

## **National Electric Power Regulatory Authority**

Islamic Republic of Pakistan

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

Registrar

No. NEPRA/R/LAG-167/3071-73

October 13, 2010

Mr. Mustafa Majid Director Shikarpur Power (Private) Limited 1<sup>st</sup> Floor, Block-3, Hockey Club of Pakistan Stadium Liaquat Barracks, Karachi-75350

Subject:

Generation Licence No. SGC/64/2010

Licence Application No. LAG-167 Shikarpur Power (Private) Limited

Reference:

Your letter No. nil, dated May 21, 2010.

Enclosed please find herewith Generation Licence No. SGC/64/2010 granted by National Electric Power Regulatory Authority (NEPRA) to Shikarpur Power (Private) Limited for 17.660 MW thermal power plant located at 8 KM Main Jaccobabad Road, Village Lodra, District Shikarpur, Sindh pursuant to Section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997). Further, the determination of the Authority in the subject matter is also attached.

2. Please quote above mentioned Generation Licence No. for future correspondence.

**Enclosure:** Generation Licence

[No. SGC/64/2010]

REGISTRAR PUTHON NEPRA\*

(Syed Safeer Hussain)

Copy to:

- 1. Chief Executive Officer, Hyderabad Electric Supply Company(HESCO), WAPDA Water Wing Complex, Hussainabad, Hyderabad
- 2. 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. SGC/64/2010

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:

#### SHIKARPUR POWER (PVT.) LIMITED

Incorporated under the Companies Ordinance, 1984
Under Certificate of Incorporation

No. 0072297, dated April 22, 2010

For its Plant located at 8 KM Main Jaccobabad Road, Village Lodra, District Shikarpur, Sindh

(Installed Capacity: 17.660 MW Gross ISO)

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

Given under my hand this  $13\overline{4}$  day of October, Two Thousand & Ten, and expires on  $30^{th}$  day of May, Two Thousand & Thirty

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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 Shikarpur Power (Pvt.) Limited;
- (d) "Power Purchaser" means a Distribution Licensee purchasing electricity from the Licensee, pursuant to a power purchase agreement;
- (e) "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 generation facilities of the Licensee 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 This Licence is granted for a term of twenty five (25) years from the Commercial Operation Date (CoD) of the generation facility.
- 4.2 Unless suspended or revoked earlier, the Licensee may within ninety (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 as amended or replaced from time to time.

#### 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 is allowed to charge such tariff which either has been agreed between the Licensee and the Power Purchaser, pursuant to a power purchase agreement or approved, determined, adjusted or specified by the Authority.





#### <u>Article-7</u> Competitive Trading Arrangement

- 7.1 The Licensee shall participate in such measure 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 into 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.

#### <u>Article-8</u> <u>Maintenance of Records</u>

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 comply with the relevant provisions of NEPRA rules on Performance Standards as may be prescribed by the Authority from time to time.

# Article-10 Compliance with Environmental Standards

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





# Article-11 Provision of Information

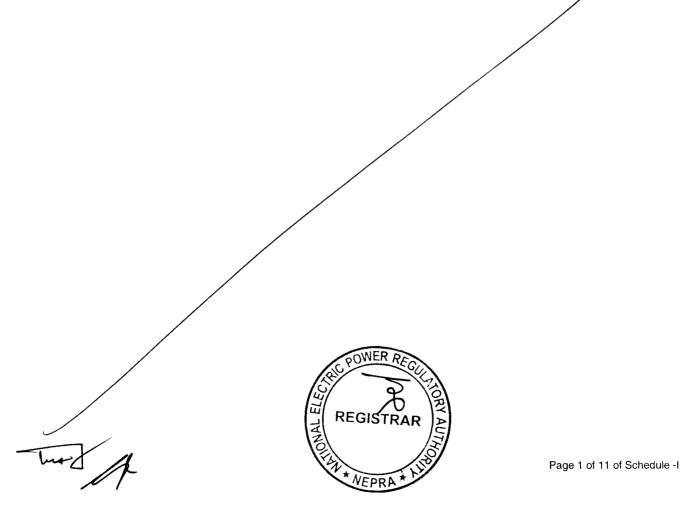
- 11.1 The obligation of the Licensee to provide information to the Authority shall be in accordance with Section 44 of the Act.
- 11.2 The Licensee shall be subject to such penalties as may be specified in the relevant rules made by the Authority for failure to furnish such information as may be required 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.



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## **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.





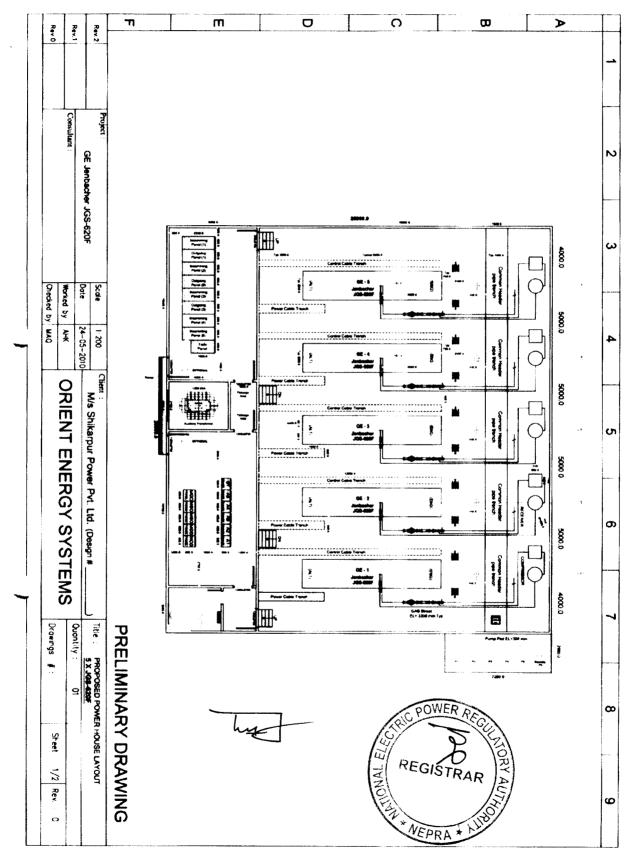
#### Location:

Shikarpur Power Private Limited Shikarpur, Sindh, Pakistan



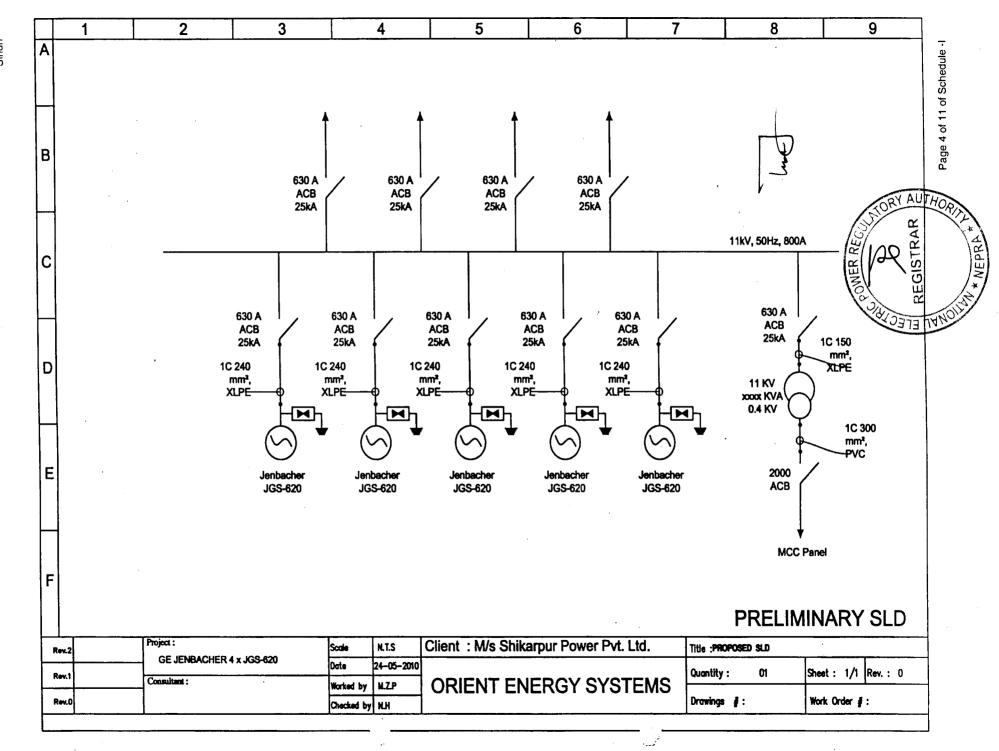
Page 2 of 11 of Schedule -I

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Page 3 of 11 of Schedule -I

Generation Licence Shikarpur Power (Pvt.) Limited 8-KM Main Jaccobabad Road, Village Lodra, District Shikarpur Sindh

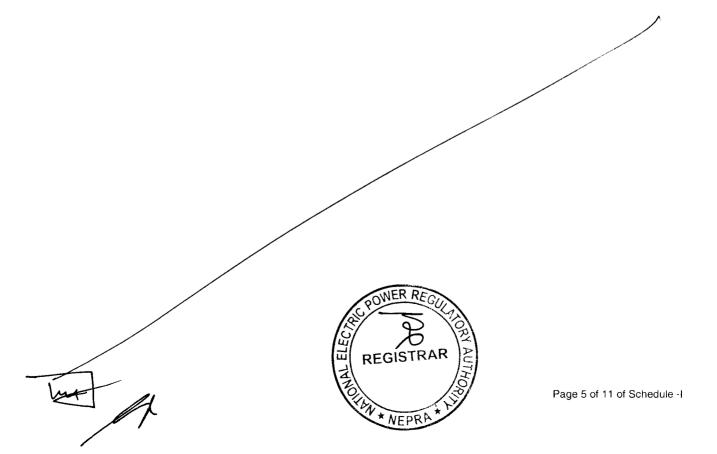


# INTERCONNECTION/TRANSMISSION ARRANGEMENT FOR THE DISPERSAL OF POWER FROM THE POWER PLANT

The Power generated by Shikarpur Power (Pvt.) Limited (SPPL) from its proposed Natural Gas operated Thermal Power Generation facility shall be dispersed to the Load Center of Hyderabad Electric Supply Company Limited (HESCO).

The Interconnection/Transmission Arrangement for the above mentioned facilities will be at 11 KV voltage connecting the generation facility of SPPL to 220 Shikarpur Grid Station of HESCO through four overhead Feeders.

The final Interconnection and Transmission Arrangement(s) [including length of line, type of conductor etc.] for the dispersal of power, as agreed by SPPL and HESCO shall be communicated to NEPRA in due course of time.



## Plant Details\*

### (A). General Information

(i).	Name of Applicant	Shikarpur Power (Pvt.) Limited	
(ii).	Registered/Business Office	1 st Floor, Block-3, Hockey Club of Pakistan Stadium, Liaquat Barracks, Karachi-75350	
(iii).	Plant Location	8-KM Main Jaccobabd Road, Village Lodra, District Shikarpur, Sindh	
(iv).	Type of Generation Facility	Thermal Generation	

## (B). Plant Configuration

(i).	Plant Size Installed Capacity (Gross ISO)	17.660 MW	
(ii).	Type of Technology	Combine Cycle Power Plant (with Gas Engines, Heat Recovery Steam Generators and Steam Turbines)	
(iii).	Number of	Gas Engine	5 x 3.332 MW Gas Engines
(111).	Units/Size (MW)	Steam Turbine	1 x 1.00 MW
( )		Gas Engines	General Electric Jenbacher/JGS 620F Gs – N.L F01
(iv).	Unit Make & Model	Steam Turbine	General Electric/Harbin Electric China/Siemens/Equivalent
(v).	Commissioning /Commercial Operation Date (CoD)	May 31, 2011	
(vi).	Minimum Expected Life of the Facility from Commissioning/ CoD	25 Years	







## (C). Fuel Details

(i).	Main Fuel	Natural Gas (Pipeline Quality)
(ii)	Alternative/Back Up- Fuel	Not Applicable (N/A)
(iii)	Start-Up Fuel	Same as Main fuel
(iv).	Fuel Source (Imported/Indigenous)	Indigenous
(iii).	Fuel Supplier	Sui Southern Gas Company Limited
(iv).	Supply Arrangement	Through Pipeline

## (D). Emission Values (Main Fuel)

(i).	SO <sub>x</sub>	0 mg/Nm <sup>3</sup>
(ii).	NO <sub>x</sub>	200 mg/Nm <sup>3</sup>
(iii).	СО	500 mg/Nm <sup>3</sup>
(iv).	PM <sub>10</sub>	10 mg/Nm <sup>3</sup>

## (E). Cooling System

(i).	Cooling Water Source/Cycle	Tube Wells installed at Site/Closed Loop
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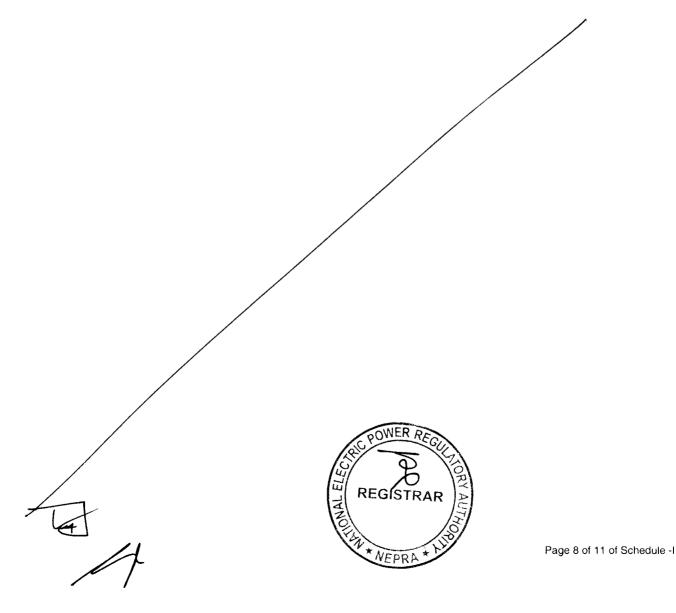






## (F). Plant Characteristics

(i).	Generation Voltage	11 KV
(ii).	Frequency	50 Hz
(iii).	Power Factor	0.8
(iv).	Automatic Generation Control (AGC)	NA
(v).	Ramping Rate	9.8 KW/Sec
(vi).	Time required to Synchronize to Grid and loading the complex to full load.	131 Sec



# <u>Licensee-Performa for Information regarding Distribution issues.</u> <u>Network Facts</u>

#### Part-A

Α.	No. of Feeders	One (01)
B.	Length of Each Feeder (Meter)	200 Meter
C.	Length of Each Feeder to each Consumer	-Do-
D.	In respect of all the Feeders, describe the property (streets, farms, Agri land, etc.) through, under or over which they pass right up to the premises of customer, whether they crossover or pass near the DISCO lines.	The 11 KV Underground Cable supplying power to Shikarpur Rice Mills (Pvt.) Limited (SRPL) is located on private property of SRPL, without any crossing etc.
E.	Whether owned by SPPL, Consumer or HESCO -(deal with each Feeder Separately)  - If owned by HESCO, please furnish particulars of contractual arrangement	N/A
	- Operation and maintenance responsibility for each feeder	The Operation and Maintenance is the responsibility of Shikarpur Power (Pvt.) Limited (SPPL).
F.	Whether connection with network of HESCO exists (whether active or not)- If yes, provide details of connection arrangements (both technical and contractual)	N/A
G.	Any other network information deemed relevant for disclosure to or consideration by NEPRA.	N/A

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Page 9 of 11 of Schedule -f

# <u>Licensee-Performa for Information regarding Distribution issues.</u> <u>Consumer Facts</u>

#### Part-B

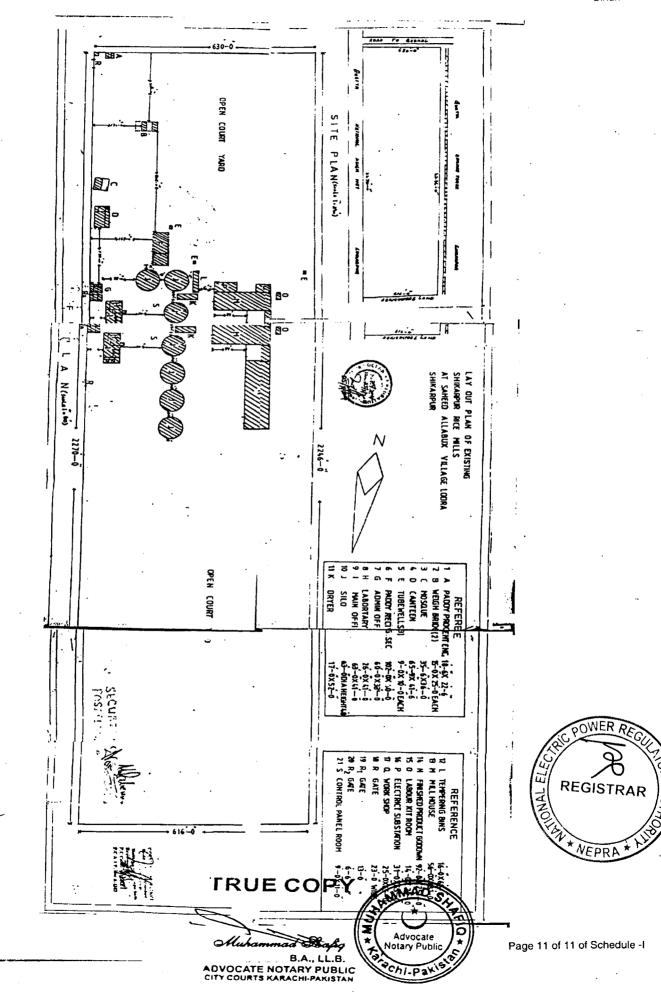
A.	No. of Consumers		One (01)	
В.	Location of consumers (distance and/or identity of premises)		Shikarpur Rice Mills (Pvt.) Limited (SRPL), 8-KM Main Jaccobabad Road, Village Lodra, District Shikarpur Sindh.	
C.		racted Capacity and Load or for consumer	Shikarpur Rice Mills (Pvt.) Limited	1.35 MW (Maximum)
	Spec	ify Whether		
D.	(i) The consumer is an Associate undertaking of the SPPL- If yes, specify percentage ownership of equity;		Yes/5%	
	(ii)	There are common directorships:	Yes	
	(iii)	Either can exercise influence or control over the other.	Only contractually	
		ify nature of contractual ionship		
E.	(i) Between each consumer and SPPL.		Firm Supply of Electric basis	city on Continuous
	(ii) Consumer and HESCO.		No	
F.	Capacity originally sanctioned by Provincial Government- If subsequently enhanced, evidence of permission for enhancement.		N/A	
G.	Tariff Arrangement and particulars with WAPDA/Provincial Government		N/A	
Н.	Any other network information deemed relevant for disclosure to or consideration by NEPRA.		N/A	







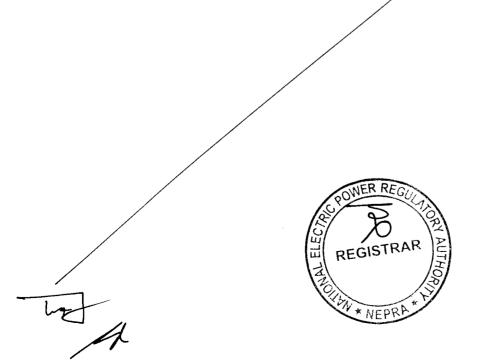
Generation Licence Shikarpur Power (Pvt.) Limited 8-KM Main Jaccobabad Road, Village Lodra, District Shikarpur Sindh



Generation Licence Shikarpur Power (Pvt.) Limited 8-KM Main Jaccobabad Road, Village Lodra, District Shikarpur Sindh

## **SCHEDULE-II**

The Installed, De-Rated, Auxiliary and Net Capacity of the Licensee's Generation Facilities



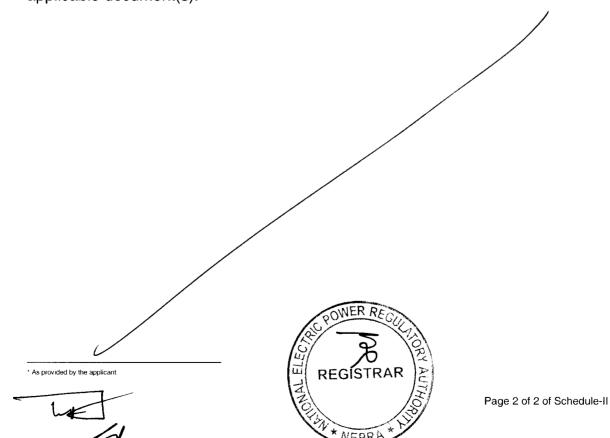
Page 1 of 2 of Schedule-II

## **SCHEDULE-II**\*

1.	Installed Capacity Gross ISO	17.660 MW
2.	De-rated Capacity at Mean Site Conditions	17.660 MW
3.	Auxiliary Consumption	00.750 MW
4.	Net Capacity at Mean Site Conditions	16.910 MW

#### Note

All the above figures are indicative as provided by the Licensee. The Net Capacity available to HESCO for dispatch will be determined through procedure(s) contained in the Bi-lateral Agreement(s), Grid Code or any other applicable document(s).



#### Authorization By National Electric Power Regulatory Authority (NEPRA) to Shikarpur Power (Pvt.) Limited

#### Incorporated under the Companies Ordinance, 1984 **Under Certificate of Incorporation**

No. 0072297, dated April 22, 2010

#### NEPRA GENERATION LICNCE No. SGC/64/2010 For Sale to Bulk Power Consumer(s)

Pursuant to Section 22 of the Act and Rule 7 of the NEPRA Licensing (Generation) Rules-2000, the Authority hereby authorize Shikarpur Power (Pvt.) Limited (Licensee) to engage in second-tier supply business, limited to the following consumers also mentioned in Schedules-I of the Generation Licence No. SGC/64/2010.

Shikarpur Rice Mills (Pvt.) Limited. 1.

(Shaukat Ali Kundi) 61.10.10

Member

(Maqbool Ahmad Khawaja)

Member

(Zafar Ali Khan)

Member

(Ghiasuddin Ahmed)

Member/Vice Chairman

Khalid Saged



