

## **National Electric Power Regulatory Authority** Islamic Republic of Pakistan

NEPRA Tower, Ataturk Avenue (East) G-5/1, Islamabad Ph: +92-51-9206500, Fax: +92-51-2600021 Web: www.nepra.org.pk, E-mail: info@nepra.org.pk

No. NEPRA/R/LAG-228/13167-13169

November 27, 2013

Mr. Mustafa Tapal Director Tapal Wind Energy (Private) Limited Ameejee Chambers, Campbell Street, Karachi-74200 Ph: 021-32625492

Subject:

Generation Licence No. WPGL/23/2013

Licence Application No. LAG-228 Tapal Wind Energy (Private) Limited

Reference:

Your application vide letter No. nil, dated May 29, 2013

Enclosed please find herewith Generation Licence No. WPGL/23/2013 granted by National Electric Power Regulatory Authority (NEPRA) to Tapal Wind Energy (Private) 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.

REGISTRAR

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

Enclosure: Generation Licence

(WPGL/23/2013)

(Sved 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. WPGL/23/2013

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:

#### **TAPAL WIND ENERGY (PVT.) LIMITED**

Incorporated under the Companies Ordinance, 1984
having Corporate Universal Identification No. 0074224, dated December 13, 2010

for its Generation Facility/Wind Farm Located at Jhampir, near Nooriabad,

District Thatta, in the Province of Sindh

(Installed Capacity: 30.00 MW Gross ISO)

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

& Thirteen and expires on 29<sup>th</sup> day of June Two Thousand &

**Thirty Five** 

Registrar





## Article-1 Definitions

#### 1.1 In this Licence

- (a). "Act" means "the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997";
- (b). "Authority" means "the National Electric Power Regulatory Authority constituted under section 3 of the Act";
- (c). "Bus Bar" means a system of conductors in the generation facility of the Licensee on which the electric power of all the generators is collected for supplying to the Power Purchaser;
- (d). "Carbon Credits" mean the amount of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases not produced as a result of generation of energy by the generation facility/Wind Farm, and other environmental air quality credits and related emissions reduction credits or benefits (economic or otherwise) related to the generation of energy by the generation facility/Wind Farm, which are available or can be obtained in relation to the generation facility/Wind Farm after the COD;
- (e). "Commercial Operations Date (COD)" means the day immediately following the date on which the generation facility of the Licensee is Commissioned;
- (f). "CPPA" means the Central Power Purchasing Agency of NTDC or any other entity created for the like purpose;
- (g). "Energy Purchase Agreement" means the energy purchase Agreement, entered or to be entered into by and between the Power Purchaser and the Licensee, for the purchase and sale of electric energy generated by the generation facility/Wind Farm,

hye



as may be amended by the parties thereto from time to time

- (h). "Grid Code" means the grid code prepared by NTDC and approved by the Authority, as it may be revised from time to time by NTDC with any necessary approval by the Authority;
- (i). "HESCO" means Hyderabad Electric Supply Company Limited and its successors or permitted assigns;
- (j). "IEC" means "the International Electrotechnical Commission and its successors or permitted assigns;
- (k). "IEEE" means the Institute of Electrical and Electronics Engineers and its successors or permitted assigns;
- (I). "Licensee" means <u>Tapal Wind Energy (Pvt.) Limited</u> and its successors or permitted assigns;
- (m). "NTDC" means National Transmission and Despatch Company Limited and its successors or permitted assigns;
- (n). "Policy" means "the Policy for Development of Renewable Energy for Power Generation, 2006" of Government of Pakistan as amended from time to time;
- (o). "Power Purchaser" means NTDC (through CPPA) on behalf of XW-DISCOs which purchases electricity from the Licensee, pursuant to an Energy Purchase Agreement for procurement of electricity;
- (p). "Rules" mean "the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000";



- (r). "Wind Turbine Generator" or "WTG" means the machines installed at the generation facility/Wind Farm with generators for conversion of wind energy into electric power/energy;
- (s). "XW DISCO" means "an Ex-WAPDA distribution company engaged in the distribution of electric power"
- 1.2 Words and expressions used but not defined herein bear the meaning given thereto in the Act or in the Rules.

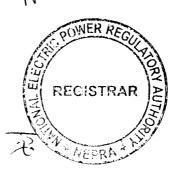
## Article-2 Application of Rules

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 and functional specifications and other details specific to the generation facility/Wind Farm of the Licensee are set out in Schedule-I of this Licence.
- 3.2 The net capacity of the generation facility/Wind Farm 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 specific details pertaining to its generation facility/Wind Farm before its commissioning/COD.





## Article-4 Term of Licence

- 4.1 The Licence is granted for a term of twenty (20) years after the COD of the generation facility/Wind Farm.
- 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 National Electric Power Regulatory Authority Licensing (Application & Modification Procedure) 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, 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 determined, approved or specified by the Authority in terms of Rule-6 of the Rules.

## 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.

#### <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 the National Electric Power Regulatory Authority Performance Standards (Generation) Rules 2009 as amended 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 Power off take Point and Voltage

The Licensee shall deliver electric power to the Power Purchaser at the outgoing Bus Bar of its 132 KV grid station. The up-gradation (step up) of generation voltage up to 132 KV will be the responsibility of the Licensee.





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Generation Licence Tapal Wind Energy (Pvt.) Limited Jhampir, Nooriabad, District Thatta Sindh

## Article-12 Performance Data of Wind Farm

The Licensee shall install monitoring mast with properly calibrated automatic computerized wind speed recording meters at the same height as that of the wind turbine generators and a compatible communication/SCADA system both at its Wind Farm and control room of the Power Purchaser for transmission of wind speed and power output data to the control room of the Power Purchaser for record of data.

#### <u>Article-13</u> Provision of Information

- 13.1 The obligation of the Licensee to provide information to the Authority shall be in accordance with Section 44 of the Act.
- 13.2 The Licensee shall in addition to 13.1 above, supply information to the Power Purchaser regarding the wind data specific to the site of the Licensee and other related information on a regular basis and in a manner required by it.
- 13.3 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.

## Article-14 Carbon Credits

The Licensee shall process and obtain Carbon Credits expeditiously and credit the proceeds to the Power Purchaser as per the Policy.

## Article-15 Design & Manufacturing Standards

15.1 The Wind Turbine Generator or WTG and other associated equipments of the generation facility/Wind Farm shall be designed, manufactured and tested





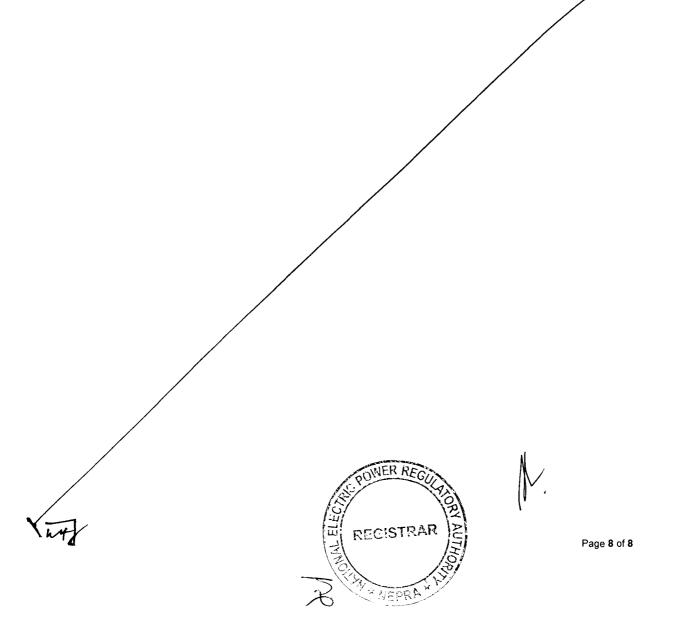
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according to the latest IEC, IEEE standards or other equivalent standards in the matter.

15.2 All the plant and equipment of the generation facility/Wind Farm shall be unused and brand new.

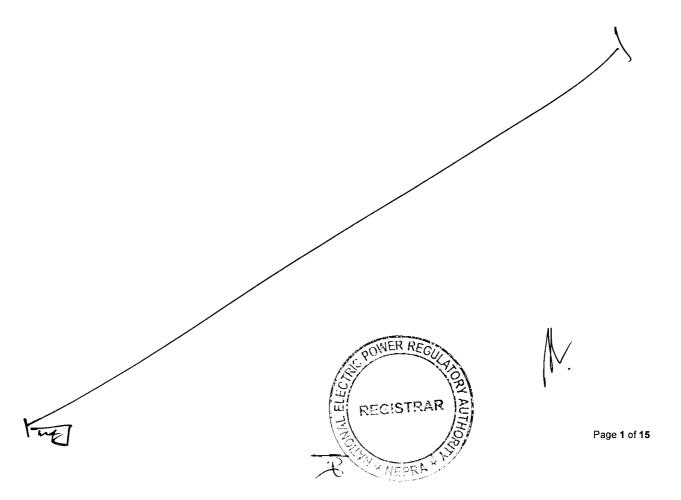
## Article-16 Power Curve

The power curve for the individual Wind Turbine Generator or WTG provided by the manufacturer and as mentioned in Schedule-I of this Generation Licence, shall form the basis in determining the cumulative Power Curve of the generation facility/Wind Farm.

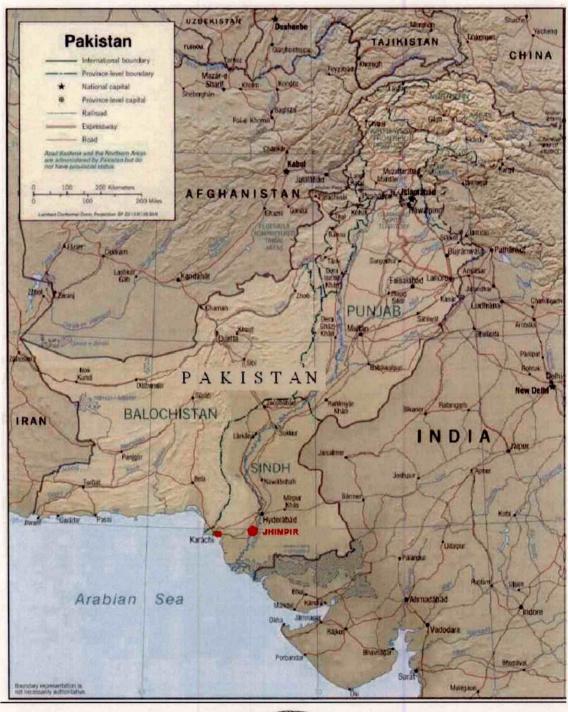


## **SCHEDULE-I**

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.



## Location of the Generation Facility/Wind Farm









## Coordinates Location of the Generation Facility/Wind Farm

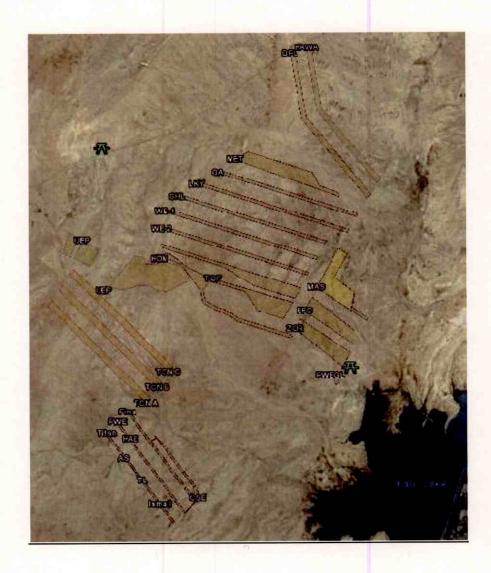
Site Coordinates					
Ref Point	Area	Fasting [m]	Northing [m]	latitude	Longitude
01	69 acres	385103.7206	2759226.42	24.94398226	67.86195921
02		384991.1921	2759137.244	24.94316854	67.86035221
03		386125.53	2757588.52	24.92926999	67.87221326
04		386228.4171	2757701.727	24.93029989	67.87322278

Site Coordinates					
Ref Point	Area	Easting [m]	Northing [m]	Latitude	Longitude
01	66 acres	384915.3395	2759481.798	24.94627389	67.86007238
02		384802.0389	2759395.497	24.94548605	67.85895748
03		383667.6164	2760944.337	24.95938449	67.84759257
04		383775.7397	2761026.694	24.96013641	67.84865657

Site Coordinates					
Ref Point	Area	Easting [m]	Northing [m]	Latitude	Longitude
U1	62.34 acres	382349.98	2/62/43.32	24.9/552634	67.83438894
02		382446.8374	2762828.218	24.97630042	67.83534117
03		383590.3659	2761277.996	24.95239127	67.84679936
04		383477.8813	2761203.384	24.93170894	67.84569151



## Lay Out of the Generation Facility/Wind Farm



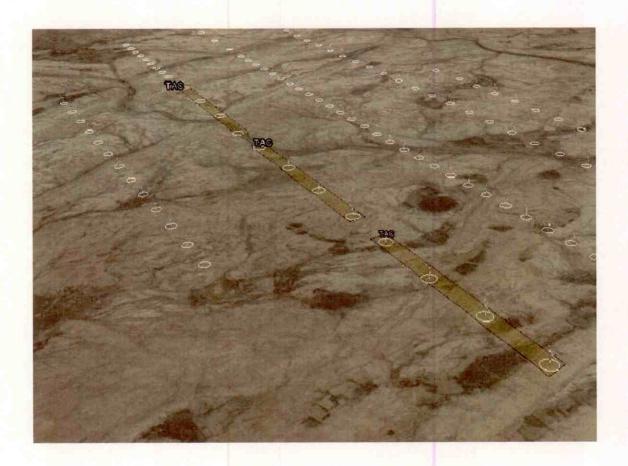






Generation Licence Tapal Wind Energy (Pvt.) Limited Jhampir, Nooriabad, District Thatta Sindh

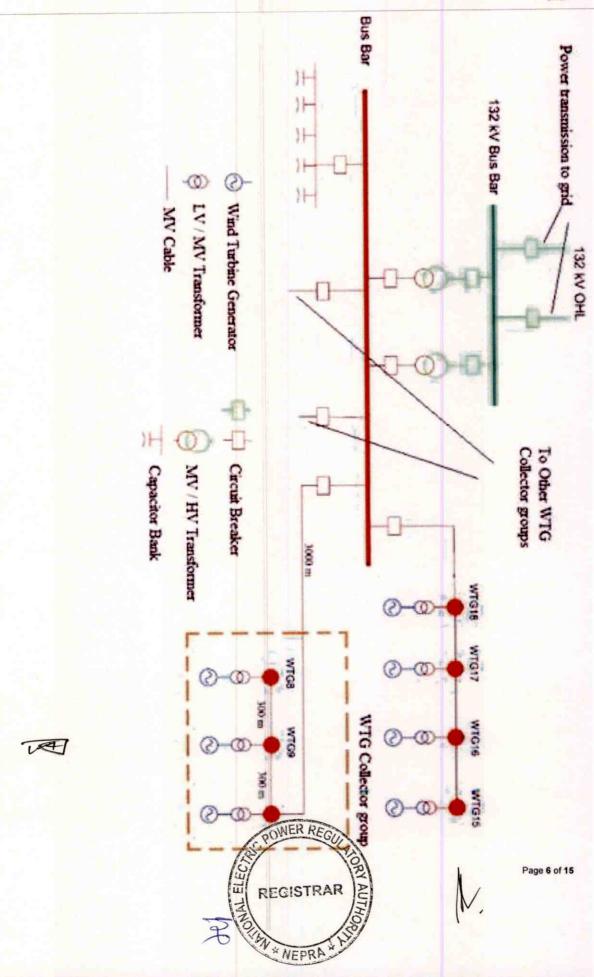
# Micro-siting of the Location of the Generation Facility/ Wind Farm



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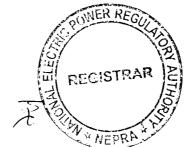
#### Interconnection

# Arrangement/Transmission Facilities for Dispersal of Power from the Generation Facility/Wind Power Plant/Wind Farm of Tapal Wind Energy (Pvt.) Limited (TWEPL)

The power generated from the Generation Facility/Wind Power Plant (WPP)/Wind Farm of TWEPL shall be dispersed to the load center of HESCO.

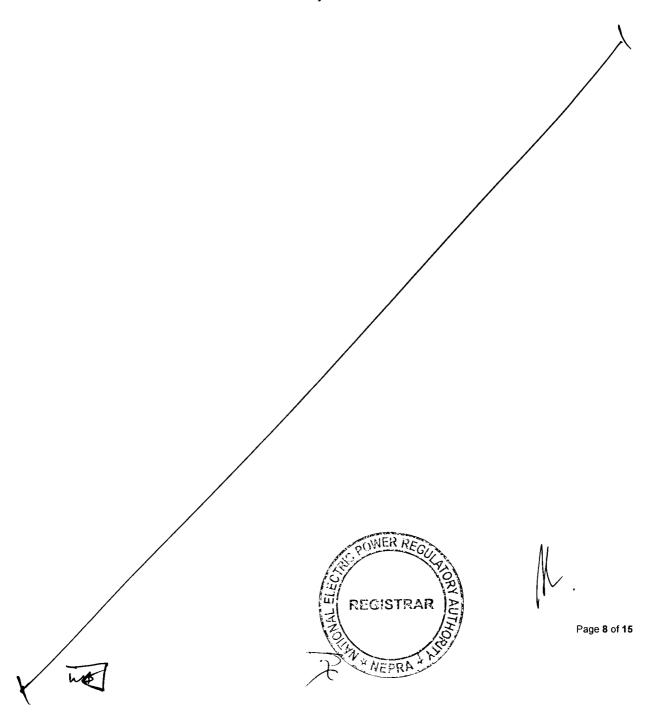
- (2). The proposed Interconnection Arrangement/Transmission Facilities for dispersal will consist of the following:-
  - (a). The Generation facility of TWEPL would be connected by looping in-out Jhimpir-FINA-Thatta 132kV circuit at substation of TWEPL. In this arrangement, TWEPL would be connected to Thatta on one end and FINA WPP at the other end. The nearby 9.00MW WPP of Titan will also be using the same 132/20 kV substation as that of TWEPL to connect to the grid.
- (3). The scheme of interconnection of TWEPL proposes the following reinforcement already in place in Jhimpir cluster by 2014:
  - (a). 220/132 kV Jhimpir-New collector substation at suitable location in Jhimpir cluster;
  - (b). 75 Km Long 132 kV double circuit from Jhimpir-New collector substation to T.M Khan 132 kV Substation.
  - (c). 120 Km long 220 kV double circuit from NTDC Gharo to T.M Khan Road 220 kV substation in Hyderabad, which is in-out at Jhimpir-New 220/132 kV substation.
  - (d). 132 kV D/C from Gharo cluster to Thatta (55 Km) using Greeley conductor constructed from the first wind farm in Gharo cluster.

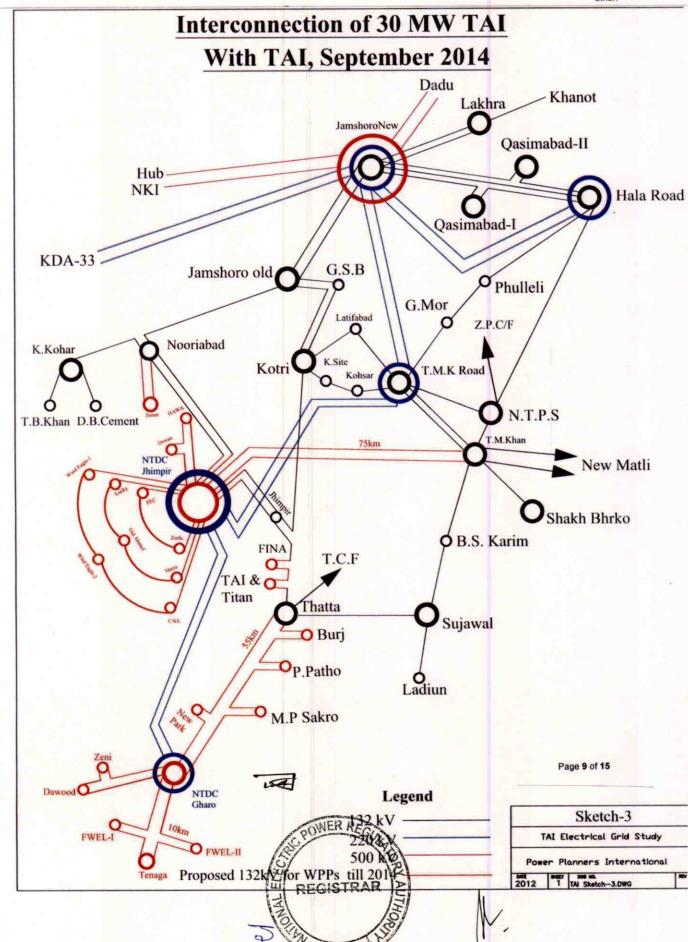




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- (e). 220/132kV NTDC Gharo substation at suitable location in Gharo cluster that may be constructed in stages for 132 kV and 220 kV levels depending on the respective quantum of wind power going to be added in this cluster.
- (f). Reconductoring of Nooriabad Jamshoro Old 132 kV single circuit with Greeley Conductor.
- (4). Any change in the above mentioned Interconnection Arrangement/Transmission Facilities duly agreed by TWEPL, NTDC and HESCO, shall be communicated to the Authority in due course of time.





### <u>Detail of</u> <u>Generation Facility/</u> <u>Wind Farm</u>

#### (A). General Information

(i).	Name of Applicant/ Company	Tapal Wind Einergy (Pvt.) Ltd.
(ii).	Registered/Business Office	2 <sup>nd</sup> Floor, Ameejee Chamber, Campbell Street, Karachi.
(iii).	Plant Location	Jhampir, Near Nooriabad, District Thatta, Sindh.
(iv).	Type of Generation Facility	Wind Power Plant

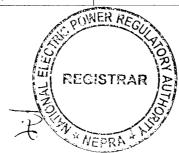
#### (B). Wind Farm Capacity & Configuration

(i).	Wind Turbine type, Make & Model	Goldwind Permanent Magnet Direct Drive GW109/2500
(ii).	Installed Capacity of Wind Farm (MW)	30.00 MW
(iii).	Number of Wind Turbine Units/Size of each Unit (MW)	12 x 2.50 MW

#### (C). Wind Turbine Details

(a).	Wind Turbine	
(i).	Quantity	12 Each
(ii).	Rated Power	2.50 MW
(iii).	Number of Blades	3 Each
(ii).	Diameter of Blades	109 Meter
(iv).	Rotor Swept Area	9326 Meter
(v).	Cut-in Wind Speed	3 m/s
(vi).	Rated Wind Speed	13.5 m/s
(vii).	Cut-out Wind Speed	25 m/s







(i).	Annual Average Wind Speed	7.4 m/s (80m height)
(g).	Wind Resource	
(iii).	Natural Foundation Features	Highly-weathered limestone, moderately - weathered limestone, highly weathered sandy shale bed
(ii).	Туре	Reinforced concrete foundation on Natural Ground
(i).	Quantity	12 Each
(f).	Compact Pre Fabricated Su	bstation Foundation
(iii).	Natural Foundation Features	Highly-weathered limestone, moderately - weathered limestone, highly weathered sandy shale bed
(ii).	Туре	Reinforced concrete foundation on Natural Ground
(i).	Quantity	12 Each
(e).	WTGs Foundation	
(ii).	Туре	132/33kV, 25/31.5 MVA ONAN/ONAF, 132 kV ± 8x1.25%/33kV
(i).	Main Transformer	2 Each
(d).	132kV Substation	
(ii).	Voltage Level	33±2×2.5%/0.69kV
(i).	Quantity	12 Each
(c).	Compact Pre Fabricated Su	bstation
(iii).	Rated Voltage	690 V
(ii).	Power Factor of Generators	0.95 Leading to 0.95 Lagging
(i).	Generator Capacity	2500 kW
(b).	<u>Generator</u>	
(x).	Rotational Speed	9-17.3 r.p.m.
(ix).	Hub Height	80 Meter
(viii).	Survival Wind Speed	40 m/s to 60 m/s

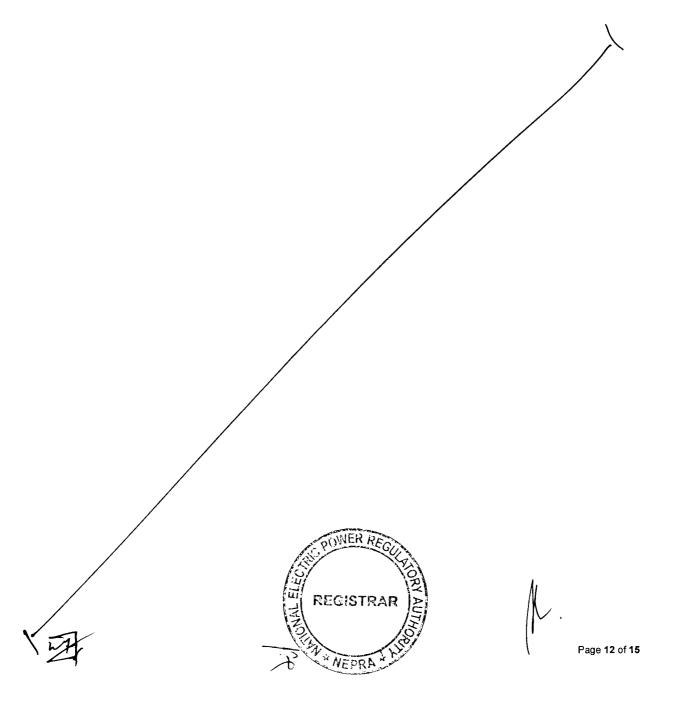




(ii).	Prevailing Winds	WSW
(iii).	Annual Expected Energy	84.897 GWh

## (D). Other Details

(i).	Project Commissioning date (Anticipated)	June 30, 2015
(ii).	Expected Life of the Project from Commercial Operation date (COD)	20 Years



## Power Curve GW109/2500 @ 1.225 Kg/m<sup>3</sup>

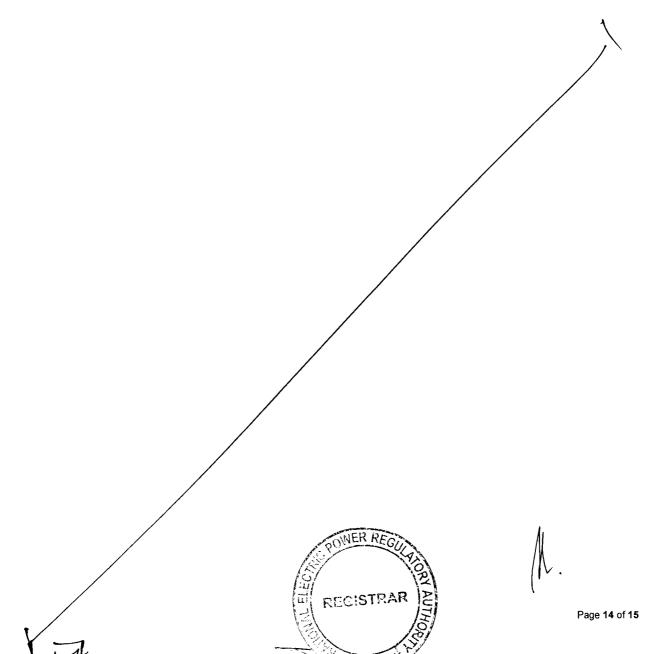
Wind Speed [m/s]	Power [KW]
3	47
3.5	90
4	145
4.5	212
5	291
5.5	389
6	506
6.5	643
7	803
7.5	986
8	1189
8.5	1412
9	1641
9.5	1861
10	2084
10.5	2271
11	2381
11.5	2450
12	2477
12.5	2492
13	2499
13.5	2500
14	2500
15	2500
16	POWER RECO

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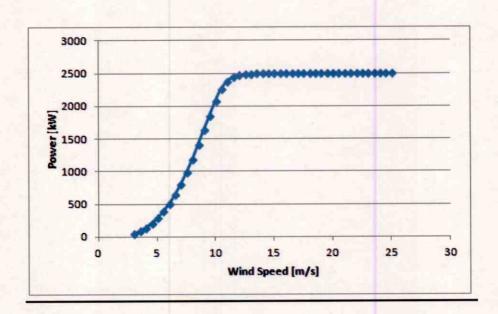




17	2500
18	2500
19	2500
20	2500
21	2500
22	2500
23	2500
24	2500
25	2500



## Power Curve (Graphic) GW109/2500



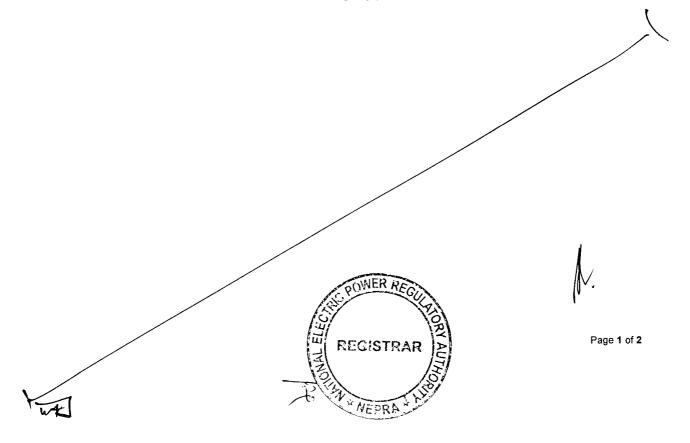




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### **SCHEDULE-II**

The Total Installed/Gross ISO Capacity (MW), Total Annual Full Load Hours, Average Wind Turbine Generator (WTG) Availability, Total Gross Generation of the Generation Facility/Wind Farm (in GWh), Array & Miscellaneous Losses (GWh), Availability Losses (GWh), Balance of Plant Losses (GWh) and Annual Energy Generation (GWh) of the Generation Facility /Wind Farm of Licensee is given in this Schedule



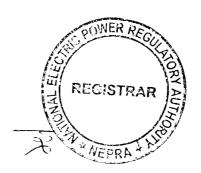
## **SCHEDULE-II**

(1).	Total Installed Gross ISO Capacity of the Generation Facility /Wind Farm (MW/GWh)	30 MW
(2).	Total Annual Full Load Hours	2830 Hrs
(3).	Average Wind Turbine Generator (WTG) Availability	95%
(4).	Total Gross Generation of the Generation Facility/Wind Farm (in GWh)	123.407 GWh
(5).	Array & Miscellaneous Losses GWh	14.62 GWh
(6).	Availability Losses GWh	6.17 GWh
(7).	Balance of Plant Losses GWh	17.72 GWh
(8)	Annual Energy Generation (20 year equivalent Net Annual Energy Production-AEP) GWh	84.897 GWh
(9).	Net Capacity Factor	32.31%

Note

All the above figures are indicative as provided by the Licensee. The Net energy available to Power Purchaser for dispatch will be determined through procedures contained in the Energy Purchase Agreement.





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## National Electric Power Regulatory Authority (NEPRA)

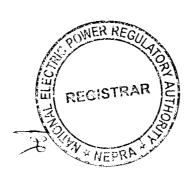
#### <u>Determination of the Authority</u> <u>in the Matter of Generation Licence Application of</u> <u>Tapal Wind Energy (Pvt.) Limited</u>

November 26, 2013 Application No. LAG-228

#### (A). Background

- (i). In order to harness the Renewable Energy (RE) resources in the Country, the Government of Pakistan has mandated Alternative Energy Development Board (AEDB). A significant number of Letter of Intents (LoIs) have been issued to different developers for setting up Wind Project in the identified wind corridors of Jhampir and Gharo in District Thatta, in the Province of Sindh.
- (ii). AEDB issued an LoI on April 04, 2013 to Tapal Wind Energy (Pvt.) Limited (TWEPL) for setting up a 30.00 MW Wind Power Project (WPP)/Wind Farm (WF) in the above mentioned Wind Corridors. According to the terms and condition of the LoI, the sponsors of the project were required to carry out a complete Feasibility Study (FS) of the project consisting of (a) Technical study including resource assessment, plant & equipment details, layout and energy production analysis (b) Grid Interconnection Study approved by NTDC and (c) Environmental Impact Assessment (EIA)/Initial Environmental Examination/IEE study approved by provincial Environmental Protection Agency.
- (iii). In order to accomplish the above tasks, TWEPL hired the services of different consulting firms. Later on, after the announcement of the Up-Tariff by the Authority, TWEPL decided opting the same. Accordingly, TWEPL decided to approach NEPRA for the grant of Generation Licence and for unconditional acceptance of the announced Up-Front Tariff.





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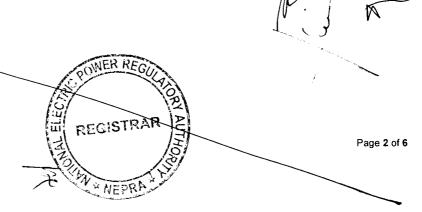
#### (B). Filing of Generation Licence Application

- (i). TWEPL in accordance with Section 15 of Regulation of Generation, Transmission and Distribution of Electric Power Act 1997, filed an application on June 03, 2013, requesting for grant of a Generation Licence. The Authority admitted the application on July 24, 2013.
- (ii). Pursuant to Regulation-8 of the NEPRA Licensing (Application & Modification Procedure) Regulations, 1999 (hereinafter "the Regulations"), a Notice of Admission (NoA) including the brief of prospectus and other salient features of application was advertised in the newspapers of July 27, 2013, seeking comments from the General Public and other interested/affected parties in favor or against the Grant of Licence.
- (iii). Apart from NoA in the press, separate notices were also sent to Individual Experts/Government Ministries/Representative Organizations etc. on July 27, 2013, for submitting views/comments in the matter for the assistance of the Authority.

#### (C). Comments of Stakeholders

- (i). In reply to the above, the Authority received comments from four (04) stakeholders. This included Pakistan Counsel of Renewable Energy Technologies (PCoRET), Ministry of Water and Power (MoW&P), Central Power Purchasing Agency (CPPA) of National transmission and Desptach Company Limited (NTDC) and Energy and Power Department of Government of Khyber Pakhhtunekhwa (E&PDGoKPK).
- (ii). The salient points of the comments offered by the above stakeholder are summarized in the following paragraphs: /





- (a). PCoRET stated that in order to meet the energy requirements of the country, it encourages all the projects related to RE. Further, PCoRET expressed its no objection for the grant of Generation Licence to TWEPL;
- (b). MoW&P submitted that the Authority may grant Generation Licence to TWEPL if AEDB is on board and it has granted a Letter of Support (LoS) and the indicated Power Purchaser has consented to purchase power from the proposed generation facility;
- (c). CPPA remarked that According to the latest plan provided by Planning Department NTDC, the interconnection facilities for the evacuation of power from the WPP/WF of TWEPL would be possible in Stage 4 (i.e. December 2016). CPPA further stated that TWEPL must ensure that their proposed WPP/WF comply with the relevant provisions of the Grid Code already enforced;
- (d). E&PDGoKPK supported the proposed RE Project of TWEPL. However, E&PDGoKPK also highlighted that cost of the project should be in line with offered technology and its country of origin/manufacture.
- (iii). The perspective of TWEPL on the aforesaid position of MoW&P was sought. In its rejoinder, TWEPL submitted that AEDB was on board as it had issued the LoI. Further, AEDB through its letter of September 03, 2013 confirmed its support for the project. TWEPL also submitted that the Power Purchaser had already consented in purchasing power and had also confirmed that necessary Infrastructure for dispersal of power from TWEPL would be available before its Commercial Operation. TWEPL also clarified that it had already submitted a tariff petition with the Authority for /un-conditional





acceptance of Up-front Tariff for Wind Projects. As soon as the request is approved/accepted, TWEPL will be approaching AEDB for the LoS.

(iv). In consideration of the above, Authority considered it appropriate to process the Generation Licence application of TWEPL in terms of Regulations of NEPRA Licensing (Generation), Rules 2000 ("the Rules").

#### (D). Grant of Generation Licence

- (i). The sustainable and affordable energy/electricity is a key prerequisite for socio-economic development of any Country. In fact, the Economic Growth of any Country is directly linked with the availability of safe, secure, reliable and cheaper supply of energy/electricity. In view of the said reasons, the Authority is of the considered opinion that for sustainable development, all indigenous power generation resources including RE must be developed on priority basis.
- (ii). The existing energy mix of the country is heavily skewed towards the costlier thermal power plants, mainly operating on imported furnace oil. The continuously increasing trend in fuel prices is not only creating pressure on the precious foreign exchange reserves of the country but is also an environmental concern. Therefore, in order to achieve sustainable development it is imperative that indigenous RE resources are given priority for power generation and their development is encouraged. The Energy Security Action Plan 2005 (ESAP) approved by the Government of Pakistan, duly recognizes this very aspect of power generation through RE and envisages that at least 5% of total national power generation capacity (i.e. 9700 MW) to be met through RE resources by 2030. The Authority considers that the proposed project of TWEPL is consistent with the provisions of ESAP. The project will help in diversifying the energy portfolio of the country. Further, it will not only enhance the energy security of the country by reducing the dependence on imported furnace oil but will also help reduction in carbon emission by generating clean electricity, thus improving the environment.

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- (iii). The Authority has examined the offered comments of the stakeholders and the rejoinder submitted by TWEPL [as explained at Para-C(ii)(a), C(ii)(b), C(ii)(c), C(ii)(d) and C(iii) above] and is satisfied that TWEPL is entitled for the grant of Generation Licence as it has complied with the requirements of the Regulations and the Rules. However, it shall be obligatory on the part of TWEPL to comply with the provisions of the Grid Code.
- (iv). The term of a Generation Licence under the Rule 5 of the Rules is to be commensurate with the maximum expected life of the units comprised in a generating facility. According to the information provided, the Commercial Operation Date (COD) of the proposed Generation Facility/ WPP/WF of TWEPL will be June 30, 2015 and will have a useful life of about twenty (20) years from its COD. TWEPL has also submitted that the Energy Purchase Agreement (EPA) will be based and negotiated in terms of twenty (20) years useful life of the equipment. TWEPL has submitted that the term of its Generation Licence may be set accordingly. The Authority considers that the information provided by TWEPL on useful life is consistent with other similar cases. In view of this, the Authority fixes the term of the Generation Licence to twenty (20) years from COD.
- (v). Regarding the Tariff, it is hereby clarified that under Section 7(3)(a) of the NEPRA Act, the determining of tariff, rate and charges etc. is the sole responsibility of the Authority. TWEPL had already applied for the acceptance of the Up-front Tariff in accordance with the Determination of the Authority No. NEPRA/TRF-WPT/2013/3942-3944, dated April 24, 2013. The Authority has also accepted the request of TWEPL through its determination No. NEPRA/TRF-243/TWEPL-2013/12986, dated November 21, 2013. In view of the said, the Authority directs TWEPL to charge the Power Purchaser the Tariff determined, approved or specified by the Authority in terms of Rule-6 of the Rules.

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(vi). In view of this, the Authority hereby decides to approve the grant of Generation Licence to TWEPL on the terms set out in the Generation Licence annexed to this determination. The grant of Generation Licence will be subject to the provisions contained in the NEPRA Act, relevant rules and regulations framed there under including the Grid Code.

#### **Authority**

Habibullah Khilji Member 26/11/20/3

Maj. (R) Haroon Rashid Member Juny Smins 113

Khawaja Muhammad Naeem Member/Vice Chairman 10/1/26 X1 QU,

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