National Electric Power Regulatory Authority

Islamic Republic of Pakistan

Registrar

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

No. NEPRA/R/LAG-94/ 3962-63

September 26, 2007

Mr. Umer Saeed
Authorized Representative
Nishat Power Limited (NPL)
31-Q, Gulberg-II
Lahore

Subject: **Generation Licence No. IGSPL/15/2007**
Licence Application No. LAG-94
Nishat Power Limited (NPL)

Please refer to your letter no. nil, dated January 16, 2007 to NEPRA for a Generation Licence.

2. Enclosed here is Generation Licence No. IGSPL/15/2007 granted by the Authority to Nishat Power Limited (NPL). The Licence is granted to you pursuant to Section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).

3. Please quote above mentioned Generation Licence No. for your future correspondence with the Authority.

DA/as above

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

26.09.07.
(Mahjoob Ahmad Mirza)

Copy for information to Director General, Pakistan Environmental Protection Agency, House No. 311, Main Margalla Road, F-11/3, Islamabad.

National Electric Power Regulatory Authority
(NEPRA)
Islamabad – Pakistan

GENERATION LICENCE

No. IGSPL/15/2007

In exercise of the Powers conferred upon the National Electric Power Regulatory Authority (NEPRA) under Section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997), the Authority hereby grants a Generation Licence to:

NISHAT POWER LIMITED

Incorporated under the Companies Ordinance, 1984
Under Certificate of Incorporation

No. 00000017648/20070202, dated February 23, 2007

For its Plant located at Jamber Kalan, 66-KM, Lahore-Multan Road
Tehsil Pattoki, District, Kasur, Punjab
(Installed Capacity: 202.179 MW Gross ISO)

to engage in generation business subject to and in accordance with the Articles of this Licence.

Given under my hand this 6th day of SEPTEMBER, Two Thousand & Seven, and expires on 30th day of December, Two Thousand & Thirty Four.

Registrar

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

Article-1
Definitions

1.1 In this Licence

(a) "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997);

(b) "Authority" means the National Electric Power Regulatory Authority constituted under section 3 of the Act;

(c) "Licensee" means Nishat Power Limited.

(d) "Rules" mean the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000.

1.2 Words and expressions used but not defined herein bear the meaning given thereto in the Act or in the Rules.

Article-2
Application of Rules

This Licence is issued subject to the provisions of the Rules, as amended from time to time.

Article-3
Generation Facilities

3.1 The location, size (capacity in MW), technology, interconnection arrangements, technical limits, technical functional specifications and other details specific to the power generation facilities of the Licensee are set out in Schedule-I to this Licence.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

3.2 The net capacity of the Licensee's generation facilities is set out in Schedule-II hereto.

3.3 The Licensee shall provide the final arrangement, technical and financial specifications and other details specific to generation facilities before commissioning of the generation facilities.

Article-4
Term of Licence

4.1 The Licence is granted for a term of twenty five (25) years after the Commercial Operation Date.

4.2 Unless revoked earlier, the Licensee may ninety days (90) days prior to the expiry of the term of the Licence, apply for renewal of the Licence under the Licensing (Application and Modification Procedures) Regulation, 1999

Article-5
Licence fee

After the grant of the Generation Licence, the Licensee shall pay to the Authority the Licence fee, in the amount and manner and at the time set out in National Electric Power Regulatory Authority (Fees) Rules, 2002.

Article-6
Tariff

The Licensee shall charge only such tariff which has been approved or specified by the Authority.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

Article-7
Competitive Trading Arrangement

7.1 The Licensee shall participate in such measures as may be directed by the Authority from time to time for development of a Competitive Trading Arrangement. The Licensee shall in good faith work towards implementation and operation of the aforesaid Competitive Trading Arrangement in the manner and time period specified by the Authority. Provided that, any such participation shall be subject to any contract entered between the Licensee and another party with the approval of the Authority.

7.2 Any variation or modification in the above-mentioned contracts for allowing the parties thereto to participate wholly or partially in the Competitive Trading Arrangement shall be subject to mutual agreement of the parties thereto and such terms and conditions as may be approved by the Authority.

Article-8
Maintenance of Records

For the purpose of sub-rule (1) of Rule 19 of the Rules, copies of records and data shall be retained in standard and electronic form and all such records and data shall, subject to just claims of confidentiality, be accessible by authorized officers of the Authority.

Article-9
Compliance with Performance Standards

The Licensee shall conform to the relevant NEPRA rules on Performance Standards as may be prescribed by the Authority from time to time.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

Article-10
Compliance with Environmental Standards

The Licensee shall conform to the environmental standards as may be prescribed by the relevant competent authority from time to time.

Article-11
Provision of Information

11.1 The obligation of the Licensee to provide information to the Authority shall be in accordance with Section 44 of the Act.

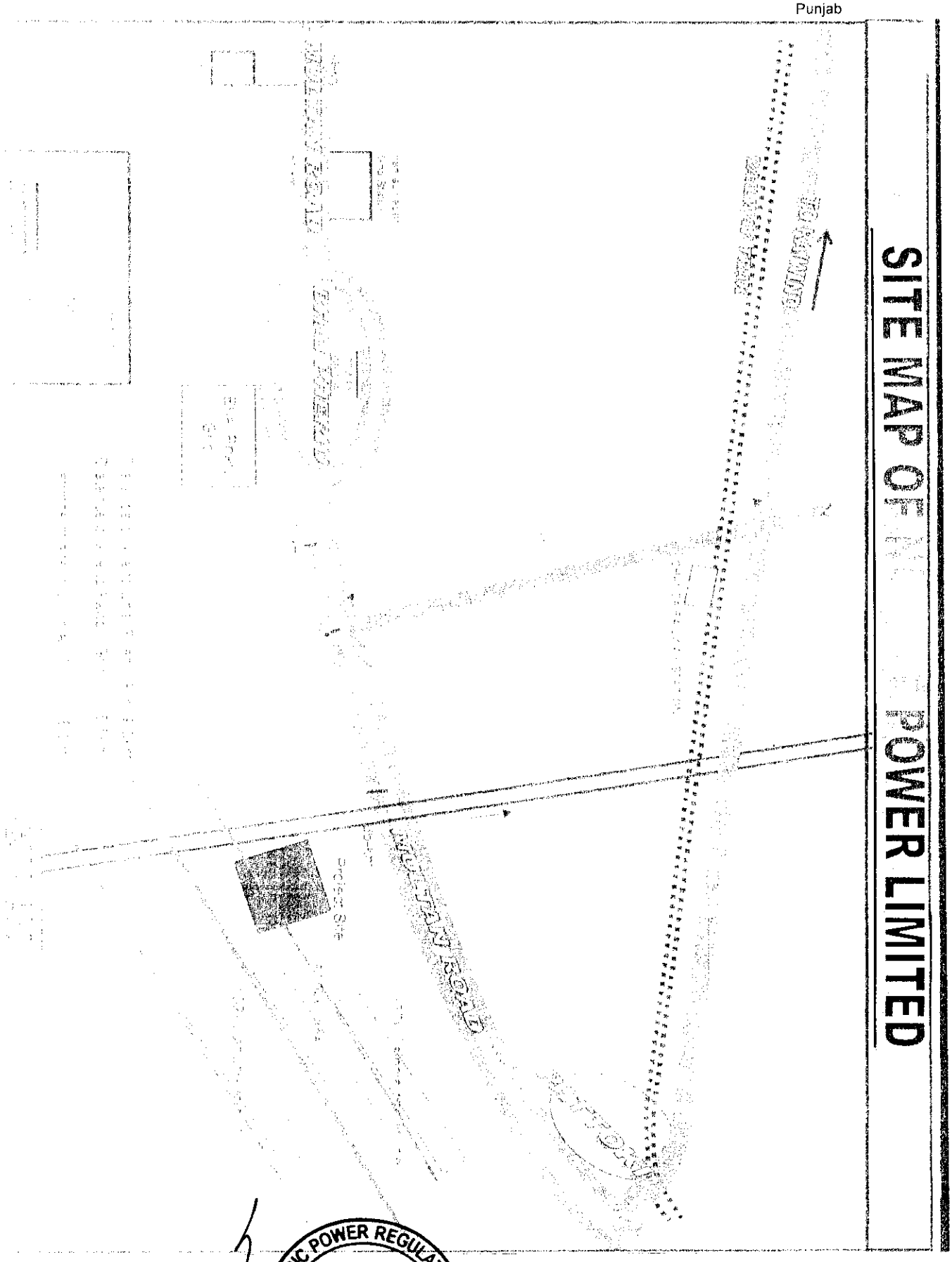
11.2 The Licensee shall be subject to such penalties as may be specified in the relevant rules made by the Authority for failure to furnish such information as may be required from time to time by the Authority and which is or ought to be or has been in the control or possession of the Licensee.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

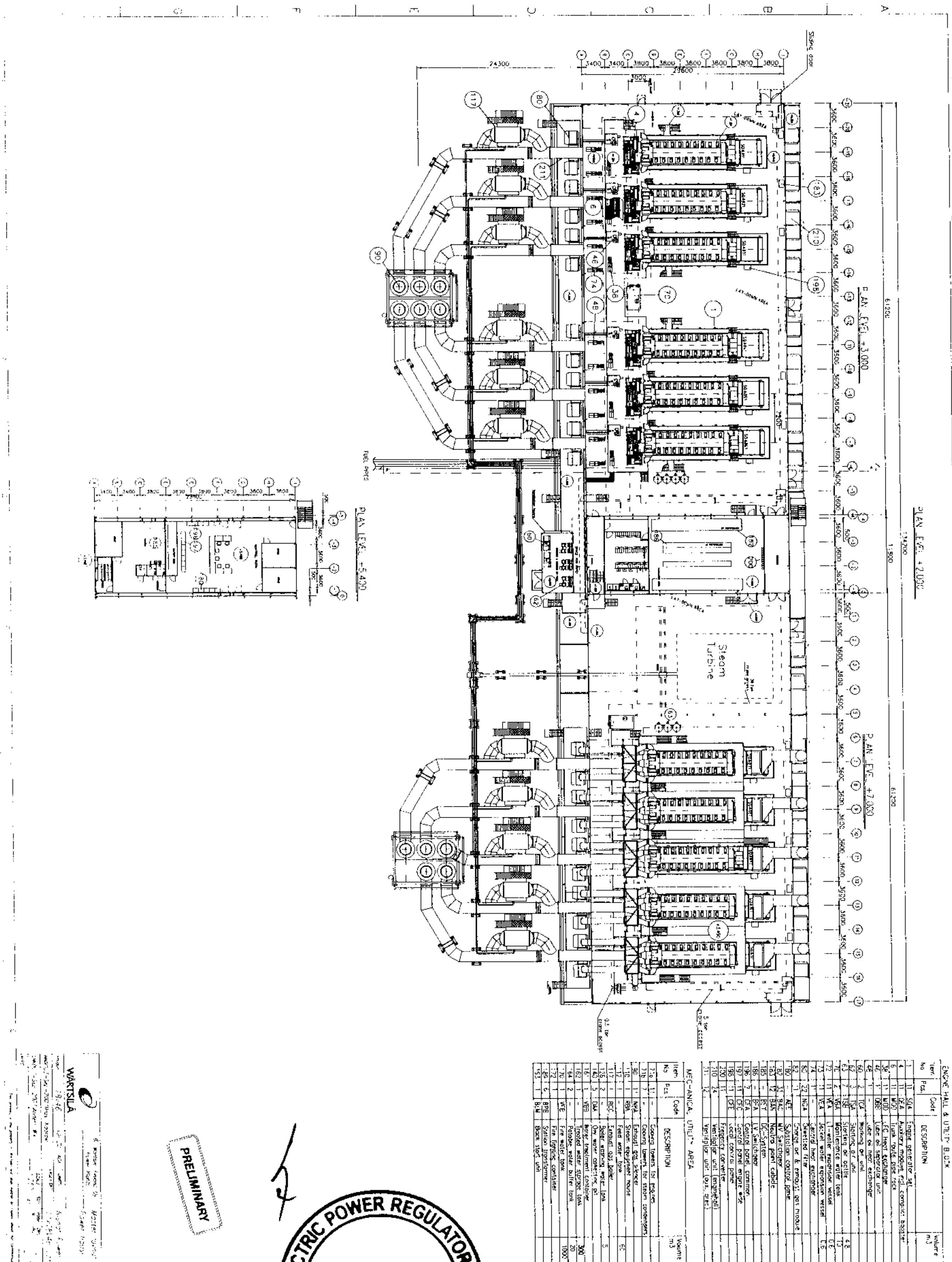
SCHEDULE-I

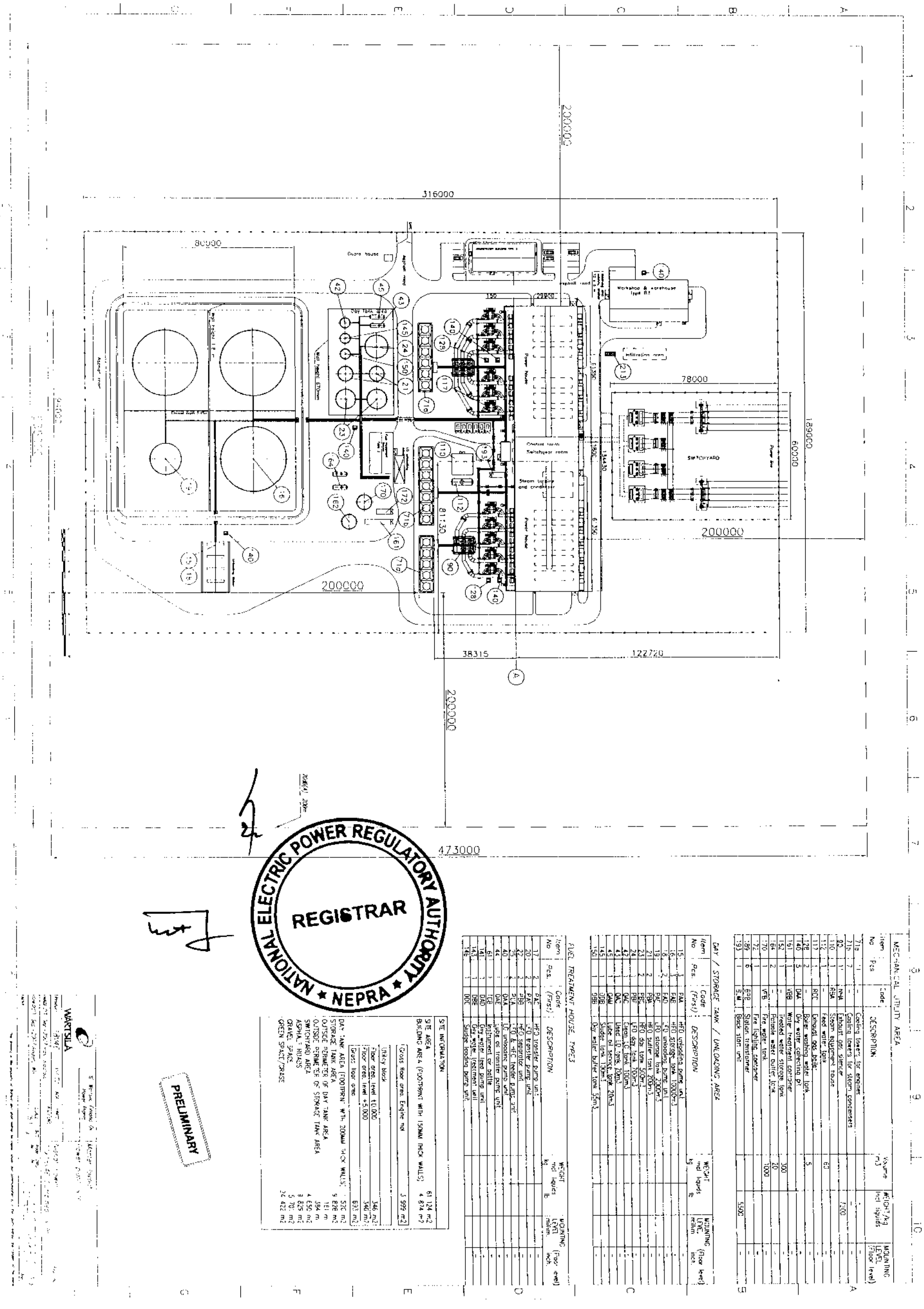
The location, size (capacity in MW) technology, interconnection arrangements, technical limits, technical functional specifications and other details specific to the Generation Facilities of the Licensee.

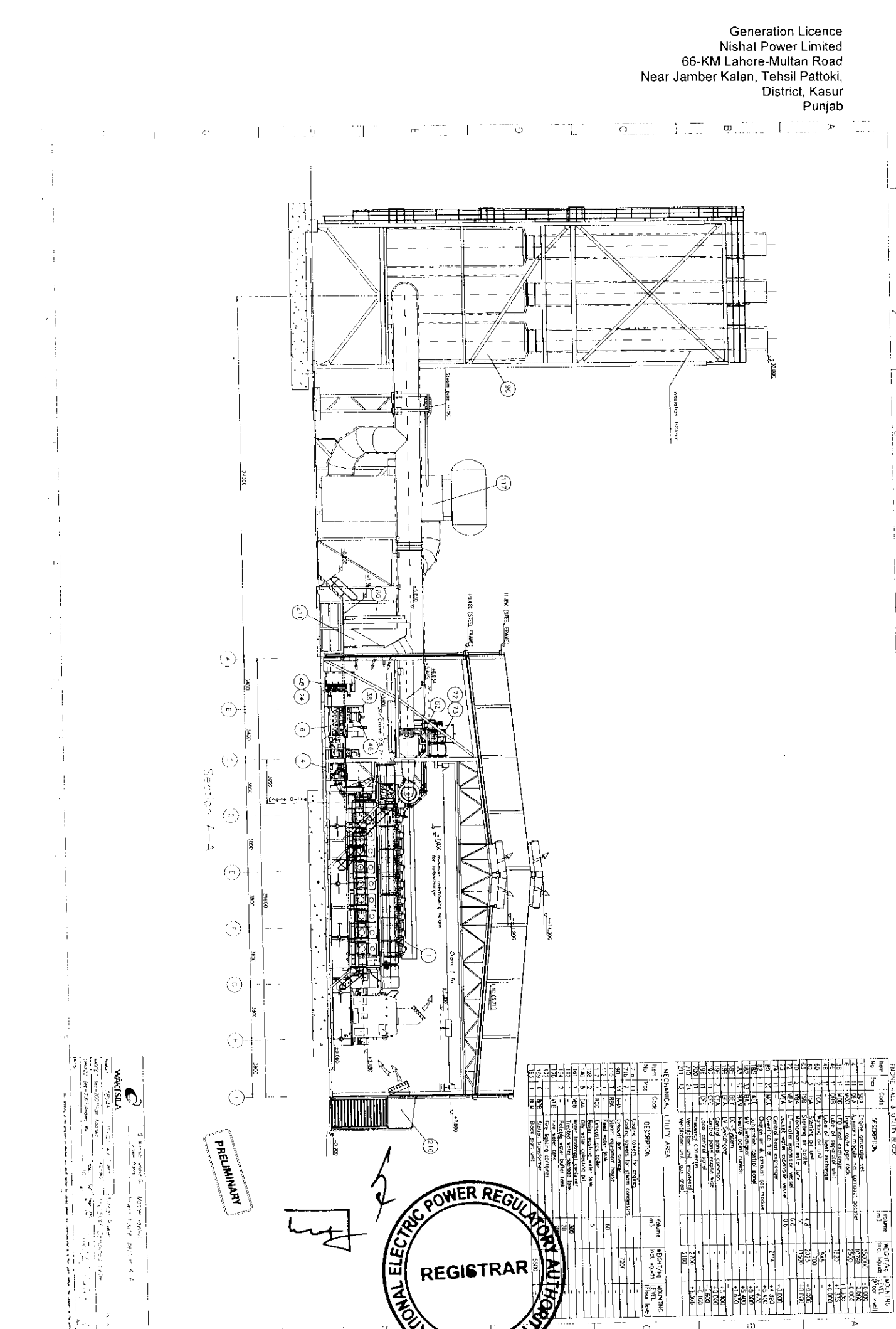
NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

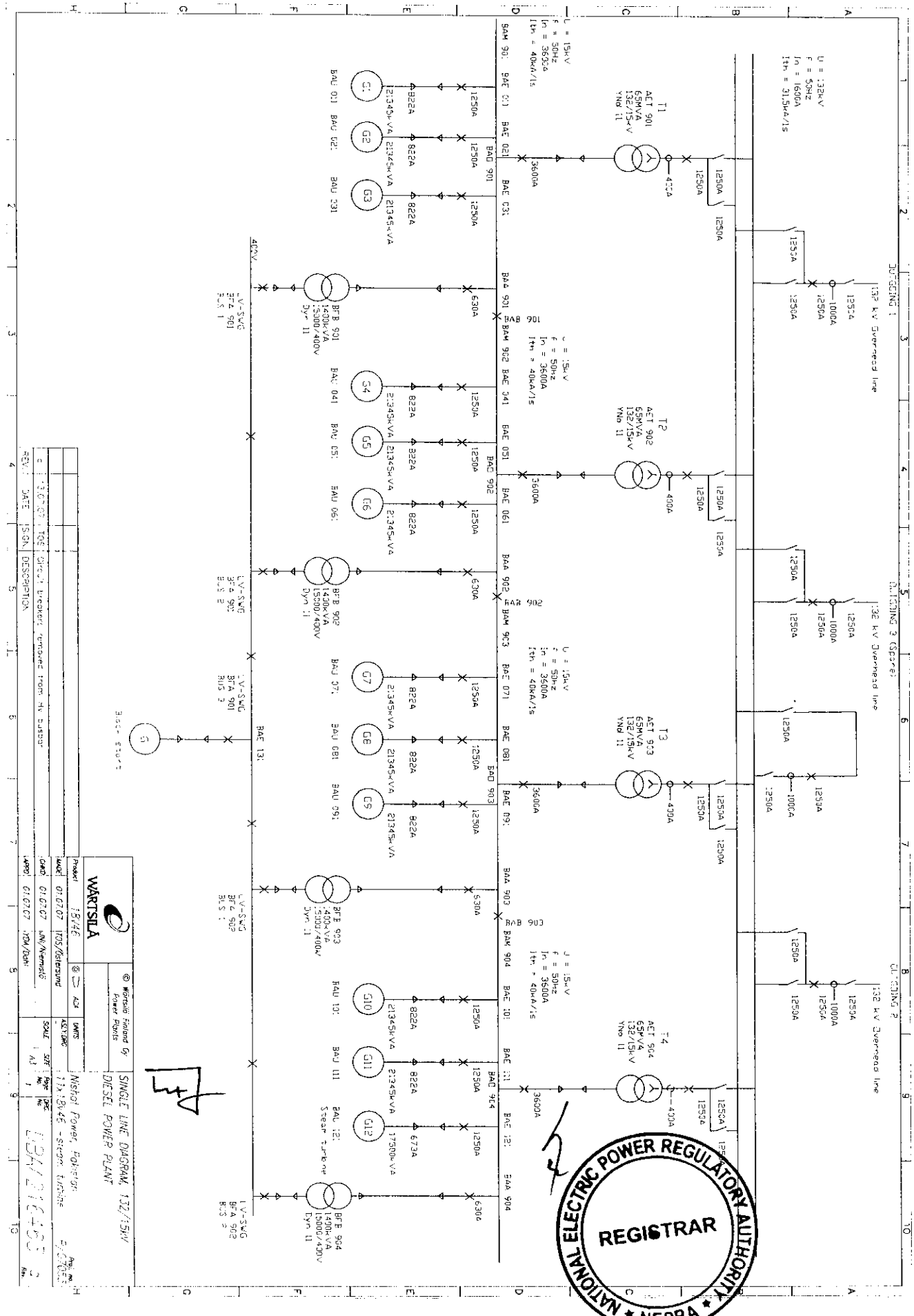


NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA


PLAN LEVEL +3.000
PLAN LEVEL +7.000
PLAN LEVEL +5.400
Steam Turbine
ENGINE HALL & UTILITY BLOCK
MECHANICAL UTILITY AREA
PRELIMINARY
WÄRTSILÄ
NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA


316000
200000
78000
473000
38315
122720
SWITCHYARD
NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA
PRELIMINARY
WÄRTSILÄ


Section A-A
PRELIMINARY
WARTSILA
ENGINE HALL & UTILITY BLOCK
MECHANICAL UTILITY AREA
NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
NEPRA
REGISTRAR



Plant Details*

1. General Information

i.	Name of Applicant	Nishat Power Limited
ii.	Registered/Business Office	53A, Lawrence Road, Lahore
iii.	Plant Location	66-kM, Multan Road, Jambar Kalan, District Kasur
iv.	Type of Generation Facility	Thermal Generation (Combined Cycle)

2. Plant Configuration

i.	Plant Size Installed Capacity (Gross ISO)	202.179 MW
ii.	Type of Technology	Reciprocating Engines
iii.	Number of Units/Size (MW)	Reciprocating Engines : 11 x 17.076 MW Steam Turbine : 1x 14.343 MW
iv.	Unit Make & Model	Reciprocating Engines – Wartsila 18V46 Steam Turbine – GE or Peter Brotherhood Ltd
v.	De-rated Capacity at Mean Site Conditions	200.00 MW
vi.	Auxiliary Consumption	4.74 MW
vii.	Commissioning and Commercial Operation date	December 31, 2009
viii.	Expected Life of the Facility from Commercial Operation Date	25 Years

* As provided by the Applicant

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY ★ NEPRA ★ REGISTRAR

3. Fuel Details

i.	Primary Fuel	RFO (Residual Fuel Oil)	
ii.	Back-up Fuel	High Speed Diesel (HSD)	
iii.	Fuel Source (Imported/Indigenous)	Both Local & Imported	
iv.	Fuel Supplier	Pakistan State Oil (PSO)/Shell, Pakistan	
v.	Supply Arrangement	Through Oil Tankers	
vi.	No of Storage Tanks	Primary Fuel (RFO)	Back-up Fuel (HSD)
		3	1
vii.	Storage Capacity of each Tank	Primary Fuel (RFO)	Back-up Fuel (HSD)
		10,000 M.Tons	2,000 M.Tons
viii.	Gross Storage	Primary Fuel (RFO)	Back-up Fuel (HSD)
		30,000 M.Tons	2,000 M.Tons

4. Emission Values

i.	SO_x	Primary Fuel (RFO)	Back-up Fuel (HSD)
		Max. 2030 mg/Nm^3	n.a.
ii.	NO_x	Max. 2000 mg/Nm^3	n.a.
iii.	CO	Max. 100 mg/Nm^3	n.a.
iv.	PM_{10}	Max. 110 mg/Nm^3	n.a.

5. Cooling System

i.	Cooling Water Source/Cycle	Water From Tube Wells/Closed Loop for main cooling system

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY ★ NEPRA ★ REGISTRAR

6. Plant Characteristics

i.	Generation Voltage	15 kV
ii.	Frequency	50 Hz
iii.	Power Factor	0.8 lagging to 0.95 leading
iv.	Automatic Generation Control	Yes
v.	Ramping Rate	50 minutes cold/ 35 minutes hot/ STG to full power output maximum 2 hours after all Gen. sets achieve full load
vi.	Time required to Synchronize to Grid and loading the complex to full load.	As per Dispatch Instruction

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

SCHEDULE-II

The net capacity of the Licensee's Generation Facilities

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY ★ NEPRA ★ REGISTRAR

SCHEDULE-II*

1.	Installed Capacity Gross ISO	202.179 MW
2.	De-rated Capacity at Mean Site Conditions	200.00 MW
3.	Auxiliary Consumption	4.74 MW
4.	Net Capacity of the Plant at Site Conditions	195.26 MW

Note

All the above figures are indicative as provided by the Licensee. The Net Capacity available to NTDC for dispatch and other purchasers will be determined through procedures contained in the Agreements or Grid Code.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

* As provided by the applicant

INTERCONNECTION SCHEME FOR THE POWER DISPERSAL OF THE PLANT*

The Power of the Power Plant shall be dispersed to system directly within LESCO load center at 132 KV voltage level as follows:-

- 132 KV D/C Transmission Line about 0.5 KM long on Rail Conductor for making In-Out of 132 KV Pattoki - C.P.Mill S/C Transmission Line at Nishat Power Limited.

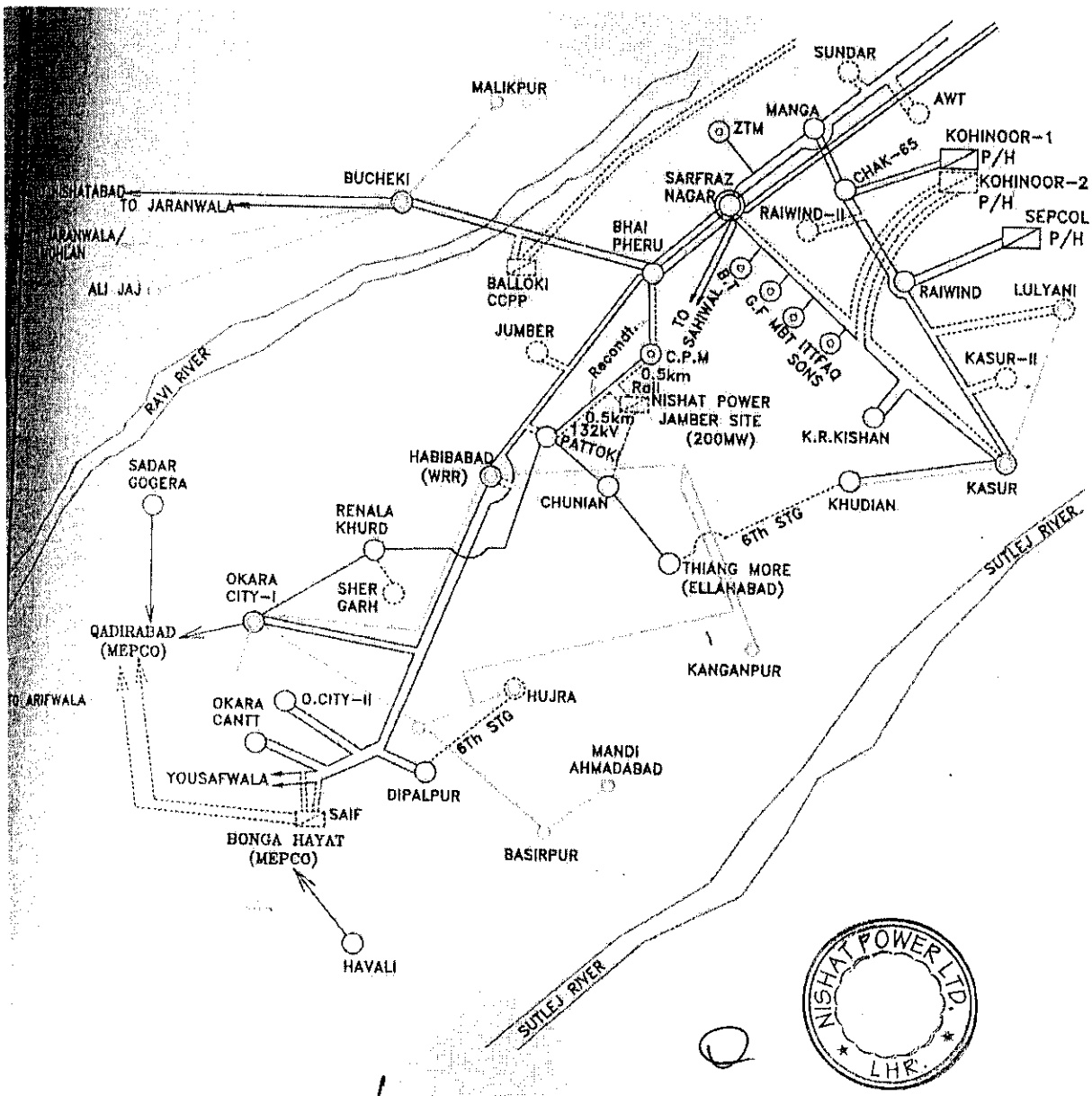
- 132 KV SDT Transmission Line about 18.5 KM long on Rail Conductor from Nishat Power to Chunian Sub-Station.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

* As provided in the Interconnection Study provided by Nishat Power Limited.

Generation Licence
Nishat Power Limited
66-KM Lahore-Multan Road
Near Jamber Kalan, Tehsil Pattoki,
District, Kasur
Punjab

132 KV Interconnection Arrangement for Dispersal of Power from 200 MW Nishat Power Limited

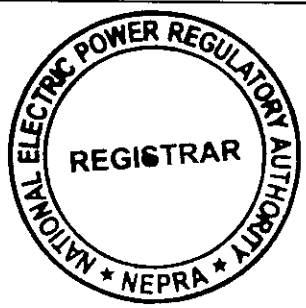


NISHAT POWER LTD. LHR.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

National Electric Power Regulatory Authority
NEPRA

Determination in the Matter of Grant of Generation Licence to Nishat Power Limited



September 6, 2007
Application No. LAG-94

Background

A number of Independent Power Generation Projects (IPPs) were initiated under "Policy for Power Generation 2002". The potential IPPs being set up under the Policy of 2002, based on indigenous fuel resource (i.e. Natural Gas) include Orient Power Limited (Balloki, Punjab), Star Power Limited (Dharki, Sindh), Saif Power Limited (Sahiwal, Punjab), Sapphire (Muridkee, Punjab), Foundation Power Limited (Dharki, Sindh), Halmore Power Limited (Bhakhi, Punjab). Tariff has been determined and Licences granted in respect of these IPPs.

2. Shortage of committed Gas expected for future projects and unusual growth in demand for electricity was creating a gap between supply and demand for electricity during 2007 to 2009. Government of Pakistan (GoP), consequently allowed the gap to be met through Furnace Oil based projects for expeditious acquisition of generation capacity to cover the anticipated shortage.

3. In order to expeditiously process the induction of new capacity, the Economic Coordination Committee (ECC) approved a fast track based plan to allow PPIB to implement "Thermal fuel based Projects", including Residual Fuel Oil (RFO) based Reciprocating Engine Technology, to the extent of bridging the shortage of 2225 MW between demand and supply. Pre-qualification, submission of feasibility study and issuance of Letter of Interest (LOI) required under the Power Policy of 2002 was allowed to be relaxed for these Fast Track projects.

4. Under the Fast Track initiative, PPIB recommended the proposal of Nishat Group Limited (NGL) for setting up a 200 MW power plant based on Residual Fuel Oil (RFO) to be located near Lahore, Punjab. In order to, carry out the project implementation, NGL incorporated a separate company in the name of Nishat Power Limited (NPL). PPIB advised NPL to approach NEPRA for the grant of Generation Licence.

Filing of Application

5. NPL in accordance with Section 15 of Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997), filed an application on January 16, 2007 with NEPRA, requesting the grant of a Generation Licence. Authority admitted the application of NPL for the grant of Generation Licence on August 1, 2007.

6. Pursuant to Regulation-8 of the NEPRA Licensing (Application and Modification Procedure) Regulation, 1999, a brief of Prospectus and Notices of Admission were published in daily newspapers of August 3, 2007, for seeking comments from the interested/affected parties and general public.

7. After considering the received comments, the Authority decided to hold a hearing/conference on August 29, 2007, which was attended by the representatives of the applicant and other organizations including representatives of PPIB, NTDC, Ministry of Privatization & Investment (Privatization Commission), Ministry of Water and Power, Atlas Power Limited, Shell Pakistan Limited, Pakistan State Oil Limited (PSO) and Environmental Protection Agency (EPA-Punjab).

Proceedings of Hearing

8. During the hearing NPL presented salient features of the project and explained that the proposed plant would be operated on RFO fuel and it would have a total installed capacity of 202.179 MW (Gross) at ISO

conditions. It was further stated that the power plant would be consisting of eleven (11) Reciprocating Engines each having a capacity of 17.076 MW, eleven (11) Heat Recovery Steam Generator (HRSG) and one (01) Steam Turbine of 14.343 MW.

9. It was described that the electricity generated from the proposed power plant would be acquired by Central Power Purchasing Agency (CPPA) on behalf of the Ex-WAPDA DISCOs. It was also informed that CPPA vide its letter No. CPPA/CE-IV/10018, dated August 17, 2007 had already requested for authorization of procurement of power from NPL to the extent of 200.274 MW on behalf of Ex-WAPDA DISCOs (and Authority granted the permission vide its decision of September 3, 2007). Regarding the anticipated Commercial Operation Date of the plant, it was informed that the project would be operational by December 31, 2009.

10. The applicant presented its case and other participants/interested persons were also heard during the hearing. The participants proffered their comments and submitted arguments supporting their stance. The following relevant salient points were discussed during the hearing and commented on by other participants:

- Site location, availability/procurement of land for the plant and confirmation of suitability by Central Power Purchasing Agency (CPPA) in the absence of Feasibility study of the power plant.
- Confirmation of the Supplier to make available the fuel.
- Selection of the Specific Technology (i.e. WARTSILA Diesel Engines) for the Power Plant.
- De-rated Capacity of the Power Plant, as given in the Generation Licence Application.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

- Availability/Reliability of Plant Operation.

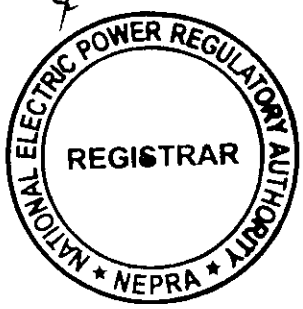
- Interconnection and Transmission arrangement for dispersal of power from the power plant and the cost of the dispersal arrangement.

- Project Implementation Plan to comply with the Commercial Operating date, to qualify for a Fast Track Project.

- Useful Life of the Power Plant Equipment and Term of the Licence.

- Availability of Water for the Power Plant.

- Compliance with Environmental Standards.



11. NPL informed that the location of the site of the proposed power plant is at Jumber Kalan in Tehsil Pattoki in District Kasur, about 66-Kilometer from Lahore on the main Lahore-Multan Road. NPL has purchased about 30 Acres of land for the proposed power plant. The existing infrastructure facilities including the availability of main road, location of main oil depot of the potential fuel supplier and availability of existing electrical infrastructure around the selected site has made it ideal location for such a venture.

12. Regarding the supply of the required fuel (RFO) for the plant operation, NPL informed that negotiations were underway with Pakistan State Oil and Shell Pakistan and it was expected that a long term Fuel Supply Agreement to supply RFO would be reached soon.

13. About the selection of the WARTSILA technology for the proposed power plant, NPL informed that WARTSILA was one of the leading suppliers of power plants for power generation. It had offered power plants for base

load, peaking and industrial purposes. In all the above mentioned categories, WARTSILA had held a strong position worldwide. Further, WARTISAL also had a major share of the power market based on reciprocating engine technology in Pakistan. WARTSIAL had formulated a comprehensive network of sales and services making it one of the best choices for the proposed power plant. The performances of the WARTISAL engines could be gauged from the fact that most of the existing reciprocating technology based Independent Power Plants operating in Pakistan were based on WARTISAL engines. Further, the proposed WARTSILA engines had the capability to be converted to duel fuel operation, i.e. RFO and Natural Gas. Keeping in the view the facts, NPL was confident that WARTSILA technology was much superior to its competitors in terms of operation and reliability. On account of all these factors, NPL decided to select these engines being one of the best in the world. Regarding the provision of the duel fuel engines at this stage, NPL stated that on account of the fact that the efficiency of the duel fired engines having Natural Gas as the first priority fuel when operated on RFO, results in significant decline in efficiency. On account of this very reason this option was not considered at this stage. However, if at some stage the gas was made available to the power sector including this plant, priority would be given to operate the plant on Natural Gas for which necessary alterations in the hardware of the proposed WARTSIAL engines would be made.

14. NPL further elaborated that installed capacity of the power plant at ISO conditions would be 202.179 MW which would be de-rated to 200.00 MW at mean site conditions and the net capacity of the plant would be 195.26 MW after allowing the auxiliary consumption of 4.74 MW. It was also explained that that Annual Plant availability for this plant would be 88% which was in line with the decision of August 2, 2007 of the Authority.

15. NPL clarified that the power generated by the proposed power plant would be disbursed by making an In-Out arrangement measuring about 0.5 KM of Rail Conductor from the existing 132 KV S/C Pattoki - C.P.Mills at the proposed Power Plant. Apart from this In-Out arrangement, another 132

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

KV SDT Transmission Line measuring about 18.5 KM in length on Rail Conductor from the proposed Nishat Power Limited power plant to Chunian Sub-Station will also be constructed for the dispersal of power from the complex. NPL further clarified that the proposed Interconnection and Transmission facilities would be constructed and maintained by National Transmission and Dispatch Company (NTDC) as per Policy Guideline of the Government of Pakistan.

16. NPL also informed that a comprehensive Project Implementation Plan had already been develop and all efforts were being made that all the time limits were adhered to so that the plant would be achieving the Commercial Operation Date (COD) by December 31, 2009. NPL also informed that the term of the Licence requested was for 25 years.

17. Regarding the availability of water, NPL informed that Tube wells would be installed in the premises of the proposed project site to meet the water requirement of the power plant however, as a back arrangement options are being explored to have water from the Balloki-Sulemanki (BS) Link Canal for which necessary permission would be obtained from the concerned Authorities.

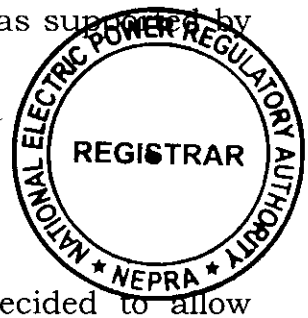
18. Further, NPL also informed that the services of Envirotech had already been appointed to carry out the required Environmental Impact Assessment for the project. The effluent from the power plant would be disposed in accordance with World Bank and Environmental Protection Agency Guidelines, making the project completely compliant with Environmental standards.

19. NPL also clarified that services of Imagtech has also been engaged to carry out the Geo-technical Investigation, Topographical Survey, Seismic, Geological and Earth Resistivity Studies.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

Comments of Applicant on Draft Gen. Licence.

20. Draft Generation Licence proposed to be granted to NPL was circulated to all stakeholders including the applicant (i.e. NPL). No objections were received earlier or proffered during the hearing with respect to the Terms and Conditions of the proposed Draft Generation Licence by any of the stakeholders. The grant of Generation Licence was supported by all the stakeholders who provided comments.



Grant of Generation Licence.

21. ECC vide its decision of October 31, 2006 had decided to allow thermal (Fossil Fuel) based power generation on a fast track basis to meet the imminent demand of 2007/2008 and onwards, in order to avoid outages/blackouts. The PPIB had been directed to issue LOIs to the extent of meeting the gap in supply/demand. In view of the absence of a firm commitment of gas availability PPIB had included RFO based Reciprocating Engine technology in the basket of procurement to meet the immediate demand. The instant case had been referred by PPIB vide its communication of 1(102) PPIB-1031/05/PRJ, dated January 16, 2006.

22. In view of the prevailing situation of non-availability of natural gas for any of new power projects, the imminent shortage of Generating Capacity with respect to Peak Demand, lesser construction/commissioning lead time of reciprocating engines compared to other technologies, the reluctance of sponsors to employ Gas Turbine for burning RFO fuel mainly due to operational problems, the Authority considers the proposed project as acceptable under the given circumstances.

23. The Authority has already determined the tariff for NPL vide its decision of March 9, 2007 and April 19, 2007 for operation on RFO. The net capacity has accordingly been established as 195.26 MW after allowing de-rating at Mean site conditions of 200.00 MW and auxiliary consumption of 4.74 MW from an Installed Capacity Gross ISO of 202.179 MW.

24. In view of the above the Authority hereby decides to approve the grant of Generation Licence to Nishat Power Limited, in the terms set out in the attached Licence as annexed to this determination. The grant of such a licence would be subject to the provisions contained in the NEPRA Act and relevant rules framed there under.

Authority

Nasiruddin Ahmed
Member

Zafar Ali Khan
Member

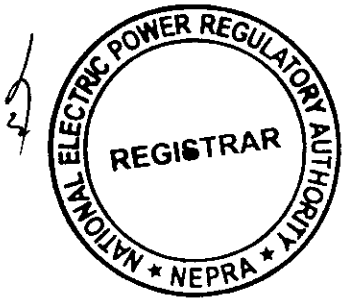
Abdul Rahim Khan
Member/Vice Chairman

Lt. Gen. (R) Saeed uz Zafar
Chairman

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

National Electric Power Regulatory Authority
NEPRA

Determination in the Matter of Grant of Generation Licence to Nishat Power Limited



September 6, 2007
Application No. LAG-94

Background

A number of Independent Power Generation Projects (IPPs) were initiated under "Policy for Power Generation 2002". The potential IPPs being set up under the Policy of 2002, based on indigenous fuel resource (i.e. Natural Gas) include Orient Power Limited (Balloki, Punjab), Star Power Limited (Dharki, Sindh), Saif Power Limited (Sahiwal, Punjab), Sapphire (Muridkee, Punjab), Foundation Power Limited (Dharki, Sindh), Halmore Power Limited (Bhakhi, Punjab). Tariff has been determined and Licences granted in respect of these IPPs.

2. Shortage of committed Gas expected for future projects and unusual growth in demand for electricity was creating a gap between supply and demand for electricity during 2007 to 2009. Government of Pakistan (GoP), consequently allowed the gap to be met through Furnace Oil based projects for expeditious acquisition of generation capacity to cover the anticipated shortage.

3. In order to expeditiously process the induction of new capacity, the Economic Coordination Committee (ECC) approved a fast track based plan to allow PPIB to implement "Thermal fuel based Projects", including Residual Fuel Oil (RFO) based Reciprocating Engine Technology, to the extent of bridging the shortage of 2225 MW between demand and supply. Pre-qualification, submission of feasibility study and issuance of Letter of Interest (LOI) required under the Power Policy of 2002 was allowed to be relaxed for these Fast Track projects.

4. Under the Fast Track initiative, PPIB recommended the proposal of Nishat Group Limited (NGL) for setting up a 200 MW power plant based on Residual Fuel Oil (RFO) to be located near Lahore, Punjab. In order to, carry out the project implementation, NGL incorporated a separate company in the name of Nishat Power Limited (NPL). PPIB advised NPL to approach NEPRA for the grant of Generation Licence.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY ★ NEPRA ★ REGISTRAR

Filing of Application

5. NPL in accordance with Section 15 of Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997), filed an application on January 16, 2007 with NEPRA, requesting the grant of a Generation Licence. Authority admitted the application of NPL for the grant of Generation Licence on August 1, 2007.

6. Pursuant to Regulation-8 of the NEPRA Licensing (Application and Modification Procedure) Regulation, 1999, a brief of Prospectus and Notices of Admission were published in daily newspapers of August 3, 2007, for seeking comments from the interested/affected parties and general public.

7. After considering the received comments, the Authority decided to hold a hearing/conference on August 29, 2007, which was attended by the representatives of the applicant and other organizations including representatives of PPIB, NTDC, Ministry of Privatization & Investment (Privatization Commission), Ministry of Water and Power, Atlas Power Limited, Shell Pakistan Limited, Pakistan State Oil Limited (PSO) and Environmental Protection Agency (EPA-Punjab).

Proceedings of Hearing

8. During the hearing NPL presented salient features of the project and explained that the proposed plant would be operated on RFO fuel and it would have a total installed capacity of 202.179 MW (Gross) at ISO

conditions. It was further stated that the power plant would be consisting of eleven (11) Reciprocating Engines each having a capacity of 17.076 MW, eleven (11) Heat Recovery Steam Generator (HRSG) and one (01) Steam Turbine of 14.343 MW.

9. It was described that the electricity generated from the proposed power plant would be acquired by Central Power Purchasing Agency (CPPA) on behalf of the Ex-WAPDA DISCOs. It was also informed that CPPA vide its letter No. CPPA/CE-IV/10018, dated August 17, 2007 had already requested for authorization of procurement of power from NPL to the extent of 200.274 MW on behalf of Ex-WAPDA DISCOs (and Authority granted the permission vide its decision of September 3, 2007). Regarding the anticipated Commercial Operation Date of the plant, it was informed that the project would be operational by December 31, 2009.

10. The applicant presented its case and other participants/interested persons were also heard during the hearing. The participants proffered their comments and submitted arguments supporting their stance. The following relevant salient points were discussed during the hearing and commented on by other participants:

- Site location, availability/procurement of land for the plant and confirmation of suitability by Central Power Purchasing Agency (CPPA) in the absence of Feasibility study of the power plant.
- Confirmation of the Supplier to make available the fuel.
- Selection of the Specific Technology (i.e. WARTSILA Diesel Engines) for the Power Plant.
- De-rated Capacity of the Power Plant, as given in the Generation Licence Application.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

- Availability/Reliability of Plant Operation.

- Interconnection and Transmission arrangement for dispersal of power from the power plant and the cost of the dispersal arrangement.

- Project Implementation Plan to comply with the Commercial Operating date, to qualify for a Fast Track Project.

- Useful Life of the Power Plant Equipment and Term of the Licence.

- Availability of Water for the Power Plant.

- Compliance with Environmental Standards.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY ★ NEPRA ★ REGISTRAR

11. NPL informed that the location of the site of the proposed power plant is at Jumber Kalan in Tehsil Pattoki in District Kasur, about 66-Kilometer from Lahore on the main Lahore-Multan Road. NPL has purchased about 30 Acres of land for the proposed power plant. The existing infrastructure facilities including the availability of main road, location of main oil depot of the potential fuel supplier and availability of existing electrical infrastructure around the selected site has made it ideal location for such a venture.

12. Regarding the supply of the required fuel (RFO) for the plant operation, NPL informed that negotiations were underway with Pakistan State Oil and Shell Pakistan and it was expected that a long term Fuel Supply Agreement to supply RFO would be reached soon.

13. About the selection of the WARTSILA technology for the proposed power plant, NPL informed that WARTSILA was one of the leading suppliers of power plants for power generation. It had offered power plants for base

load, peaking and industrial purposes. In all the above mentioned categories, WARTSILA had held a strong position worldwide. Further, WARTISAL also had a major share of the power market based on reciprocating engine technology in Pakistan. WARTSIAL had formulated a comprehensive network of sales and services making it one of the best choices for the proposed power plant. The performances of the WARTISAL engines could be gauged from the fact that most of the existing reciprocating technology based Independent Power Plants operating in Pakistan were based on WARTISAL engines. Further, the proposed WARTSILA engines had the capability to be converted to duel fuel operation, i.e. RFO and Natural Gas. Keeping in the view the facts, NPL was confident that WARTSILA technology was much superior to its competitors in terms of operation and reliability. On account of all these factors, NPL decided to select these engines being one of the best in the world. Regarding the provision of the duel fuel engines at this stage, NPL stated that on account of the fact that the efficiency of the duel fired engines having Natural Gas as the first priority fuel when operated on RFO, results in significant decline in efficiency. On account of this very reason this option was not considered at this stage. However, if at some stage the gas was made available to the power sector including this plant, priority would be given to operate the plant on Natural Gas for which necessary alterations in the hardware of the proposed WARTSIAL engines would be made.

14. NPL further elaborated that installed capacity of the power plant at ISO conditions would be 202.179 MW which would be de-rated to 200.00 MW at mean site conditions and the net capacity of the plant would be 195.26 MW after allowing the auxiliary consumption of 4.74 MW. It was also explained that that Annual Plant availability for this plant would be 88% which was in line with the decision of August 2, 2007 of the Authority.

15. NPL clarified that the power generated by the proposed power plant would be disbursed by making an In-Out arrangement measuring about 0.5 [illegible] on Rail Conductor from the existing 132 KV S/C Pattoki - C.P.Mills at the proposed Power Plant. Apart from this In-Out arrangement, another 132

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

KV SDT Transmission Line measuring about 18.5 KM in length on Rail Conductor from the proposed Nishat Power Limited power plant to Chunian Sub-Station will also be constructed for the dispersal of power from the complex. NPL further clarified that the proposed Interconnection and Transmission facilities would be constructed and maintained by National Transmission and Dispatch Company (NTDC) as per Policy Guideline of the Government of Pakistan.

16. NPL also informed that a comprehensive Project Implementation Plan had already been develop and all efforts were being made that all the time limits were adhered to so that the plant would be achieving the Commercial Operation Date (COD) by December 31, 2009. NPL also informed that the term of the Licence requested was for 25 years.

17. Regarding the availability of water, NPL informed that Tube wells would be installed in the premises of the proposed project site to meet the water requirement of the power plant however, as a back arrangement options are being explored to have water from the Balloki-Sulemanki (BS) Link Canal for which necessary permission would be obtained from the concerned Authorities.

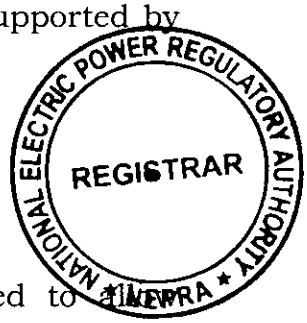
18. Further, NPL also informed that the services of Envirotech had already been appointed to carry out the required Environmental Impact Assessment for the project. The effluent from the power plant would be disposed in accordance with World Bank and Environmental Protection Agency Guidelines, making the project completely compliant with Environmental standards.

19. NPL also clarified that services of Imagtech has also been engaged to carry out the Geo-technical Investigation, Topographical Survey, Seismic, Geological and Earth Resistivity Studies.

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA

Comments of Applicant on Draft Gen. Licence.

20. Draft Generation Licence proposed to be granted to NPL was circulated to all stakeholders including the applicant (i.e. NPL). No objections were received earlier or proffered during the hearing with respect to the Terms and Conditions of the proposed Draft Generation Licence by any of the stakeholders. The grant of Generation Licence was supported by all the stakeholders who provided comments.



Grant of Generation Licence.

21. ECC vide its decision of October 31, 2006 had decided to allow thermal (Fossil Fuel) based power generation on a fast track basis to meet the imminent demand of 2007/2008 and onwards, in order to avoid outages/blackouts. The PPIB had been directed to issue LOIs to the extent of meeting the gap in supply/demand. In view of the absence of a firm commitment of gas availability PPIB had included RFO based Reciprocating Engine technology in the basket of procurement to meet the immediate demand. The instant case had been referred by PPIB vide its communication of 1(102) PPIB-1031/05/PRJ, dated January 16, 2006.

22. In view of the prevailing situation of non-availability of natural gas for any of new power projects, the imminent shortage of Generating Capacity with respect to Peak Demand, lesser construction/commissioning lead time of reciprocating engines compared to other technologies, the reluctance of sponsors to employ Gas Turbine for burning RFO fuel mainly due to operational problems, the Authority considers the proposed project as acceptable under the given circumstances.

23. The Authority has already determined the tariff for NPL vide its decision of March 9, 2007 and April 19, 2007 for operation on RFO. The net capacity has accordingly been established as 195.26 MW after allowing de-rating at Mean site conditions of 200.00 MW and auxiliary consumption of 4.74 MW from an Installed Capacity Gross ISO of 202.179 MW.

24. In view of the above the Authority hereby decides to approve the grant of Generation Licence to Nishat Power Limited, in the terms set out in the attached Licence as annexed to this determination. The grant of such a licence would be subject to the provisions contained in the NEPRA Act and relevant rules framed there under.

Authority

Nasiruddin Ahmed
Member

Zafar Ali Khan
Member

Abdul Rahim Khan
Member/Vice Chairman

Lt. Gen. (R) Saeed uz Zafar
Chairman

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY
REGISTRAR
NEPRA