

Dec 22, 2022

The Registrar

National Electric Power Regulatory Authority
NEPRA Tower, Atatürk Avenue, G-5/1,
Islamabad.

Subject: Application for Licensee Proposed Modification to the Generation License under NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021, on behalf of 2x660 MW Thar Coal Block-1 Power Generation Company (Private) Limited

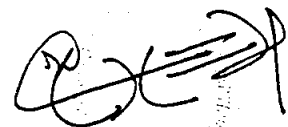
Dear Sir,

I, Muhammad Yasir Hussain, Senior Business Manager, being the duly authorized representative of M/s Thar Coal Block-1 Power Generation Company (Private) Limited (the "Company") by virtue of Board Resolution dated Nov 23, 2022, hereby apply to the National Electric Power Regulatory Authority ("NEPRA") for the Licensee Proposed Modification ("LPM") to our Generation License No. IGSP/L/74/2017 dated January 05, 2017 (the "Generation License") pursuant to NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021.

I hereby certify that the documents-in-support attached with this application are prepared and submitted in conformity with the provisions of the NEPRA 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.

A pay-order No. C0000033291 dated 21.12.2022 in the sum of Rupees 2,023,100 (two million twenty-three thousand one hundred), being the license modification fee calculated in accordance with Schedule II to the NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021, is also attached herewith.

Sincerely yours,



Muhammad Yasir Hussain
Senior Business Manager

Thar Coal Block-1 Power Generation Company (Pvt.) Ltd.

Attachments:

1. ICBC Pay Order No. C0000033291, dated 21.12.2022.
2. Affidavit.
3. Extract of Board Resolution dated Nov 23, 2022.
4. Licensee Proposed Modification (LPM) Application.
5. Copy of Generation License # IGSP/L/74/2017 dated January 05, 2017

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**Petition for Licensee
Proposed Modification to
the Generation License**

BEFORE

THE NATIONAL ELECTRIC POWER REGULATORY
AUTHORITY

APPLICATION FOR MODIFICATION OF
GENERATION LICENSE NO. IGSP/L/74/2017 DATED JANUARY 05, 2017

ON BEHALF OF

THAR COAL BLOCK-1 POWER GENERATION COMPANY
(PRIVATE) LIMITED

PURSUANT TO NATIONAL ELECTRIC POWER REGULATORY
AUTHORITY LICENSING (APPLICATION, EXTENSION
MODIFICATION and CANCELLATION) REGULATION, 2021, READ
TOGETHER WITH THE REGULATION OF GENERATION, TRANSM
MISSION AND DISTRIBUTION OF ELECTRIC POWER ACT, 1997 AND
ALL OTHER ENABLING PROVISIONS OF LAW

DATED: DECEMBER 22, 2022

i. DETAILS OF THE PETITIONER

a) Name and Address

Thar Coal Block-1 Power Generation Company (Private) Limited
Mailing address: Office No. A-1, Navy Housing Scheme, Zam
Zama Link Road, Clifton Block-9, Karachi.
Phone: +92-21-3518-3615
Fax: +92-21-3518-3666

b) Particulars of the Authorized Representative

Name: Mr. Muhammad Yasir Hussain
Designation: Senior Business Manager
e-mail: yasir@shanghai-electric.com

c) Project Details

Thar Coal Block-1 Power Generation Company (Pvt.) Limited (the "Company") is a private limited company incorporated under the laws of Pakistan and is establishing a 2x660 MW indigenous coal based power generation facility located at Tharparkar, province of Sindh, Pakistan.

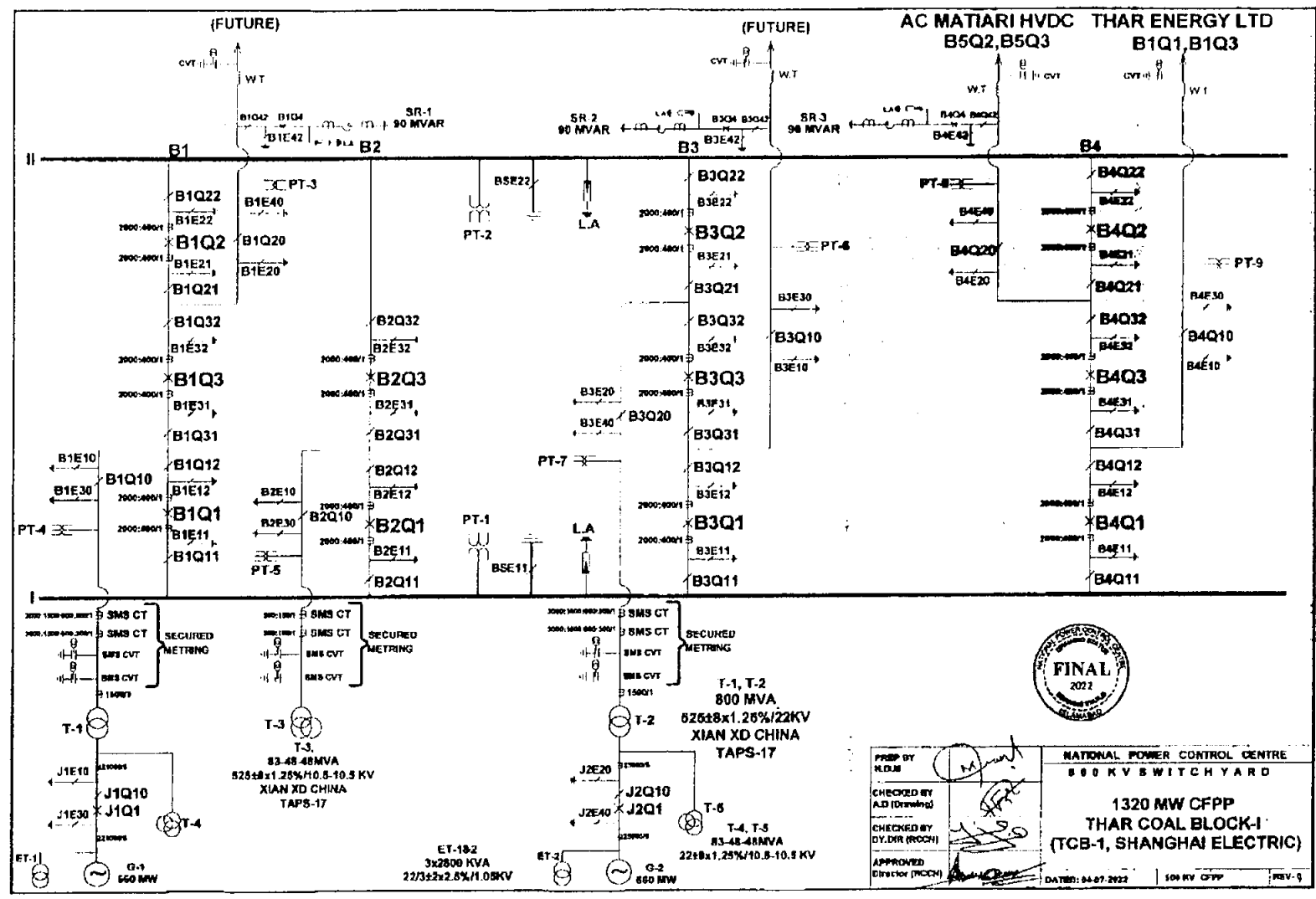
NEPRA had already granted the Company, Generation License No. IGSP/L/74/2017 dated 5 January 2017 (the "Generation License") under Section 15 of the Regulation of the Generation, Transmission and Distribution of Electric Power Act, 1997.

ii. PROPOSED MODIFICATIONS

M/s Thar Coal Block-1 Power Generation Company (Pvt.) Limited in pursuance of inter alia, NEPRA Licensing (Application, Extension Modification and Cancellation) Regulation, 2021 (the "Licensing Regulations") submits this application for the Licensee Proposed Modification (the "LPM") in respect of its Generation License No. IGSPL/74/2017 dated 05 January, 2017.

The Company, pursuant to the abovementioned Licensing Regulations and based on the finalized design and Original Equipment Manufacturer (OEM) data, hereby seeks to apply for modification of the Generation License granted for 2x660 MW Thar Coal Fired Power Plant located at Block-1, Tharparkar, Sindh, to address the following modifications in the already issued Generation License.

(a). Single Line Diagram of Thar Coal Block-1 Power Generation Facility

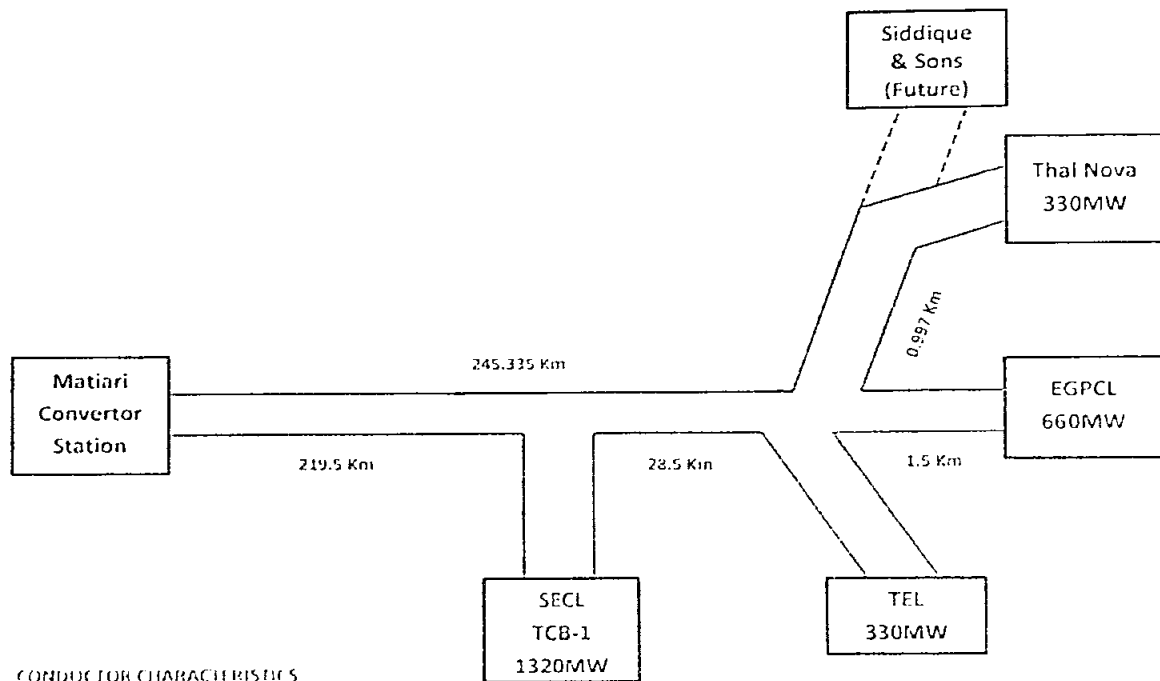


(b). Interconnection Facilities/Transmission Arrangements for Dispersal of Power from the Generation Facility/Thermal Power Plant:

The para (2) in the original Generation License under the narrated heading, is hereby proposed to be modified with the following, while the other paras remain the same. i.e.,

“The Interconnection Facilities (IF)/Transmission Arrangement (TA) for supplying to National Grid from the above-mentioned generation facility shall be at 500 kV voltage level. The Interconnection/Dispersal Arrangement will be consisting of a 500 kV triple circuit transmission line connecting the Power Plant directly with Matiari Converter Station, while the fourth circuit will be connected with 330 MW TEL Power Plant through in/out arrangement. ”

Schematic Diagram
of Interconnection Arrangement for Dispersal of Power from the Generation
Facility / Thermal Power Plant



CONDUCTOR CHARACTERISTICS

Type of Conductor:	Greedy Quad bundle
Positive Sequence Impedance:	0.0185 + j0.2767 Ω/phase/km
Negative Sequence Impedance:	0.0185 + j0.2767 Ω/phase/km
Zero Sequence Impedance:	0.2308 + j0.7697 Ω/phase/km
Line Maximum Load Current:	4100 Amp

(c). **General Information:**

The change is related to updating the registered address and mailing address of the Company i.e.,

A (ii)	Registered/Business Office Address	7th Floor, Executive Tower, Dolmen Mall Clifton, Karachi
	Mailing Address	Office No. A-1, Navy Housing Scheme, Zam Zama Link Road, Clifton Block-9, Karachi

(d). **Plant Configuration:**

The changes are related to the technology of Boiler and Steam Turbine used in the Project, with the following brief description i.e.,

B (ii)	Type of Technology	Advanced Supercritical Lignite (Thar) Coal Fired Power Plant	
B (iv)	Unit Make/Model/Type & Year of Manufacture etc.	Boiler	Advanced supercritical steam generator variable pressure operation coal fired concurrent boiler, tower-type boiler with single furnace, once reheat and balance draft
		Steam Turbine	Advanced supercritical, intermediate reheat, tandem-compound, four cylinders, four-flow exhausts condensing steam turbine. Model: N660-27/600/600

(e). **Fuel/Raw Material Details:**

The changes are related to the start-up fuel and measuring unit of its storage capacity i.e.,

C (ii)	Start-Up Fuel	High Speed Diesel (HSD)	
C (vii)	Storage Capacity of each Bunkers/Tanks/ Open Yard	Primary Fuel	Start-Up Fuel
		30 Days for full-load operation	1000 m ³
C (viii)	Gross Storage	Primary Fuel	Start-Up Fuel
		658680 Tons (approx.)	2000 m ³

(f). **Emission Values:**

The Emission Values of the Power Plant are proposed to be modified as per the National Environmental Quality Standards.

		Primary Fuel	Start-Up Fuel
(i).	SO _x , (mg/Nm ³)	As per NEQS	As per NEQS
(ii).	NO _x , (mg/Nm ³)	As per NEQS	As per NEQS
(iii).	Particulate Matter (%)	As per NEQS	As per NEQS

(g). **Plant Characteristics:**

The changes are in the *Ramping Rate (%/min)* and *Time Required to Synchronize to Grid (min)* as these values were indicative at the time of application of Generation License and hence these parameters as set out in row (v) and (vi) of schedule I of the Generation License (under the heading ("Plant Characteristics")) are proposed to be modified as follows in accordance with the OEM data:

Table-1 (a)
Ramping Rate

Unit load (%)	Cold start (%)	Warm start (%)	Hot start (%)	Very Hot start (%)
0-30	0.2	0.6	1	1
30-50	0.2	0.8	1	1
50-100	0.3	0.3	0.8	0.8

Table-1 (b)
Holding Time for Load Raising

Unit load (%)	Cold start (min)	Warm start (min)	Hot start (min)	Very Hot start (min)
5% initial load during grid connection	60	30	0	0
35% unit load	0	10	0	0
67.5% unit load	0	0	10	0

Minimum Stable Loading of Unit = 50 %

Table-2

Length of Shutdown	Notice required synchronizing (The time start after boiler ignition)
Not more than 1 hour	95 min
More than 1 hour but less than 10 hours	140 min
More than 10 hours but less than 72 hours	395 min
More than 72 hours	600 min

Each startup Type is as follows:

- Very Hot Start-up: The start-up with a unit downtime of less than 1 hour.
- Hot Start-up: The Start-up with a unit downtime of 1 hour or more than 1 hours but less than 10 hours.
- Warm Start-up: The Start-up with a unit downtime for 10 hours or more than 10 hours but less than 72 hours.
- Cold Start-up: The Start-up with a unit downtime for 72 hours or more than 72 hours.

iii. **STATEMENT OF THE REASONS IN SUPPORT OF THE MODIFICATION**

The proposed modification is required to be incorporated to update the SLD, Interconnection Arrangement, General Information, Plant Configuration, Fuel/Raw Material details and Plant Characteristics as per the OEM data after completion of the engineering design of the Project.

Moreover, the Company only submitted the indicative values of *Ramping Rate* and *Time Required to Synchronize with the Grid* at the time of filing of the application with NEPRA for the grant of Generation License. Consequent to the above, there are certain parameters which require modifications in accordance with the engineering design, and OEM recommendations, keeping in view the Technical Limits, operational reliability and safety of the equipment. Therefore, as per Article 3.3 of the Generation License, the Company is hereby requesting modification in its Generation License in light of the actual design of the power plant and the data provided and instructions received by the Company from the OEM.

In furtherance to the above, we are submitting the specific reasons for each modification requested by the Company as detailed below:

(a). **Rationale for Modification to the Single Line Diagram (SLD):**

NPCC has approved the finalized SLD of TCB-1 Project as per the latest interconnection and power dispersal scheme. Therefore, the updated SLD has been attached in this LPM for its revision in the Generation License.

(b). **Rationale for Modification to the Interconnection Facilities/Transmission Arrangements for Dispersal of Power from the Generation Facility/Thermal Power Plant:**

NTDC has revised the whole scheme of interconnection facilities for that region. Therefore, the Power Purchaser Interconnection Facilities for TCB-1 Project has also been revised which were not envisaged at the time of application/grant of Generation License. Therefore, the updated interconnection facilities have been attached in this LPM for its revision in the Generation License.

(c). **Rationale for Modification to the General Information:**

The Company has changed its registered address as well as the mailing address and hence the same is required to be incorporated in the Generation License through this LPM.

(d). **Rationale for Modification to the Plant Configuration:**

The type of technology of the Complex, Boiler and Steam Turbine has been revised from Supercritical to Advance-supercritical as per the engineering design of the Project.

(e). **Rationale for Modification to the Fuel/Raw Material Details:**

The type of start-up fuel has been modified from Light Fuel Oil (LFO) to High Speed Diesel (HSD) as per the engineering design of the Project. Moreover, the storage capacity of each start-up fuel tank has been expressed in m³ which was inadvertently expressed in m² in the already issued Generation License.

(f). **Rationale for Modification to the Emission Values:**

The tower type Advance Supercritical technology based boiler installed by the Company is also equipped with *Advanced Boiler Flue Gas Energy Waste Heat Utilization System*, which improves the thermal efficiency of the unit, reduces air pollutants, save coal consumption, and its water saving effect is remarkable, which is in line with the National Environmental Quality Standards of Pakistan and China's national policy of "energy saving and emission reduction".

(g). **Rationale for Modification to the Plant Characteristics:**

1. **Ramping Rate:**

Ramping Rate refers to increase/decrease of output/generation of a unit and it is expressed in % per minute or MW per minute. It is generally calculated as the capability of a unit between its minimum and maximum level. Ramping Rate is defined by OEM as per the intrinsic conditions and other metallurgical and operational parameters of the equipment. The operational life span of steam turbine is seriously affected due to the frequent rate of change of loading conditions, temperature and pressure.

Moreover, the Ramping rate at various loading conditions shall be limited within the metal temperature increased rate of change of temperature. If the ramping rate of a unit is not observed as per the OEM recommendations, it will result in combustion instability due to excessive variations caused by lignite/thar coal quality and resultant concentration into the boiler, caused by excessive load change rate, which may lead to partial choking in the boiler or boiler shut down, and may result in excessive flue gas emissions. Therefore, for continued operational stability, and reliability of the Power Plant, the Ramping Rate should only be governed as per the OEM recommendations.

It is further added that as per the standard practice, OEM of TCB-1 project has recommended different ramping rates along with the holding time at different loading conditions during startup and normal operation of Unit(s) as set out in table 1(a) and table 1(b) of this application, which is required to be complied necessarily to ensure safe and reliable operation of the Power Plant. Moreover, the minimum stable loading of the Power Plant is 50%. The relevant OEM documents and recommendations justifying the proposed modification to the Ramping Rates are attached herewith as Annex-I for reference.

2. Time Required to Synchronize to Grid:

Time Required to Synchronize to Grid refers to the actual time period required by unit to synchronize with the Grid System after receipt of NTS from NPCC, and it varies as per the different length of shutdown time in accordance with the OEM recommendations.

In order to ensure safe and reliable operation of each unit of the Power Plant, following modifications to the time required for synchronization to the Grid is applied based on the technical specifications and OEM recommendations, (attached in Annex-I of this Application) taking into account an efficient, safe and reliable operation of the Complex. Following is the brief explanation for the Time Required to Synchronize to Grid with respect to each type of start-up:

Shutdown Time of Less than 1 Hour:

Based on the OEM data and recommendations, if Unit is started after shutdown time of less than an hour then it is considered as Very Hot Startup, and it takes 95 minutes' time to synchronize with the Grid after ignition of the boiler.

Shutdown Time of More than 1 Hour but Less than 10 Hours:

As per the OEM data and recommendations, if Unit is started after shutdown time of 1 hour or more than 1 hour but less than 10 hours then it is considered as Hot Startup, and it takes 140 minutes' time to synchronize with the Grid after ignition of boiler.

Shutdown Time of More than 10 Hours but Less than 72 Hours:

Based on the OEM data and recommendations, if Unit is started after shutdown time of 10 hours or more than 10 hours but less than 72 hours then it is considered as Warm Startup, and it takes 395 minutes' time to synchronize with the Grid after ignition of boiler.

Shutdown Time of More than 72 Hours:

As per the OEM data and recommendations, if Unit is started after shutdown time of 72 hours or more than 72 hours then it is considered as Cold Startup, and it takes 600 minutes' time to synchronize with the Grid after ignition of boiler.

iv. **A STATEMENT OF THE IMPACT ON THE TARIFF, QUALITY OF SERVICE AND THE PERFORMANCE BY THE LICENSEE OF ITS OBLIGATIONS UNDER THE LICENSE**

- Impact on Tariff

The Company has opted for Upfront Coal Tariff for 2x660 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.

- Impact on Quality of Service

The Company hereby certifies that the obligations under the Generation License and upfront tariff is fully acceptable to the Company and the proposed modification will not impact the quality of service of the Company.

- Impact On Obligations of the Company Under the License

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

It is also submitted to the Authority that the proposed modification to the Generation License may be accepted as it:

- does not cause NEPRA to act or acquiesce in any act or omission of the licensee in a manner contrary to the provisions of the Regulation of the Generation, Transmission and Distribution of Electric Power Act, 1997 or the rules and regulations framed thereunder;
- is beneficial to the end consumers as it will ensure safety, reliability and efficient operation of the cheapest indigenous Thar coal based project of the country;

- is reasonably necessary for the Company to effectively and efficiently perform its obligations based on the OEM recommendations under the Generation License;
- is in accordance with the design requirements, and supplier warranties as recommended and certified by the manufacturer.
- is reasonably necessary to ensure the safe, reliable and continuous supply of electric power to the end consumers keeping in view the technical and financial viability of the Project.

(v). **PRAYER:**

In view of the above, it is hereby humbly prayed to NEPRA:

1. that the Authority may kindly approve the proposed modification to the Generation License to ensure safe, reliable and an efficient operation of 2x660 MW Thar Coal Block-1 Power Project, which is the cheapest indigenous coal based power plant of the Country.
2. that the Authority may treat the Company's request for the grant of this modification to the Generation License on a non-discriminatory basis.
3. that any further and better relief that the Authority may deem appropriate in the circumstances may kindly be granted to the Company.

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

Annexure-I

OEM Datasheets and Start-up Curves

Appendix

Table 1 Maximum Allowed Ramp-up Rate (%)

Unit load range (%)	Cold start (%/min)	Warm start (%/min)	Hot start (%/min)	Extremely hot start (%/min)
0-50	0.2	0.4		
50-75	0.2	0.3		
75-100	0.5	0.7	0.8	1.0

Table 2 Allowable Time for Suspending Load Following start-up Limit and 75% Ramp

	Cold start (min)	Warm start (min)	Hot start (min)	Extremely hot start (min)
5% initial load during grid connection	30-60	10-30	5	
35% unit load	0	5	5	
67.5% unit load	0	5	5	

Note 1: In the above two tables, the percentage refers to the percentage of the total capacity of the unit.

Note 2: Each startup status is as follows:

Extremely hot start - start-up with the unit at the temperature above 100°C.

Hot Start - Start-up with the unit after the unit has been in operation for more than 10 hours.

Warm Start - Start-up with the unit after the unit has been in operation for more than 72 hours.

Cold Start - Starts when the unit has stopped for more than 72 hours.

Description of unit startup curve

1. This curve is the unit startup curve recommended for combined startup of high and intermediate pressure cylinders, and the parameters after impulse starting shall be in accordance with the curve provided by the turbine manufacturer:

The main steam flow before impulse starting is the minimum flow required by the steam turbine:

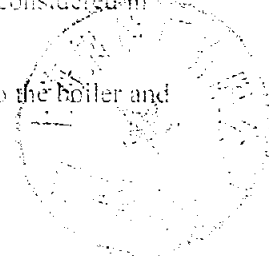
2. The time length in the curve is the recommended value. During the operation of the unit, the time required for each stage is determined by the actual operation to be completed and the allowable load raising rate of the unit:

3. During unit startup, proper combustion rate must be controlled to meet the requirements of unit startup parameters:

4. The steam inlet parameters of the high and intermediate pressure cylinders of the steam turbine must be controlled according to the startup and operation instructions of the steam turbine:

5. The waiting time of auxiliary systems such as bypass is not considered in the curve:

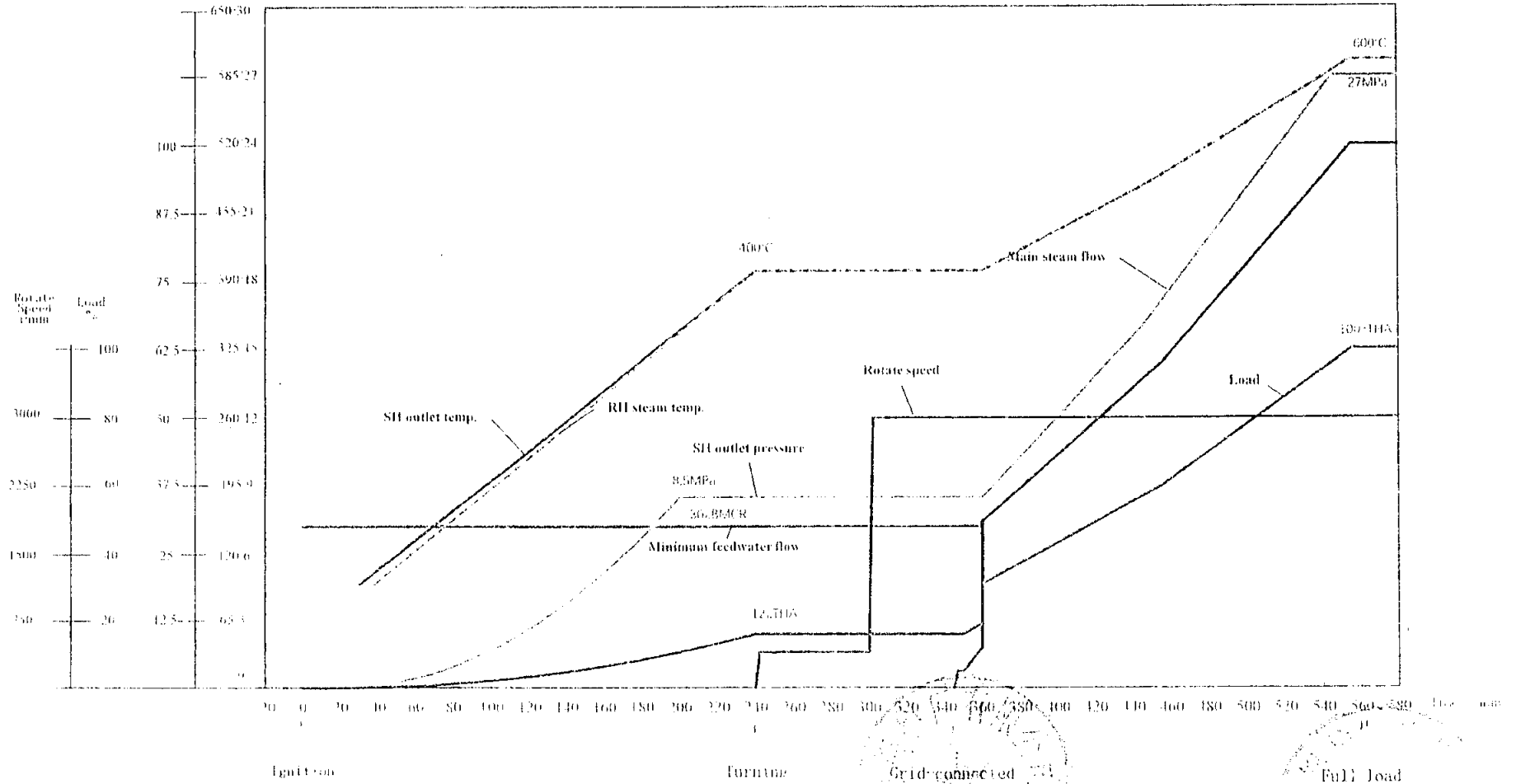
6. For more detailed unit startup operation steps, please refer to the boiler and turbine startup operation instructions:





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SHANGHAI ELECTRIC

Start curve
Ambient temperature start



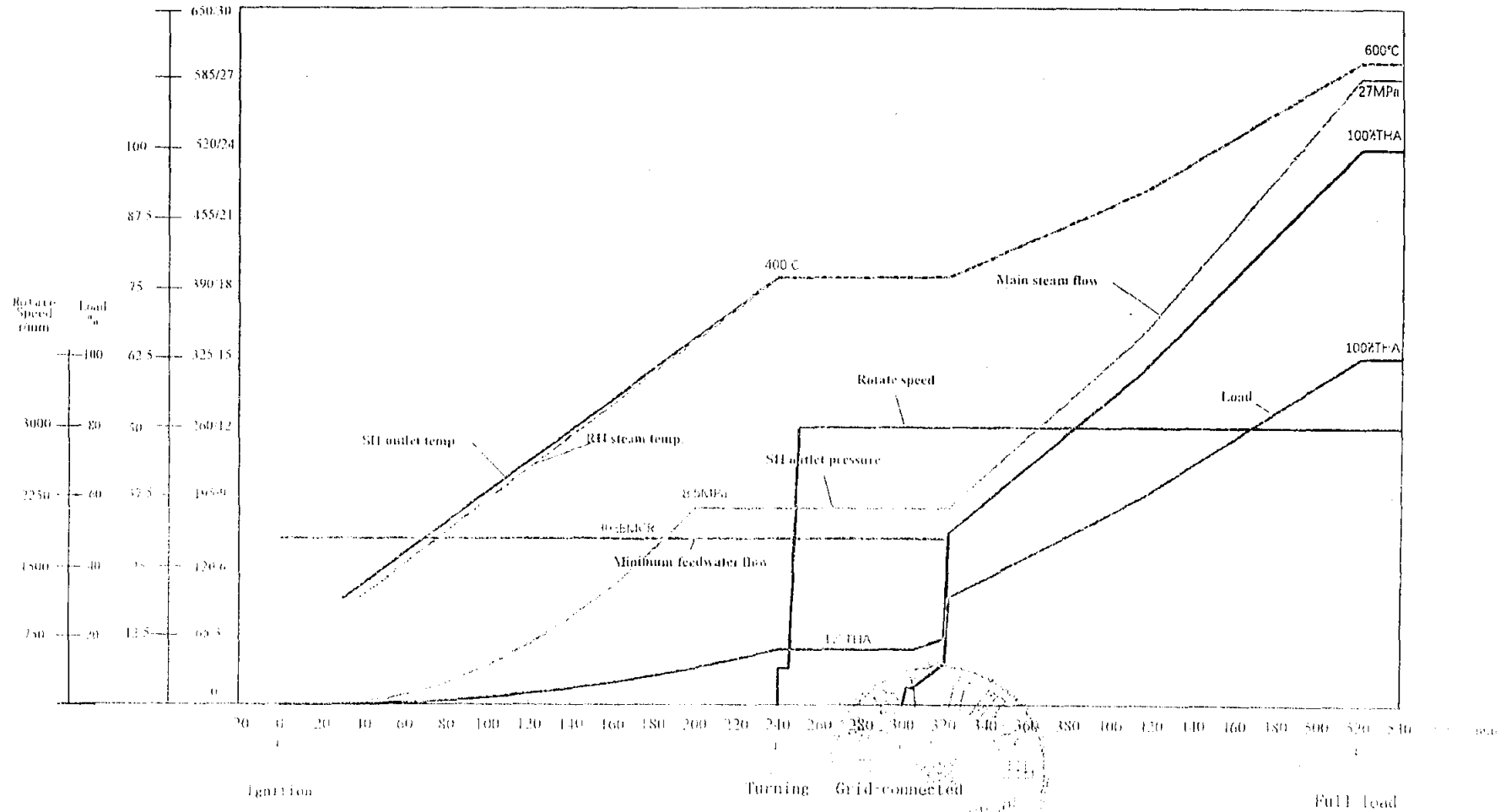
上海锅炉厂有限公司
Shanghai Boiler Works Co., Ltd.

中国上海市闵行区零川路 250 号 250 Huanchang Road, Minhang District, Shanghai, China 200245
Tel 86-21-64302391 Fax 86-21-64301980 www.shanghai-electric.com



Temperature / °C
Pressure / MPa

Start curve
Cold start-up (150°C)



上海锅炉厂有限公司

Shanghai Boiler Works Co., Ltd.

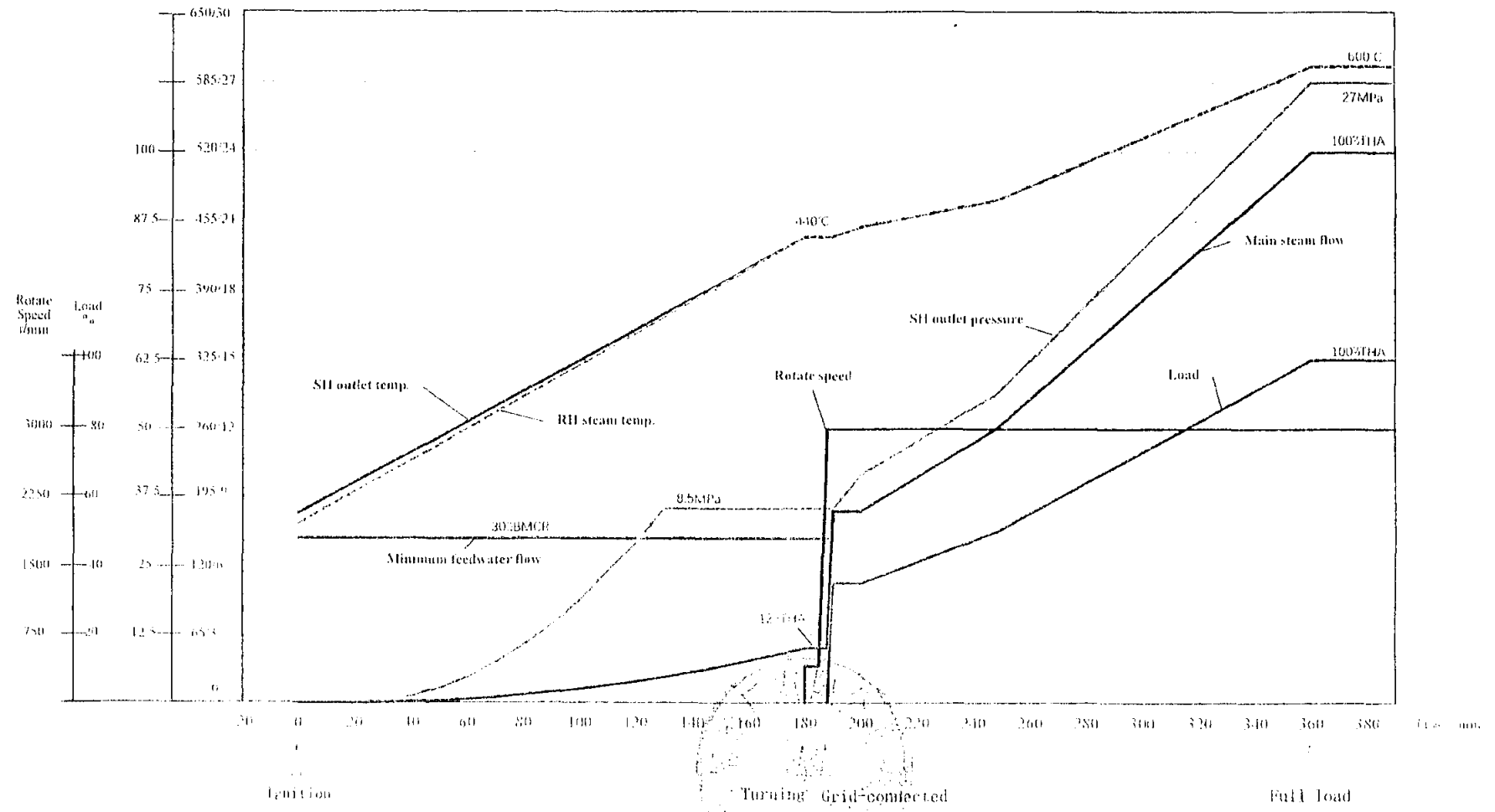
中国上海市闵行区华宁路250号 250 Huanning Road, Minhang District, Shanghai, China (200245)

Tel: 86 21 64 302 391 Fax: 86 21 64 301 980 www.shanghai-electric.com



Flow Temperature
% °C
Pressure MPa

Start curve
Warm start-up (48 hours)



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Shanghai Boiler Works Co., Ltd.

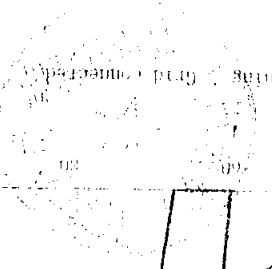
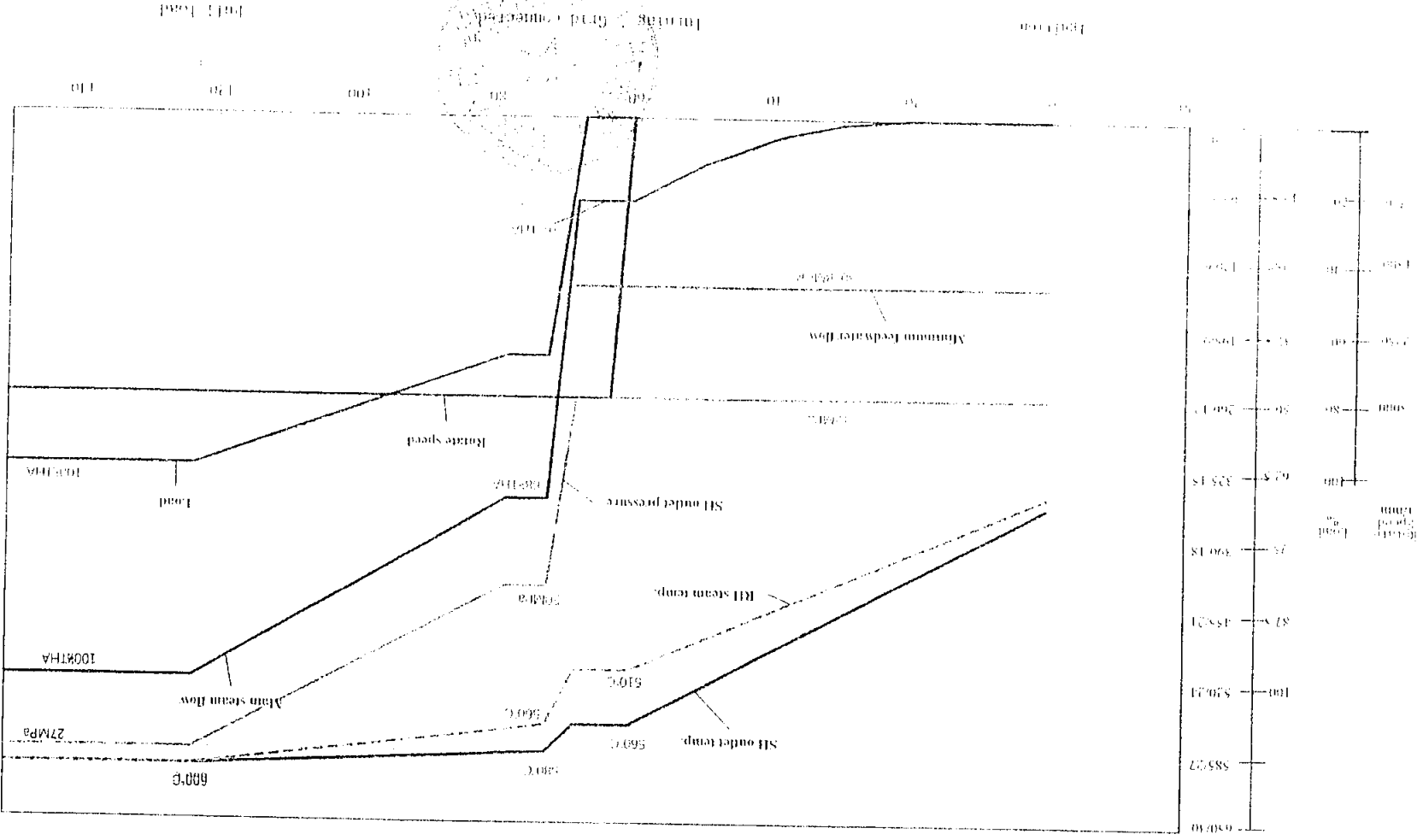
中国上海市闵行区华宁路250号 (250 Huating Road, Minhang District, Shanghai, China, 200245)
Tel: 86-21-64302391 Fax: 86-21-64301980 www.shanghai-electric.com



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Fig. Temperature, %
Pressure, MPa

Start curve
Hot start-up (8 hours)

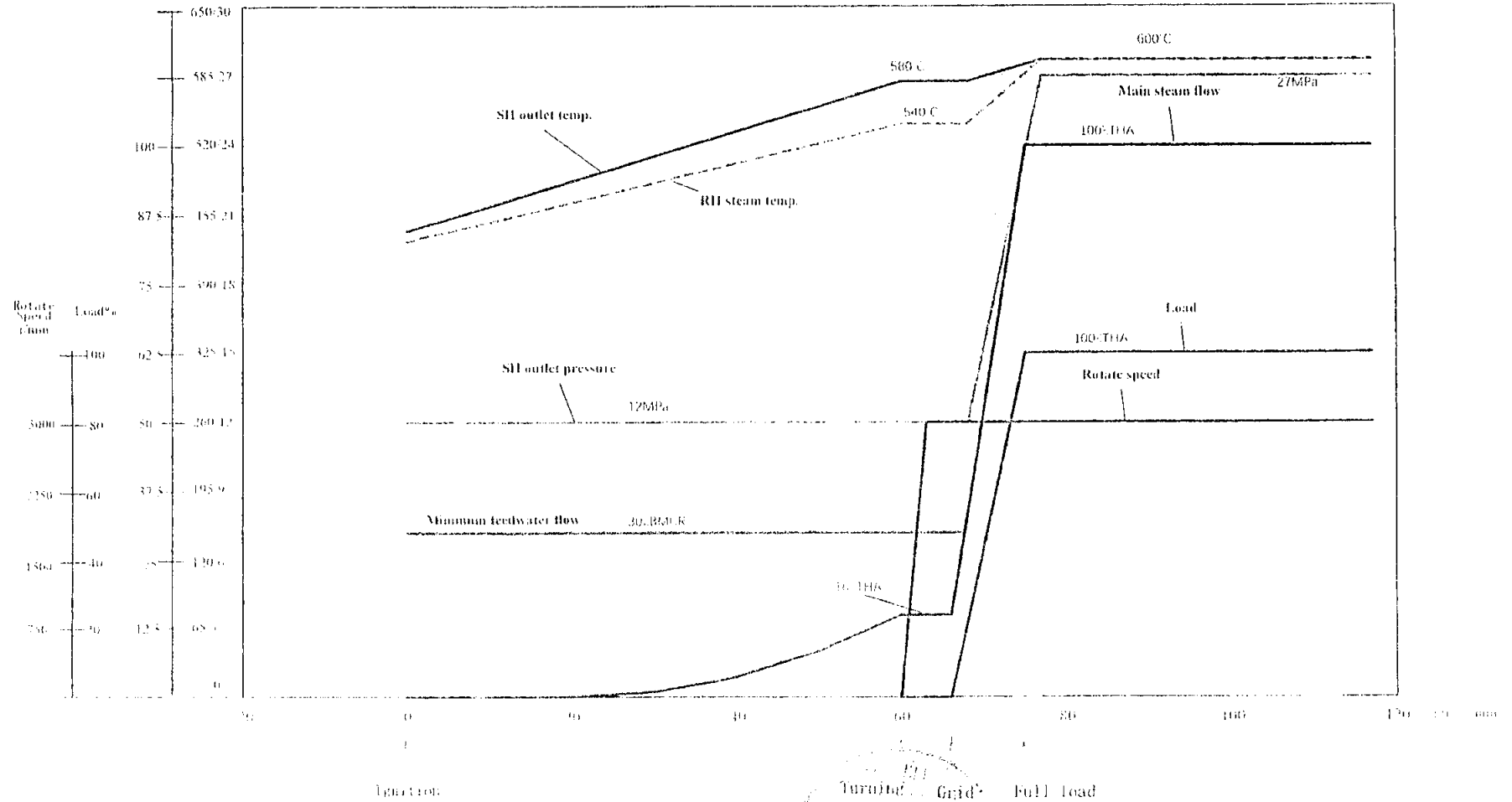


上海锅炉厂有限公司
Shanghai Boiler Works Co., Ltd.

中国上海南京路100号 邮编: 200001 电话: 86-21-64101590 传真: 86-21-64101591
China Shanghai Nanjing Road 100 Postcode: 200001 Tel: 86-21-64101590 Fax: 86-21-64101591



Start curve
Very hot start-up (8 hours)



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Tel: 8621-64302391 Fax: 8621-64301980 www.shanghai-electric.com

巴基斯坦塔尔煤田一区块 2X660MW 燃煤电站项目

汽轮机旁路设备 技术协议

需方：上海电气集团股份有限公司（SEC）

供方：Emerson Asia Pacific Private Limited

设计方：华东电力设计院有限公司

计总收

王圣强

钟志远

罗浩

编号	项 目	单 位	数 据
1	过热蒸汽流量	t/h	1937
2	过热蒸汽压力	MPa(g)	28.25
3	过热蒸汽温度	°C	605
4	再热蒸汽流量	t/h	1639
5	再热器进口压力	MPa(g)	5.68
6	再热器出口压力	MPa(g)	5.48
7	再热器进口温度	°C	358
8	再热器出口温度	°C	603
9	省煤器入口温度	°C	299
10'	锅炉最低稳燃负荷(不投油)		50%THA/

(2) 汽轮机为上海汽轮机厂生产的超超临界、一次中间再热、单轴、四缸四排汽、凝汽式汽轮机(型号：N660-27/600/600)。汽轮机主要参数如下：

名 称	单 位	数 据
型式	/	超超临界、一次中间再热、凝汽式、单轴、四缸四排汽
型号	/	N660-27/600/600
TRL 工况功率	MW	660
TRL 工况主蒸汽压力	MPa(a)	27
TRL 工况主蒸汽温度	°C	600
TRL 工况主蒸汽流量	t/h	1881
TRL 工况再热热段蒸汽压力	MPa(a)	5.228
TRL 工况再热热段蒸汽温度	°C	600
TRL 工况再热热段蒸汽流量	t/h	1589
TRL 工况背压	kPa(a)	9.6
VWO 工况功率	MW	692.565
VWO 工况主蒸汽压力	MPa(a)	27
VWO 工况主蒸汽温度	°C	600
VWO 工况主蒸汽流量	t/h	1937

**Extract of the Resolution
of the Board of Directors**



EXTRACT OF RESOLUTION DATED NOVEMBER 23, 2022 PASSED BY CIRCULATION
BY THE DIRECTORS OF M/S. THAR COAL BLOCK-1 POWER GENERATION COMPANY
(PRIVATE) LIMITED

"RESOLVED THAT the Application for Modification of Generation License No. IG SPL/74/2017 for the 2x660 MW Thar coal fired power plant located at Thar Coal Block-1, Tharparkar, Sindh, Pakistan ("**Application**"), be and is hereby approved for submission by the Company with the National Electric Power Regulatory Authority ("**NEPRA**");

FURTHER RESOLVED, THAT Mr. Muhammad Yasir Hussain, holding CNIC No. 35202-5115383-7, Senior Manager of the Company be and is hereby given the mandate and authorized to;

- (1) review, execute and submit the Application or any other related document, including any contracts, affidavits, statements, documents, powers of attorney, letters, forms, applications, deeds, guarantees, undertakings, approvals, memoranda, amendments, letters, notices, certificates, requests, statements and any other instrument of any nature whatsoever, to NEPRA, for and behalf of the Company and to proceed with and make any corrections and amendments, if required, in finalizing the Application or any other related document;
- (2) attend, represent and participate in all meetings, negotiations, hearings and conferences of whatsoever nature before NEPRA or any other regulatory authority or official or person in connection with the submission and approval of the Application and pay the necessary filing fees or license fees, for and on behalf of the Company; and
- (3) do all such acts including but not limited to delegation of any of the powers granted herein to any other director or officer of the Company, singly or jointly,

塔尔煤田一区块发电有限公司

THAR COAL BLOCK-1 POWER GENERATION COMPANY (PVT) LTD

Registered address: 7th Floor, Executive Tower, Dolmen Mall Clifton, Karachi

Mailing address: No. A-1, Navy Housing Scheme, Zam Zama Link Road, Clifton Block-9, Karachi

Landline: +9221-3518-3615, Fax: +9221-3518-3666



and submit all such documents as may be necessary in respect of the foregoing resolutions;

FURTHER RESOLVED THAT any one from the Board of Directors, Chief Executive or Company Secretary of the Company be and is hereby authorized;

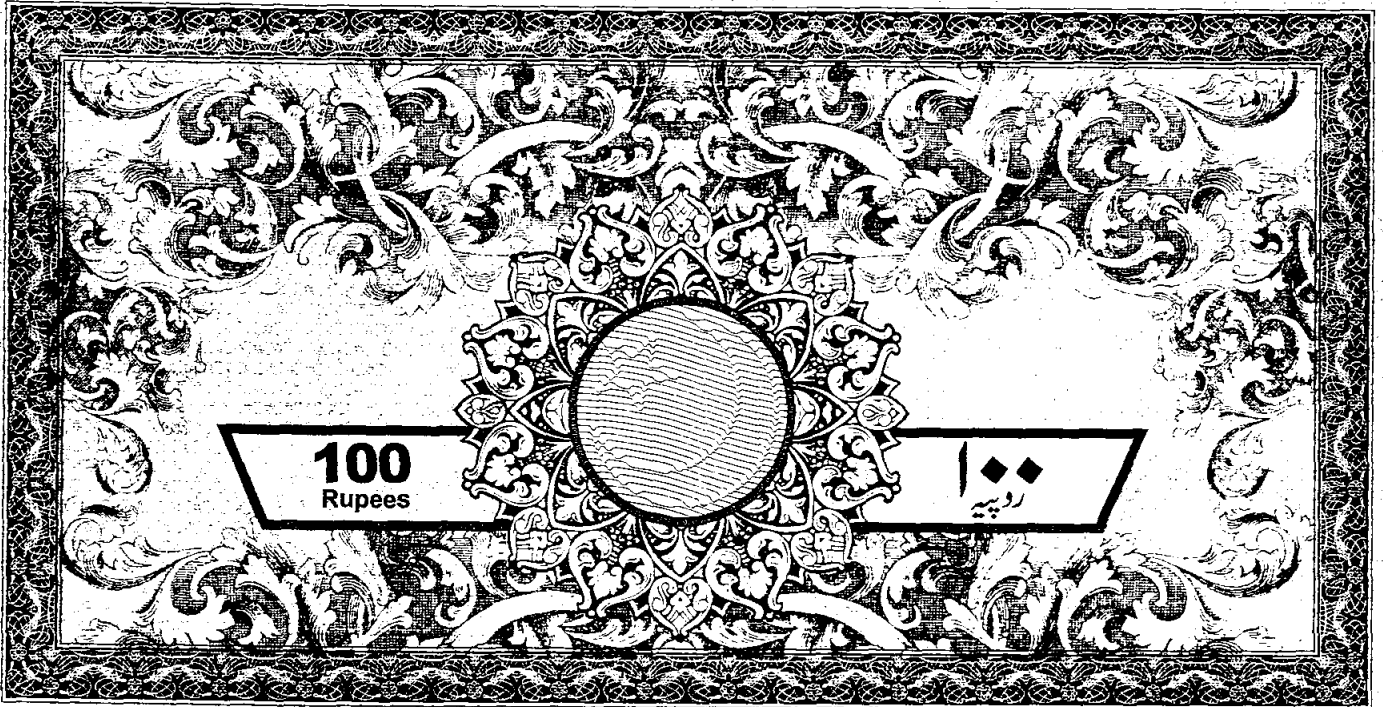
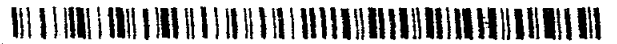
- i. To issue a certified true copy of the above resolution to NEPRA.
- ii. To receive/collect the original amended generation license and related documents, from NEPRA."

Certified True Copy

A handwritten signature in black ink, appearing to read "Ying Minghao", written over a horizontal line.

Ying Minghao
Director

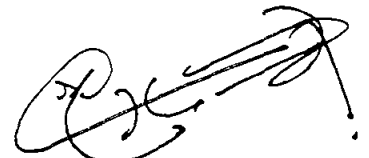
**Affidavit of Company's
Authorized Representative**




AFFIDAVIT

I, Muhammad Yasir Hussain, Senior Business Manager of Thar Coal Block-1 Power Generation Company (Private.) Limited, having its registered office located at 7th Floor, Executive Tower, Dolmen Mall Clifton, Karachi (hereinafter referred to as the "Company"), do hereby solemnly declare on oath as under:

1. That I am a duly authorized Senior Business Manager/Representative of the Company and I am well conversant with the affairs of the Company.
2. That I confirm, record, assure and declare to you that the contents of the accompanying Application for modification of Generation License No. IGSP/L74/2017 dated January 05, 2017 for 2x660 MW indigenous coal based power generation facility located at Thar Block-1 of Thar Coalfields, District Tharparkar, province of Sindh, including all supporting documents are true and correct to the best of my knowledge and belief, and nothing material or relevant thereto has been concealed or withheld therefrom.

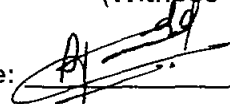

 (Deponent)

(Witness-1)

Signature: 

Name: Asif Ali Nawaz

(Witness-2)

Signature: 

Name: Touheed Ahmed