



**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-87/2406-07

May 30, 2007

Chief Executive Officer  
Eastern Power Company Ltd. (EPCO)  
Office No. 4, 2<sup>nd</sup> Floor,  
Al-Babar Centre, F-8 Markaz,  
Islamabad

Subject: **Generation Licence No. IGSP/12/2007**  
**Licence Application No. LAG-87**  
**Eastern Power Company Limited (EPCO)**


Please refer to your letter no. nil, dated November 13, 2006 to NEPRA for a Generation Licence.

2. Enclosed here is Generation Licence No. IGSP/12/2007 granted by the Authority to Eastern Power Company Limited (EPCO). 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



  
30.05.07.  
(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/12/2007

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:

Eastern Power Company Limited

Incorporated under the Companies Ordinance, 1984  
Under Certificate of Incorporation

No. 00000006029/20061101, Dated November 15, 2006

For its Plant located at 4-KM from Pasrur City, District Sialkot

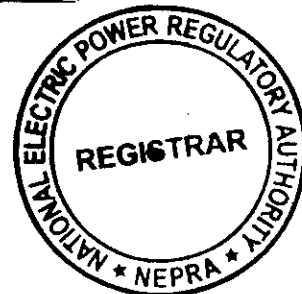
(Installed Capacity: 152.475 MW Gross ISO)

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

Given under my hand this 30<sup>TH</sup> day of MAY, Two Thousand & Seven, and expires on 30<sup>TH</sup> day of OCTOBER, Two Thousand &

TWENTY EIGHT

  
\_\_\_\_\_  
Registrar





## **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 Eastern Power Company 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.

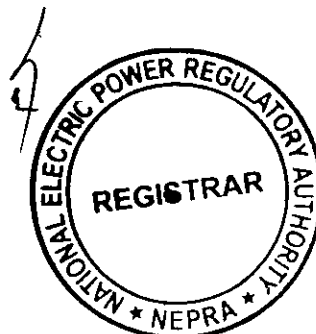
## **Article-2** **Application of Rules**

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.





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 (20) 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.

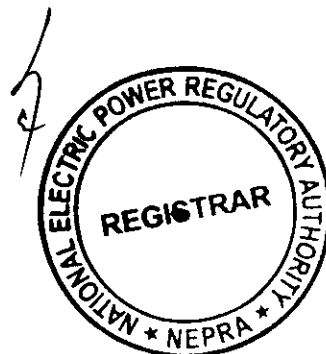
**Article-5**  
**Licence fee**

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.

*Handwritten signatures and initials.*



**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**

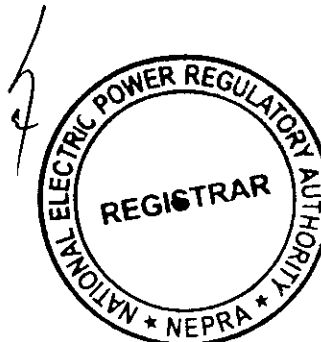
For the purpose of sub-rule (1) of Rule 19 of the Rules, copies of records and data shall be retained in standard and electronic form and all such records and data shall, subject to just claims of confidentiality, be accessible by authorized officers of the Authority.

**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.

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W  
G



**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.

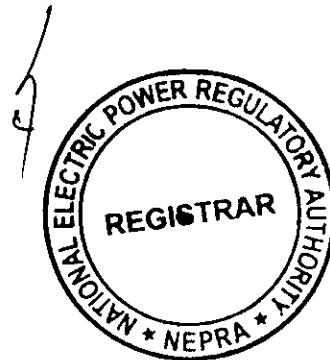
**Article-11**

**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.

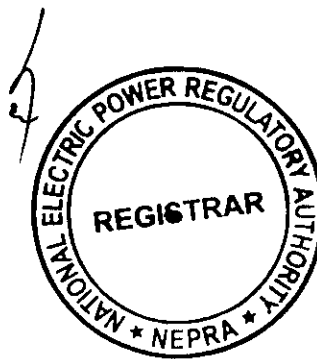
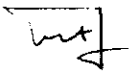
11.2 The Licensee shall be subject to such penalties as may be specified in the relevant rules made by the Authority for failure to furnish such information as may be required from time to time by the Authority and which is or ought to be or have been in the control or possession of the Licensee.

*[Handwritten signatures and initials]*

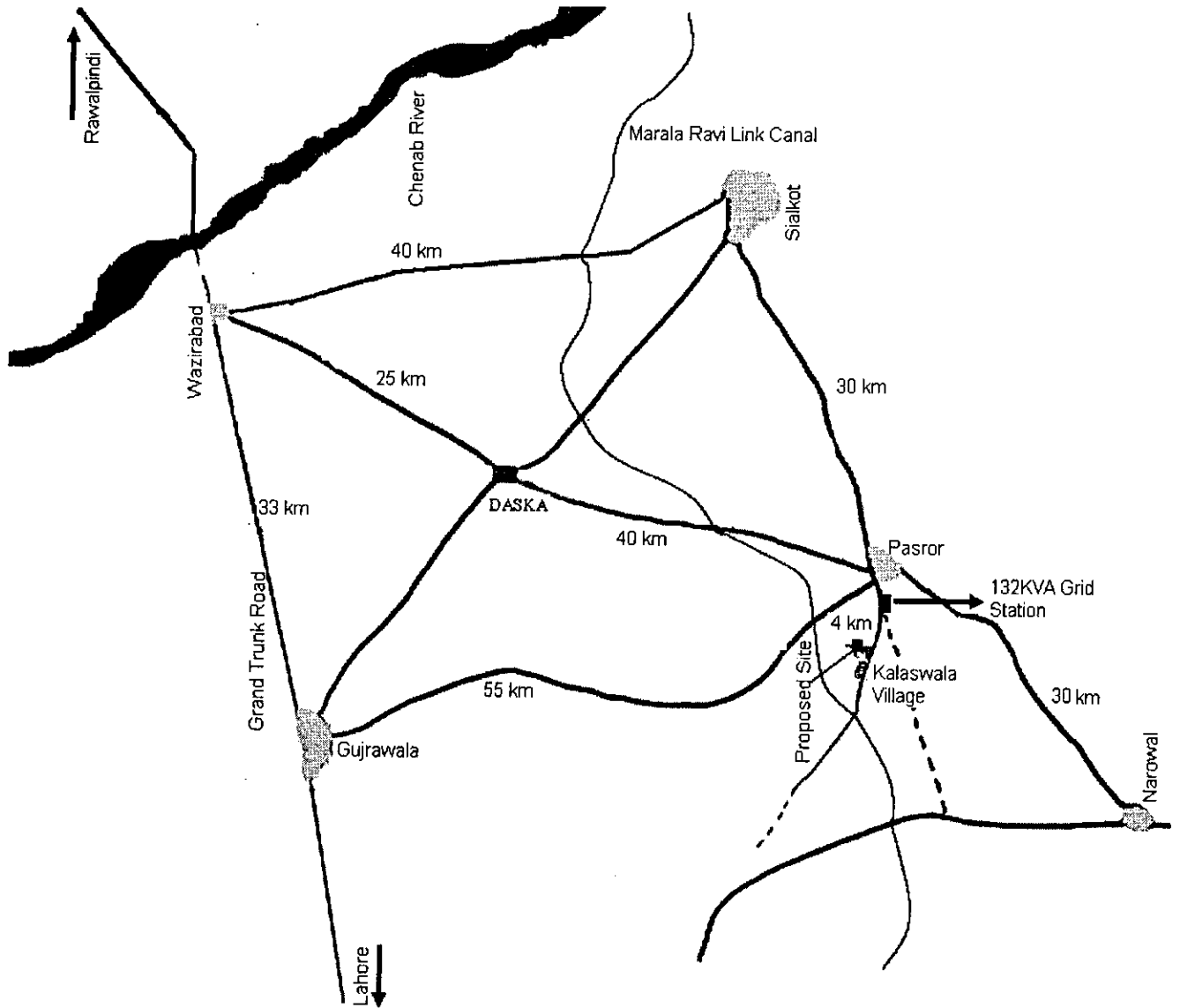


## SCHEDULE-I

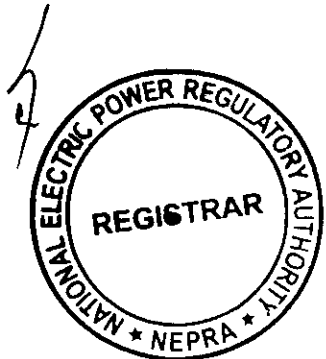
The location, size (capacity in MW) technology interconnection arrangements, technical limits technical functional specifications and other details specific to the generation facilities of the licensee.



## Site Map of Eastern Power Company Limited (EPCO)

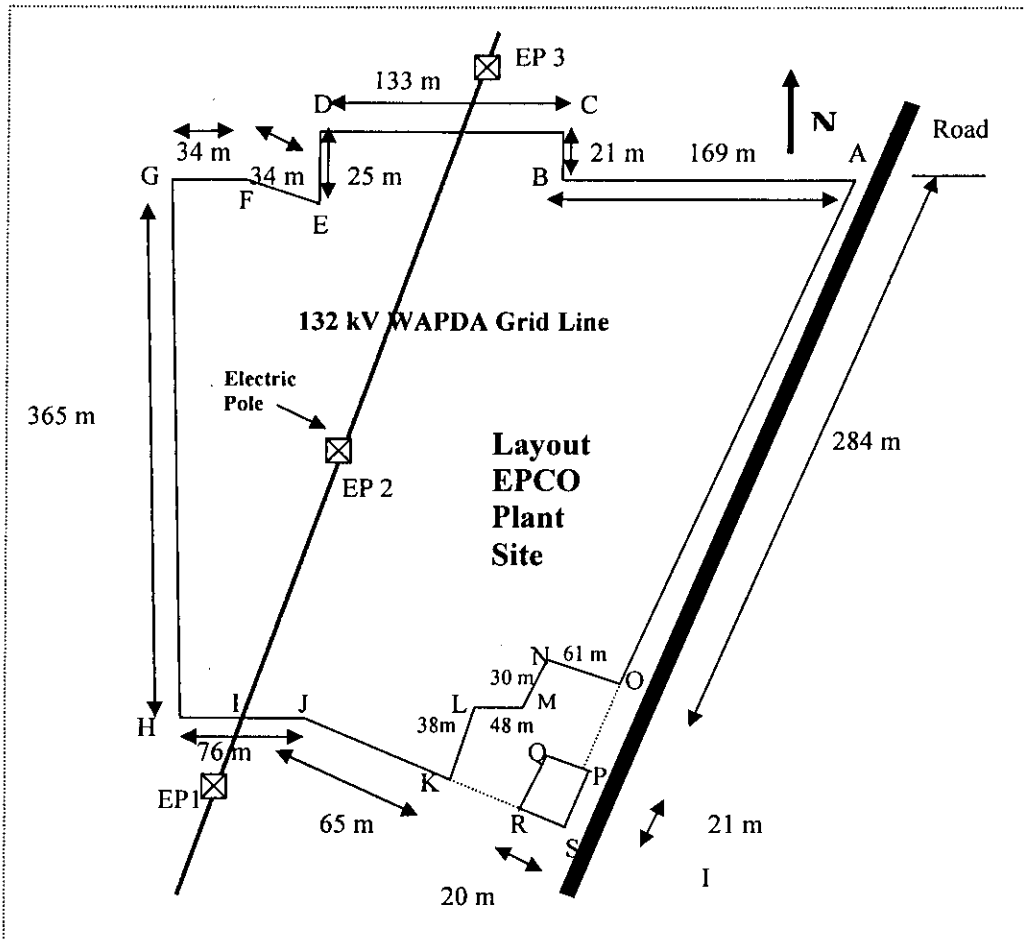


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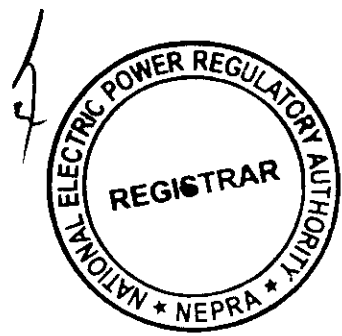


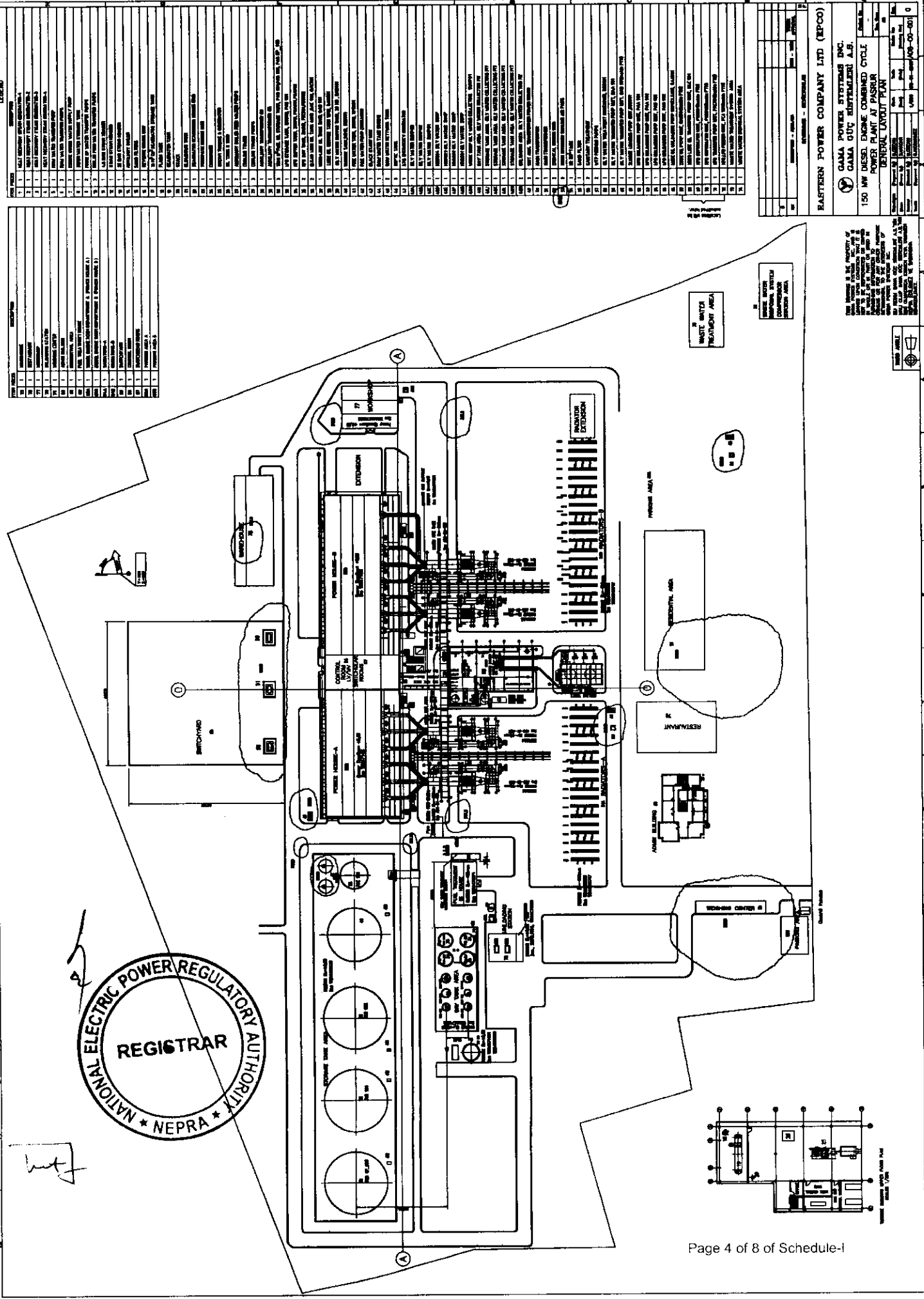
**EPCO Site layout with Co-ordinates**



Points	Co-ordinates	Points	Co-ordinates
A	N 32° 13.137::: E 074 39.420	L	N 32° 12.960::: E 074 39.272
B	N 32° 13.138::: E 074 39.312	M	N 32° 12.959::: E 074 39.302
C	N 32° 13.148::: E 074 39.312	N	N 32° 12.974::: E 074 39.308
D	N 32° 13.149::: E 074 39.228	O	N 32° 12.965::: E 074 39.344
E	N 32° 13.136::: E 074 39.227	P	N 32° 12.922::: E 074 39.327
F	N 32° 13.139::: E 074 39.205	Q	N 32° 12.928::: E 074 39.317
G	N 32° 13.137::: E 074 39.184	R	N 32° 12.918::: E 074 39.317
H	N 32° 12.946::: E 074 39.183	S	N 32° 12.929::: E 074 39.270
I	N 32° 12.943::: E 074 39.215	EP 1	N 32° 12.892::: E 074 39.202
J	N 32° 12.944::: E 074 39.233	EP 2	N 32° 13.025::: E 074 39.234
K	N 32° 12.929::: E 074 39.270	EP 3	N 32° 13.171::: E 074 39.269

*Handwritten signatures and marks.*

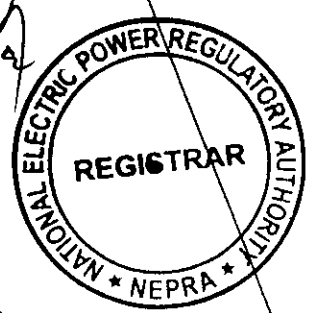




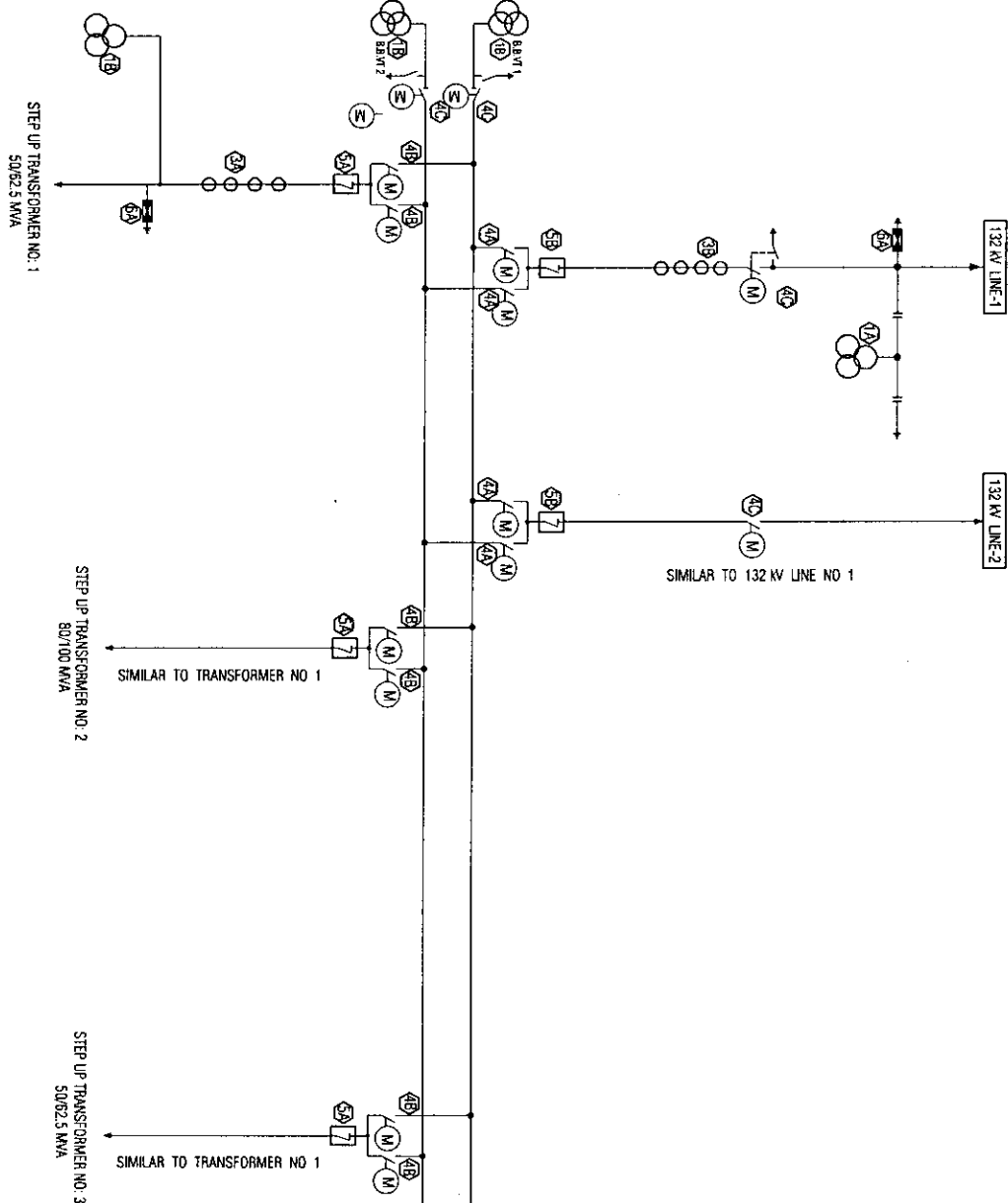
**LEGEND**

1	150 MW DIESEL ENGINE COMBINED CYCLE
2	GENERATOR EXTENSION
3	STEAM TURBINE
4	CONDENSER
5	COOLING WATER TOWER
6	WATER TREATMENT PLANT
7	WATER STORAGE TANK
8	WATER PUMP HOUSE
9	WATER DISTRIBUTION NETWORK
10	WATER TREATMENT PLANT
11	WATER STORAGE TANK
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99	WATER STORAGE TANK
100	WATER PUMP HOUSE

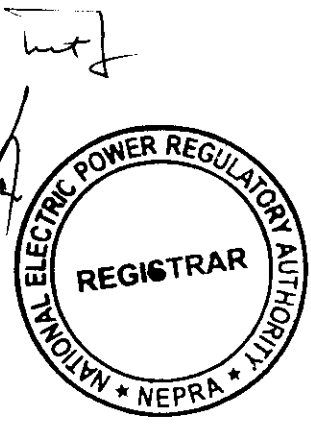
EASTERN POWER COMPANY LTD (EPCC)			
GAMA POWER SYSTEMS INC.			
GAMA QUC ENTERPRISES A.S.			
150 MW DIESEL ENGINE COMBINED CYCLE			
POWER PLANT AT PASRUR			
GENERAL LAYOUT PLAN			
Scale:	1:1000	Date:	01/08/2010
Drawn by:	ASAD	Checked by:	ASAD
Project No.:	EPCC/150MW/01	Revision:	0



GAMA POWER SYSTEM INC. AutoCAD & AutoPlant



No	Qty	DESCRIPTION
1A	6	132 KV, 1324.50/1145.00/113 KV (capacitor)
1B	15	132 KV, 132/ 3.071/ 3.61173 KV (inductive)
3A	9	132 KV, 600/ 1-1-1-1
3B	9	132 KV, 800-1600/ 1-1-1-1
4A	6	132 KV, 1600 A
4B	6	132 KV, 1250 A
4C	4	132 KV, 1600 A with room Brake
5A	3	132 KV, 1250 A, 31.5 KA
5B	3	132 KV, 1600 A, 31.5 KA
5A	15	120 KV, 10KA



DOC	DESCRIPTION
1	REFERENCES

REV.	DESCRIPTION	DATE	APPROV.	SCALE	N.T.S.	DATE

OWNER	EASTERN POWER COMPANY LTD (EPSCO)
PROJECT	150MW DIESEL ENGINE COMBINED CYCLE POWER PLANT AT PASUR, PUNJAB
PROJECT ENGINEER	GAMA POWER SYSTEMS INC.
DATE	26-04-07
ISSUED	A/EC/CH/1 26-04-07
REVISED	A/EC/CH/1 26-04-07
APPROVED	A/EC/CH/1 26-04-07
SCALE	1/1
DATE	
PROJECT NO.	
DESIGN NO.	E-001
REV.	0

## Plant Details\*

### 1. General Information

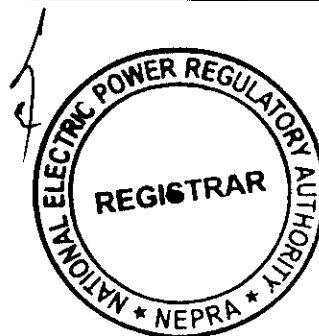
i.	Name of Applicant	Eastern Power Company Ltd.
ii.	Registered/Business Office	Office No. 4, 2 <sup>nd</sup> Floor, Al-Babar Center F-8 Markaz, Islamabad.
iii.	Plant Location	4-km from Pasrur City, District Sialkot, Punjab.
iv.	Type of Generation Facility	Thermal (Combined Cycle)

### 2. Plant Configuration

i.	Plant Size Installed Capacity Gross ISO (MW)	152.475 MW	
ii.	Type of Technology	Reciprocating Engines	
iii.	Number of Units/Size	Reciprocating Engines	13 x 11.075 MW
		Steam Turbine	1 x 8.5 MW
iv.	Unit Make & Model	Reciprocating Engines	Wartsila/18V38 B
		Steam Turbine	Tuthill/ RD6M20
v.	De-rated Capacity at Mean Site Condition	147.5 MW	
vi.	Auxiliary Consumption	3.5 MW	
vii.	Commissioning date	August 31, 2008	
viii.	Commercial Operation date (COD)	October 31, 2008	
ix.	Expected Life of the Facility from Commercial Operation Date (COD)	20 Years	

\* As provided by the applicant

*[Handwritten signatures and initials]*



### 3. Fuel Details

i.	Primary Fuel	Residual Furnace Oil (RFO)	
ii.	Emergency/Back-up Fuel	High Speed Diesel (HSD)	
iii.	Fuel Source (Imported/Indigenous)	Imported/ Indigenous	
iv.	Fuel Supplier	PSO/ Shell/ PARCO	
v.	Supply Arrangement	Oil Tankers/Lorries	
vii.	No of Storage Tanks	Primary Fuel	Emergency/Back-up Fuel
		3 Tank	1 Tank
viii.	Storage Capacity of each tank	Primary Fuel	Back-up Fuel
		7500 m <sup>3</sup>	1000 m <sup>3</sup>
ix.	Storage Capacity (Gross)	Primary Fuel	Back-up Fuel
		22500 m <sup>3</sup>	1000 m <sup>3</sup>

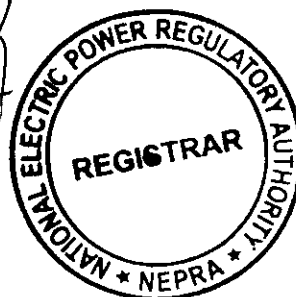
### 4. Emission Values

i.	SO <sub>x</sub> (as SO <sub>2</sub> , dry)	RFO	HSD
		2220 mg/Nm <sup>3</sup> @ 15% O <sub>2</sub>	To be provided later
ii.	NO <sub>x</sub> (as NO <sub>2</sub> , dry)	2015 mg/Nm <sup>3</sup> @ 15% O <sub>2</sub>	-do-
iii.	CO	To be provided later	-do-
iv.	PM <sub>10</sub>	75 mg/Nm <sup>3</sup> @ 15% O <sub>2</sub>	-do-

### 5. Cooling System

i.	Cooling Water Source/ Cycle	Sub surface Water (Tube well)/Closed
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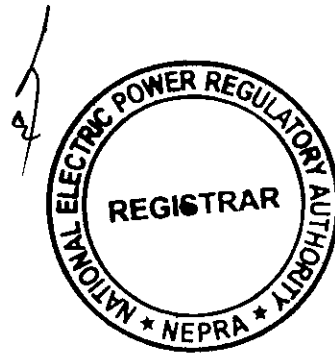
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## 6. Plant Characteristics

i.	Generation Voltage	15 kV	
ii.	Frequency	50 Hz	
iii.	Power Factor	0.8	
iv.	Automatic Generation Control	Yes	
v.	Ramping Rate	Diesel Engine	Steam Turbine
		900 kW/min	500 kW/ min
vi.	Time required to Synchronize to Grid and loading the plant to full load. (Hot condition)	<ul style="list-style-type: none"> <li>• 2 minutes for first Diesel Engine/32 minutes for Steam turbine.</li> <li>• 11 minutes for diesel engine: 70 minutes for simple cycle/ 15 minutes for ST (after roll off)</li> <li>• Combined Cycle 100 minutes</li> </ul>	

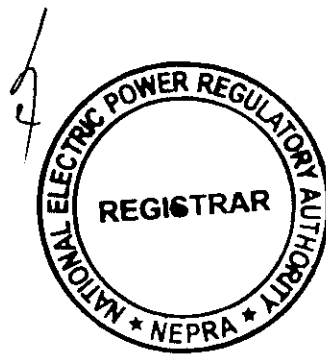
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## SCHEDULE-II

The net capacity of the Licensee's Generation Facilities

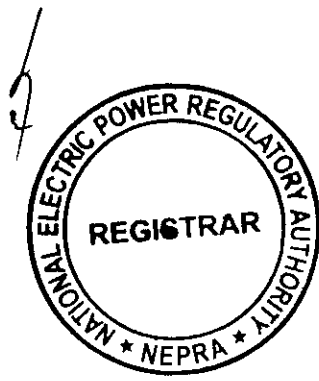
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## SCHEDULE-II\*

1.	Installed Capacity Gross ISO	152.475 MW
2.	De-rated Capacity at Mean Site Conditions	147.5 MW
3.	Auxiliary Consumption	3.5 MW
4.	Net Capacity of the Plant at Mean Site Conditions	144.0 MW

*[Handwritten signatures and initials]*

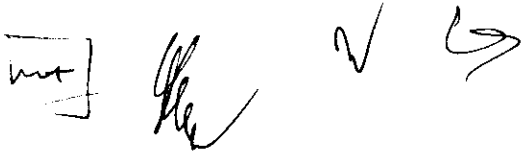


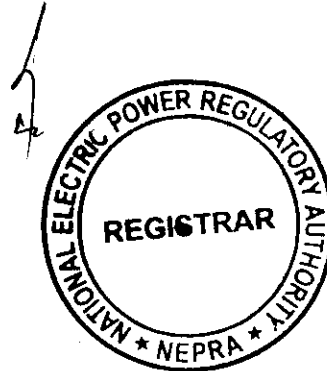
\* As provided by the applicant



## INTERCONNECTION SCHEME FOR THE POWER DISPERSAL OF THE PLANT\*

The electrical energy generated from the power plant shall be dispersed to the system directly within the load center of GEPCO by constructing a new 132 KV D/C transmission line, approximately 5 Kilometer long, on Rail conductor, from the power plant of Eastern Power Company Limited to 132 KV Pasrur Substation.

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\* As provided by Applicant

**National Electric Power Regulatory Authority**  
**NEPRA**

**Determination in the Matter of Grant of Generation Licence to**  
**Eastern Power Company Limited**

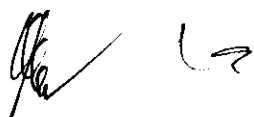
**May 30, 2007**  
**Application No. LAG-87**

**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. The ECC, in its meeting held on October 31, 2006 also allowed old/Refurbished plants to be installed as part of the "Fast Track Initiative" 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 this Fast Track initiative, PPIB accepted the proposal of the consortium of Gamma Enerji (Turkey) and Glimmer (Private) Limited on the assurance of equipment availability and meeting the dead line of Commercial Operation Date (COD) being on or before October 31, 2008, for setting up a 150 MW power plant based on Residual Fuel Oil (RFO) to be located near Pasur in District Sialkot, Punjab. The recommendation of PPIB was for allowing used Power Plant as provided in the ECC decision of October 31, 2006.

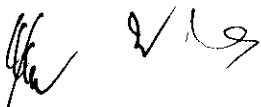
5. In order to, carry out the project implementation, the consortium of Enerji (Turkey) and Glimmer (Private) Limited incorporated a Public Limited Company in the name of "Eastern Power Company Limited (EPCO). PPIB advised EPCO to approach NEPRA for the grant of Generation Licence. Since this was the first serious offer of its kind where a used power plant was to be shifted from abroad (Turkey) to Pakistan, the Authority, vide its decision of December 19, 2006 laid down a mechanism whereby the age of the Plant was to be determined and taken into consideration while determining Tariff for the Power Plants.

#### **Filing of Generation Licence Application**

6. EPCO, in accordance with Section 15 of ~~NEPRA~~ Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997), filed an application on November 13, 2006 with NEPRA, requesting for the grant of a Generation Licence. The Authority admitted the application of EPCO for grant of Generation Licence on December 28, 2006.

7. Pursuant to Regulation-8 of the NEPRA Licensing (Application and Modification Procedure) Regulation, 1999, brief of Prospectus and Notice of Admission was published in daily newspapers of December 30, 2006, for seeking comments from the interested/affected parties and general public.

8. CPPA vide its letter no COO/CPA/CE-II/14423-24, dated December 13, 2006 had requested for authorization of procurement of power from EPCO



to the extent of 150 MW on behalf of Ex-WAPDA DISCOs and the Authority granted the permission vide its decision of December 28, 2006.

9. After considering the received comments, the Authority decided to hold a hearing/conference on January 23, 2007, which was attended by the representatives of the applicant and other stakeholders including representatives of PPIB, NTDC, Irrigation & Power Department, Government of Punjab, Total (PARCO) Limited, LESCO and Environmental Protection Agency (EPA-Punjab).

### **Proceedings of Hearing**

10. During the hearing, EPCO presented salient features of the project and explained that the Gamma Enerji (Turkey), one of the partners of the joint venture for the project, owned a power plant located at Kirikkale situated approximately 100 Km East of Ankara, the capital of Turkey. It was stated that EPCO had planned to relocate the above mentioned power plant to Pakistan near Pasrur. EPCO also informed that the proposed plant would be using Residual Fuel Oil (RFO) as the primary fuel while Diesel would be utilized as the back up fuel for the starting of the power plant.

11. Other participants/interested persons were also heard during the hearing. The participants proffered their comments and submitted arguments supporting their stance.

12. 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 CPPA in the absence of Feasibility Report;
- Confirmation regarding source of Fuel;

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- Plant details (i.e. type, technology, model and design of facilities to be acquired) and the remaining useful life of the plant/equipment;
- Interconnection and Transmission arrangement for dispersal of power from the power plant;
- Project to be included in the Generation Expansion plan of NTDC;
- Sponsor's assurance regarding plant equipment to comply with Grid Code requirements during the installation, commissioning and operation of the plant;
- Adequacy of storage capacity for Residual Fuel Oil (RFO) proposed to be utilized as primary fuel for thirty (30) days full load operation of the plant.
- Compliance with the Environmental Standards.

13. EPCO informed that the location of the site of the proposed power plant is about 4-Kilometer south of the Pasrur city on the main Pasrur-Kalaswala Road. EPCO had already purchased 22 Acres of land for the proposed power plant. Proximity of the existing infrastructure facilities including the access to main road, location of nearest oil depot of the potential fuel suppliers and availability of existing electrical infrastructure around the selected site makes it an ideal location for such a venture.

14. Regarding the fuel supply arrangement of the power plant, EPCO elaborated that they were in contact with all the potential suppliers including PSO, Total and Shell and it was expected that a long term fuel supply agreement would be reached soon.

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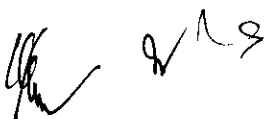
15. About the Plant details, it was informed that the plant would consist of thirteen (13) Reciprocating Engines (18V38 B of WARTSILA), each having a capacity of 11.075 MW, one (01) Heat Recovery Steam Generator (HRSG) and one Steam Turbine (1 x 8.50 MW), with a total installed capacity of 152.475 MW (gross) at ISO conditions. EPCO further informed that the ISO rating of the power plant would be de-rated to 147.5 MW at Mean Site Conditions and the net capacity of the plant would be 144 MW after allowing auxiliary consumption of 3.5 MW.

16. It was also informed that the plant would be available for 90% of the time and would have an efficiency of 45%. It was also clarified that the plant was in operation for one and half years and most of the equipment was almost brand new and it was expected that it would last for a remaining period of 25 years. EPCO would be providing a fitness certificate from any of the approved/authorized pre-shipment company, as approved by the Ministry of Commerce, Government of Pakistan. A comprehensive Project Implementation Plan had already been developed and all efforts were being made that all the time limits were adhered to the proposed time line for the project. It was anticipated that the plant would be achieving COD by the end of October 2008.

17. Regarding the Interconnection and Transmission facilities, EPCO submitted that as agreed, NTDC would be constructing a new transmission line at 132 KV D/C Transmission line (on Rail conductor) with an approximate length of 5-kilometer connecting the switch yard of the proposed power plant with 132 KV Pasrur Grid station to disperse the power generated by the power plant.

18. Regarding the "Generation Expansion plan of NTDC", EPCO informed that the issue had already been taken up with NTDC and it was expected that the project would be included in the Generation Expansion plan of NTDC.

19. The issue of the Compliance of the Grid Code during the installation, commissioning and operation of the plant was also taken up during the



proceedings of the hearing. EPCO assured that all the requirements of the Grid Code would be complied with without any exception.

20. Regarding Fuel storage capacity, EPC informed that sufficient storage capacity would be made at the proposed power plant for both primary fuel (RFO) and Diesel for start up. The storage capacity of RFO would be sufficient for thirty (30) days full load operation of the plant. Further, adequate storage capacity of the High Speed Diesel (HSD) for start up would be made at the power plant.

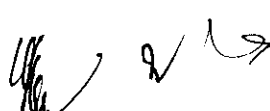
21. EPCO elaborated that the plant would comply with all the Environmental Standards as per requirements of the Government of Pakistan and the International Lending Agencies. EPCO had engaged the services of ~~the~~ Hagler Bailly Pakistan for carrying out a Comprehensive Environmental Impact Assessment of the project and the same would be submitted to all the relevant agencies, once it was finalized by the consultant.

#### **Comments of Applicant on Draft Gen. Licence.**

22. Draft Generation Licence proposed to be granted to EPCO was circulated to all stakeholders including the applicant (i.e. EPCO). 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 to NEPRA.

#### **Grant of Generation Licence.**

23. 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 in order to avoid outages/blackouts based on new as well as Used/Refurbished power plants. 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 Reciprocating



Engine technology in the basket of procurement to meet the immediate demand. The instant case has been included in the Fast Track program and referred by PPIB vide its communication of 1(102) PPIB/06/PRJ, dated December 19, 2006.

24. In view of the prevailing situation of non-availability of natural gas for any of new power project, 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) due to Vanadium deposition on turbine blades, the Authority considers the proposed project as acceptable under the given circumstances. The Authority has already determined the tariff for EPCO vide its decision of December 22, 2006, for a period of twenty five (25) years. The net capacity has been indicated as 144.00 MW after allowing de-rating at Mean site conditions of 4.975 MW and auxiliary consumption of 3.5 MW from a Gross ISO Installed Capacity of 152.457 MW.

25. EPCO as per requirement of the Ministry of Commerce has provided a third party Assessment Report carried out by SGS Belgium NV. The independent report of SGS indicated a useful life of the plant equipment, as twenty (20) years, whereas EPCO has claimed that the life of the plant equipment including that of the engines would be around twenty five (25) years.

26. Although the tariff determination was made on 25 years basis, however at that time the independent assessment was not available and the 25 year term of the tariff was based on the basis of the information provided by EPCO and technical data of the manufacturer, WARTSILA. Now, the independent assessment report has been received which has evaluated the remaining life of the plant to be 20 years compared to EPCO's earlier claim of 25 years. The term of the Licence has to be based on the remaining estimated life of the plant equipment as evaluated by the Independent Assessor which is twenty years. Therefore, the term of the Licence is decided as 20 years.

27. In view of the above the Authority hereby decides to approve the grant of Generation Licence to Eastern Power Company Limited, in the terms set out in

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**National Electric Power Regulatory Authority**  
**NEPRA**

**Determination in the Matter of Grant of Generation Licence to**  
**Eastern Power Company Limited**

**May 30, 2007**  
**Application No. LAG-87**

**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. The ECC, in its meeting held on October 31, 2006 also allowed old/Refurbished plants to be installed as part of the "Fast Track Initiative" 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 this Fast Track initiative, PPIB accepted the proposal of the consortium of Gamma Enerji (Turkey) and Glimmer (Private) Limited on the assurance of equipment availability and meeting the dead line of Commercial Operation Date (COD) being on or before October 31, 2008, for setting up a 150 MW power plant based on Residual Fuel Oil (RFO) to be located near Pasur in District Sialkot, Punjab. The recommendation of PPIB was for allowing used Power Plant as provided in the ECC decision of October 31, 2006.

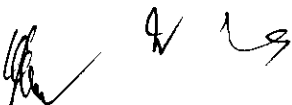
5. In order to, carry out the project implementation, the consortium of Enerji (Turkey) and Glimmer (Private) Limited incorporated a Public Limited Company in the name of "Eastern Power Company Limited (EPCO)". PPIB advised EPCO to approach NEPRA for the grant of Generation Licence. Since this was the first serious offer of its kind where a used power plant was to be shifted from abroad (Turkey) to Pakistan, the Authority, vide its decision of December 19, 2006 laid down a mechanism whereby the age of the Plant was to be determined and taken into consideration while determining Tariff for the Power Plants.

#### **Filing of Generation Licence Application**

6. EPCO, in accordance with Section 15 of ~~NEPRA~~ Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997), filed an application on November 13, 2006 with NEPRA, requesting for the grant of a Generation Licence. The Authority admitted the application of EPCO for grant of Generation Licence on December 28, 2006.

7. Pursuant to Regulation-8 of the NEPRA Licensing (Application and Modification Procedure) Regulation, 1999, brief of Prospectus and Notice of Admission was published in daily newspapers of December 30, 2006, for seeking comments from the interested/affected parties and general public.

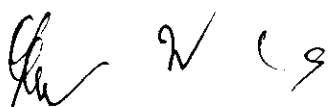
8. CPPA vide its letter no COO/CPA/CE-II/14423-24, dated December 13, 2006 had requested for authorization of procurement of power from EPCO



- Plant details (i.e. type, technology, model and design of facilities to be acquired) and the remaining useful life of the plant/equipment;
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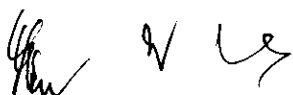
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27. In view of the above the Authority hereby decides to approve the grant of Generation Licence to Eastern Power Company Limited, in the terms set out in



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.

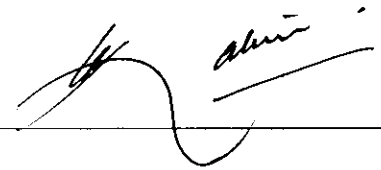
**Authority**

Zafar Ali Khan  
Member




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Abdul Rahim Khan  
VC/Member



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Lt. Gen. (R) Saeed uz Zafar  
Chairman



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