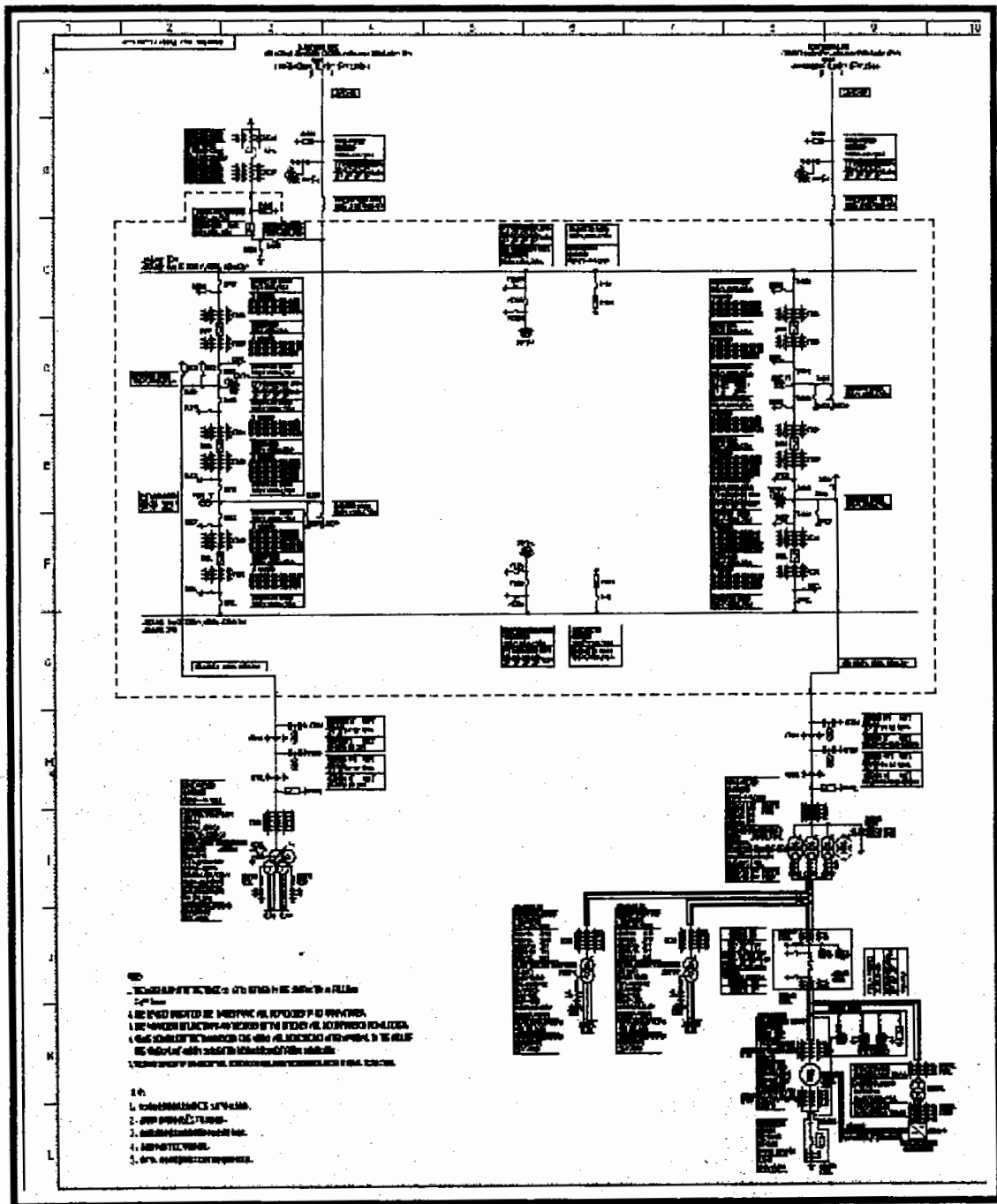
## Location of the Generation Facility/Thermal Power Plant



# Layout and Land Coordinates of the Generation Facility/Thermal Power Plant



## Single Line Diagram of the Generation Facility/Thermal Power Plant



**Interconnection Facilities/Transmission Arrangements for  
Dispersal of Power from the Generation Facility/ Thermal Power  
Plant**

The electric power from the Imported/Thar Coal based generation facility/ power plant of the Licensee/ Lucky Electric Power Company Limited (LEPCL) will be dispersed to the National Grid.

(2). The Interconnection Facilities (IF)/Transmission Arrangement (TA) for supplying to National Grid from the above mentioned generation facility shall be at 500 kV level. The IF/TA for supplying the National Grid will be consisting of looping in-out arrangement of 500kV double circuit transmission line for looping in-out on Port Qasim Coal Fired Power Plant and Matiari Circuit.

(3). Any change in the above mentioned IF/TA for dispersal of electric power as agreed by the Licensee and the Power Purchaser shall be communicated to the Authority in due course of time.

