



National Electric Power Regulatory Authority
Islamic Republic of Pakistan

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E-mail: registrar@nepra.org.pk

Registrar

No. NEPRA/R/LAG-198/6614-16

July 27, 2012

Mr. Nimr Majid
Director
Tando Allayar Sugar Mills (Pvt.) Limited
1st Floor, Block-3,
Hockey Club of Pakistan Stadium,
Liaquat Barracks,
Karachi-75350

Subject: Generation Licence No. SGC/77/2012
Licence Application No. LAG-198
Tando Allayar Sugar Mills (Pvt.) Limited

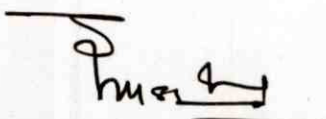
Reference: Your application vide No. nil dated 11 October, 2011.

Enclosed please find herewith Generation Licence No. SGC/77/2012 granted by National Electric Power Regulatory Authority (NEPRA) to Tando Allayar Sugar Mills (Pvt.) Limited, 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**
(SGC/77/2012)




(Syed Safer 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/77/2012

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, the Authority hereby grants a Generation Licence to:

TANDO ALLAYAR SUGAR MILLS (PVT.) LIMITED

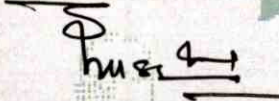
Incorporated under the Companies Ordinance, 1984
Under Corporate Universal Identification
No. 0074011, dated November 15, 2010

for its Bagasse based Thermal Generation Facility located at Deh Kandiari, U.C.
Sanjar Chang, Taluka Chamber, District Tando Allayar
in the Province of Sindh

(Installed Capacity: 12.00 MW Gross ISO)

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

Given under my hand this 27th day of July Two Thousand & Twelve
and expires on 26th day of July Two Thousand & Fifty Two.



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 Tando Allayar Sugar Mills (Pvt.) Limited;
- (d) "Power Purchaser" means a Distribution Licensee who purchases electricity from the Licensee, pursuant to a power purchase agreement for procurement of electricity;
- (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 Licensee's generation facilities is set out in Schedule-II hereto.

Article-4
Term of Licence

4.1 This Licence is granted for a term of forty (40) years from the date of its issuance.

4.2 Unless suspended or revoked earlier, the Licensee may within ninety days (90) days prior to the expiry of the term of the Licence, apply for renewal of the Licence under the National Electric Power Regulatory Authority Licensing (Application and Modification Procedures) Regulations, 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 the National Electric Power Regulatory Authority (Fees) Rules, 2002.

Article-6
Tariff

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

Article-7
Competitive Trading Arrangement

7.1 The Licensee shall participate in such manner 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.

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 comply with the relevant provisions of the National Electric Power Regulatory Authority Performance (Generation) Rules 2009 as amended from time to time.

Article-10
Compliance with Environmental & Safety Standards

The Licensee shall comply with the environmental and safety 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.

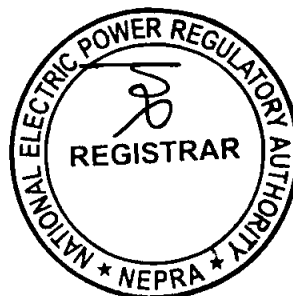
11.2 The Licensee shall be subject to such ~~provisions~~ as may be specified in the relevant rules made by the Authority for ~~future~~ to furnish such information as may



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.

Article-12
Emissions Trading /Carbon Credits

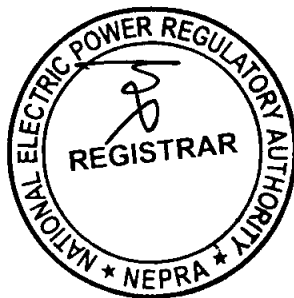
The Licensee shall process and obtain emissions/Carbon Credits expeditiously and credit the proceeds to the Power Purchaser, as per policy of the Government on the subject.



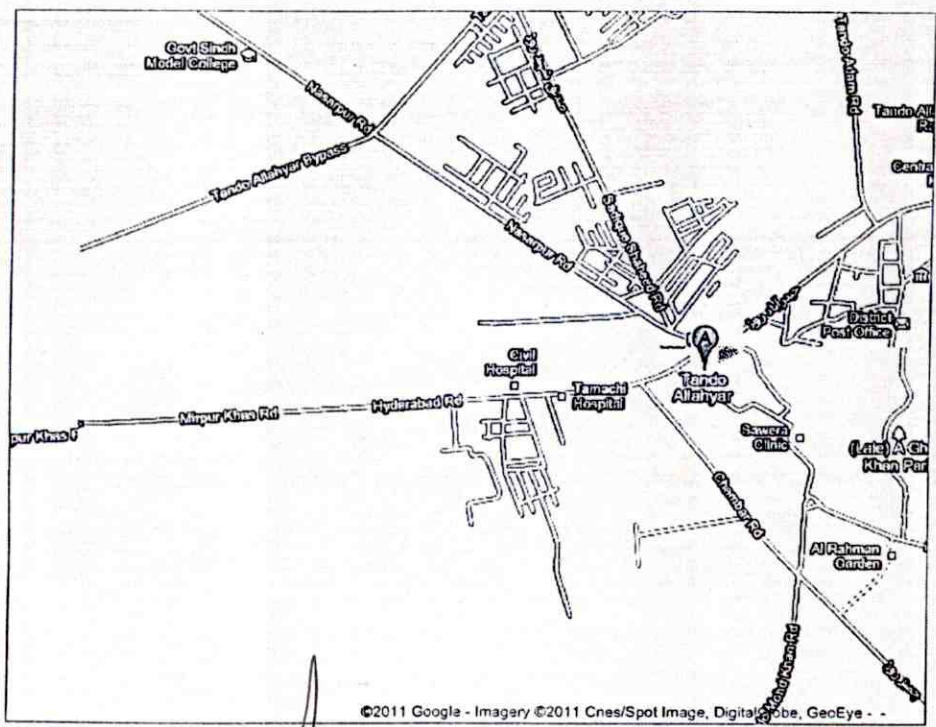
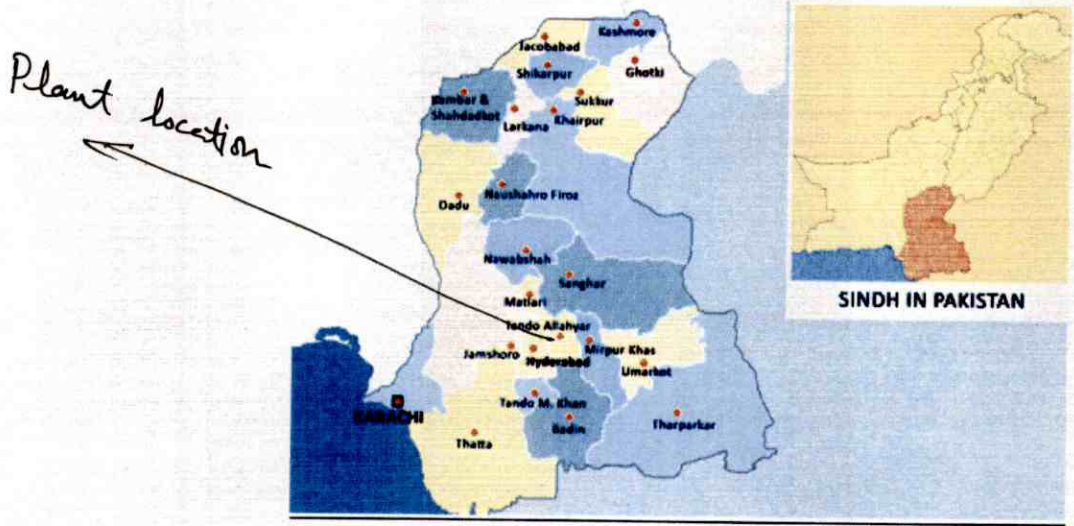
SCHEDULE-I

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

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Plant Location

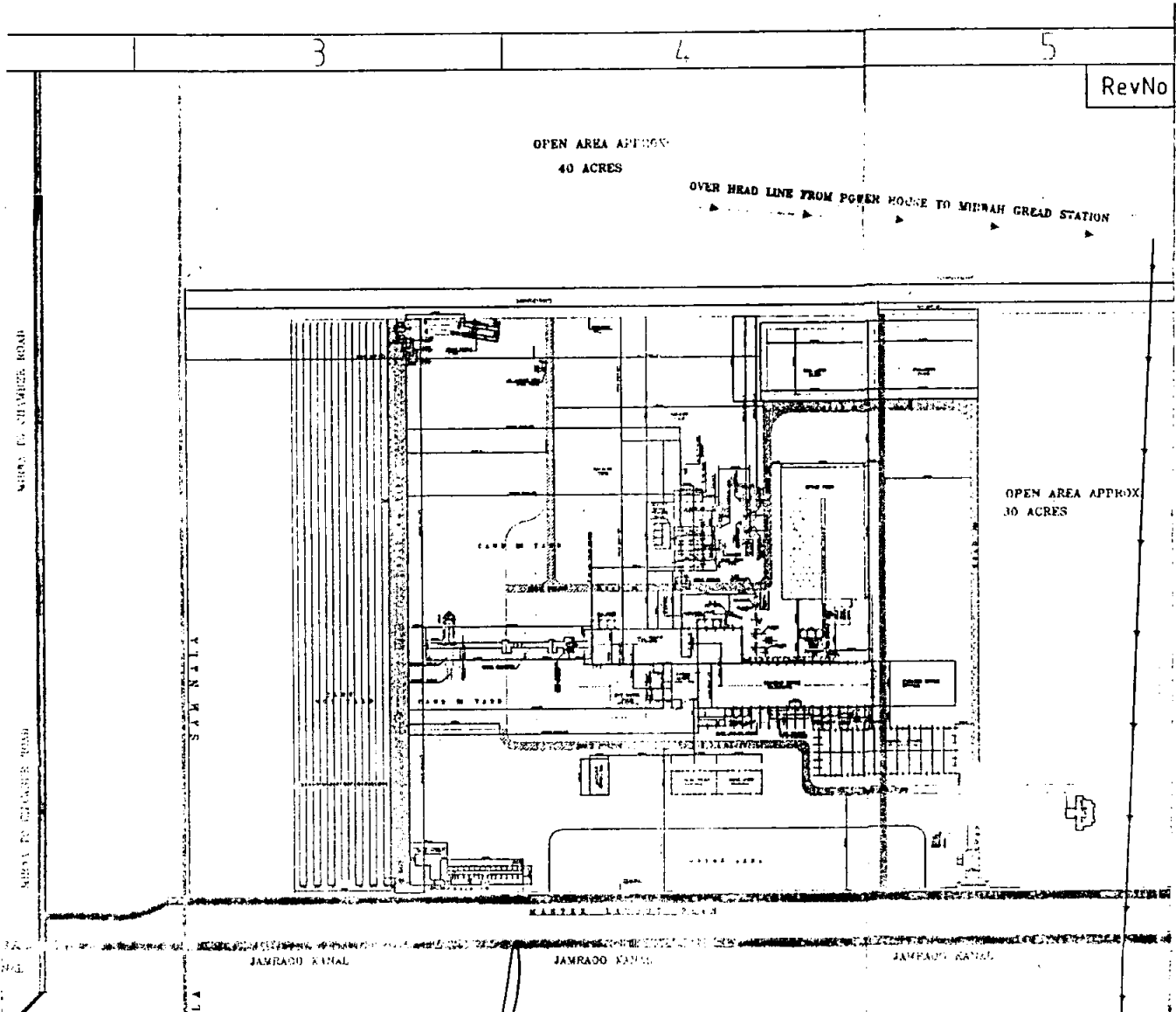


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Plant Layout



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Handwritten signature or mark.



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

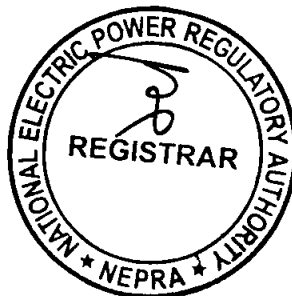
The Power generated by Tando Allayar Sugar Mills (Pvt.) Limited (TAYSMPL) from its Baggasse based Thermal Power Generation facility shall be dispersed to the Load Center of Hyderabad Electric Supply Company Limited (HESCO).

The Interconnection/Transmission Arrangement for the above mentioned facilities will be at 11 KV voltage connecting the generation facility of TAYSMPL to 132KV Grid Station of Mirwah as per the Power Purchase Agreement (PPA) of September 12, 2011.

Any change in the final Interconnection and Transmission Arrangement(s), for the dispersal of power other than the above, as agreed by TAYSMPL and HESCO shall be communicated to NEPRA in due course of time.

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**Detail of
Generation Facility/
Plant**

A. General Information

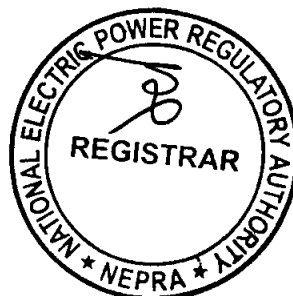
(i).	Name of Applicant	Tando Allahyar Sugar Mills (Pvt.) Limited
(ii).	Registered /Business Office	First Floor, Block 3, Hockey Club of Pakistan Stadium, Liaquat Barracks, Karachi, Pakistan.
(iii).	Plant Location	Tando Allah Yar, Sindh
(iv).	Type of Generation Facility	Bagasse Fired Thermal Power Station.

B. Plant Configuration

(i).	Plant Size Installed Capacity	12.00 MW
(ii).	Type of Technology	Conventional Steam Turbine based Power Plant
(iii).	Number of Units/Size (MW)	2 x 6.00 MW
(iv).	Unit Make & Model	Shinko Industries Ltd, Japan, DNG42-65H/2011
(v).	Commissioning/ Commercial Operation date of each Unit	November 30, 2011



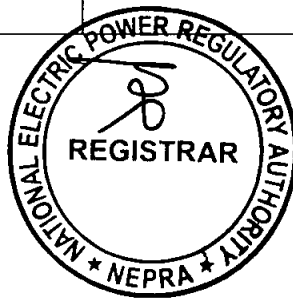

*As provided by Tando Allayar Sugar Mills (Pvt.) Limited



(vi).	Expected Useful Life of the Facility from Commercial Operation/ Commissioning Date	40 years
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C. Fuel/Raw Material Details

(i).	Primary Fuel	Bagasse		
(ii).	Alternate Fuel	Bio-Mass		
(iii).	Start Up Fuel	Furnace Oil (FO)		
(iv).	Fuel Source (Imported/Indigenous)	Primary Fuel	Alternate Fuel	Start Up Fuel
		Indigenous	Indigenous	Indigenous
(v).	Fuel Supplier	Primary Fuel	Alternate Fuel	Start Up Fuel
		Tando Allah Yar Sugar Mills Limited	Other Sugar Mills & Agro based Industrial Units located in the area including Rice shellers/Cotton Ginning factories etc.	Shell Pakistan Ltd / PSO
(vi).	Supply Arrangement	Primary Fuel	Alternate Fuel	Start Up Fuel
		Through Conveyor Belts/Loading Trucks/Tractor Trolleys etc	Through Conveyor Belts/Loading Trucks/Tractor Trolleys etc	Through Oil Tankers
(vii).	Sugarcane Crushing Capacity	9,000 Ton Crushing Per Day		
(viii).	Bagasse Generation Capacity	2,900 Tons per day		

(ix).	Fuel Storage facilities	Primary Fuel	Alternate Fuel	Start Up Fuel
		Bulk Storage	Bulk Storage	1 Tank
(x).	Capacity of Storage facilities	Primary Fuel	Alternate Fuel	Start Up Fuel
		25,000 tons bulk storage	Part of Storage Facility for Primary Fuel	300 tons
(xi).	Gross Storage Capacity	Primary Fuel	Alternate Fuel	Start Up Fuel
		25,000 tons Bulk Storage	Part of Storage Facility for Primary Fuel	300 Tons

D. Emission Values

		Primary Fuel	Alternative Fuel
(i).	SO _x (mg/Nm ³)	< 400mg/m ³	< 400mg/m ³
(ii).	NO _x (mg/Nm ³)	< 400mg/m ³	< 400mg/m ³
(iii).	CO ₂	12% ~ 13%	12% ~ 13%
(iv).	CO (mg/Nm ³)	< 3%	< 3%
(v).	PM ₁₀	0.107mg/m ³	0.107mg/m ³

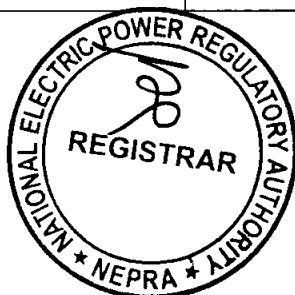
E. Cooling System

(i).	Cooling Water Source/Cycle	Condensate Water, Ground Water Turbine with Cooling Tower/Closed Loop Cycle
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F. Plant Characteristics

(i).	Generation Voltage	6.6 KV
(ii).	Frequency	50 Hz

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(iii).	Power Factor	0.8 ~ 0.95
(iv).	Automatic Generation Control (AGC)	Yes
(v).	Ramping Rate	3.3KW per second
(vi).	Time required to Synchronize to Grid	4 Hours for Cold start and 30 seconds to synchronize with Grid.



SCHEDULE-II

The Installed/ISO Capacity (MW), De-Rated Capacity At Mean Site Conditions (MW), Auxiliary Consumption (MW) and the Net Capacity At Mean Site Conditions (MW) of the Generation Facilities of Licensee is given in this Schedule



SCHEDULE-II*

1.	Total Gross Installed Capacity (2 x 6.00 MW)	12.00 MW
2.	De-rated Capacity at Mean Site Conditions	12.00 MW
3.	Auxiliary Consumption	00.40 MW
4.	Net Capacity of the Plant at Mean Site Conditions (2 x 5.80 MW)	11.60 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).

* As provided by Tando Allayar Sugar Mills (Pvt.) Limited

