



Registrar

# National Electric Power Regulatory Authority

## Islamic Republic of Pakistan

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad  
Ph: +92-51-9206500, Fax: +92-51-2600026  
Web: www.nepa.org.pk, E-mail: registrar@nepa.org.pk

No. NEPRA/R/DG(Lic)/LAG-494/22469-74

April 30, 2021

The Director  
Directorate of Power Projects,  
Energy Department  
Government of the Punjab  
206-Shadman-I, Opposite Rehmania Masjid,  
Lahore  
Tele: 042 – 9920 3520 - 23


Subject: **Grant of Generation Licence No. SGC/153/2021**  
**Licence Application No. LAG-494**  
**Directorate of Power Projects, Energy Department, Govt. of the Punjab**

Reference: Directorate of Power Projects, Energy Department. Government of the Punjab  
letter dated 22.10.2020 received on 26.10.2020.

Enclosed please find herewith Generation Licence No. SGC/153/2021 granted by National Electric Power Regulatory Authority (NEPRA) to Directorate of Power Projects, Energy Department, Government of the Punjab for its 350.960 KWp Gross Generation Facilities located at village 563/EB, tehsil and district Vehari, in the province of Punjab, pursuant to Section 14(B) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 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.

Encl: **Generation Licence**  
**(SGC/153/2021)**

  
30 04 21  
( Syed Safer Hussain )

Copy to:

1. Secretary, Ministry of Energy, Power Division, 'A' Block, Pak Secretariat, Islamabad
2. Managing Director, Punjab Power Development Board (PPDB), Old Anarkali, 1<sup>st</sup> Floor, Irrigation Secretariat, Lahore
3. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad
4. Chief Executive Officer, Multan Electric Power Co. Ltd., MEPCO Headquarter, Khanewal Road, Multan
5. Director General, Environment Protection Department, Govt. of Punjab, National Hockey Stadium, Ferozpur Road, Lahore.

**National Electric Power Regulatory Authority**  
**(NEPRA)**

**Determination of the Authority**  
**in the Matter of Application of Directorate of Power Projects Energy**  
**Department for the Grant of Generation Licence**

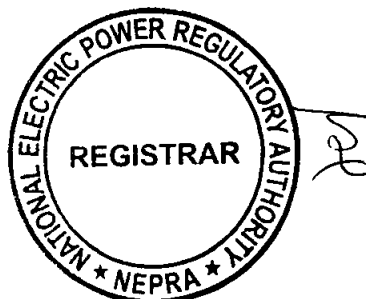
**April 3<sup>rd</sup>, 2021**  
**Case No. LAG-494**

**(A). Filing of Application**

(i). Directorate of Power Projects Energy Department, Government of Punjab (EDGoPb) submitted an application on October 26, 2020 for the grant of generation licence in terms of Section-14B of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "NEPRA Act") read with the relevant provisions of the NEPRA Licensing (Application and Modification Procedure) Regulations, 1999 (the "Licensing Regulations").

(ii). The Registrar examined the submitted application and found that application was deficient in terms of the Licensing Regulations. Accordingly, the Registrar advised EDGoPb for submitting the missing information/documents as required under the said regulations. Subsequently, EDGoPb filed the missing information/documentation on November 06, 2020 and Registrar placed the matter before the Authority for admission of the application or otherwise. The Authority considered the matter and found the form and content of the application in substantial compliance with Regulation-3 of the Licensing Regulations.

(iii). Accordingly, the Authority admitted the application on December 15, 2020 for consideration of the grant of the generation licence as stipulated in Regulation-7 of the Licensing Regulations. The Authority published a Notice of Admission/Notice in one (01) Urdu and one (01) English newspapers on December 16, 2020 to invite



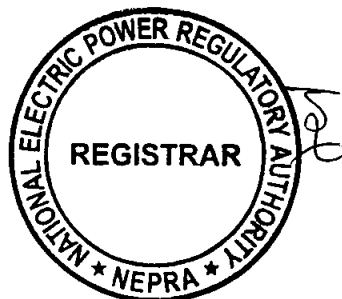
comments of general public, interested and affected persons in the matter as stipulated in Regulation-8 of the Licensing Regulations.

(iv). In addition to the above, the Authority also approved a list of stakeholders for seeking their comments for its assistance in the matter in terms of Regulation-9(2) of the Licensing Regulations. Accordingly, letters were sent to different stakeholders as per the approved list on December 16, 2020, soliciting their comments for assistance of the Authority.

**(B). Comments of Stakeholders**

(i). In reply to the above, the Authority received comments from Punjab Power Development Board (PPDB) only. The salient points of the comments offered by the said mentioned stakeholder are summarized in the paragraphs as mentioned below:-

- (a). PPDB submitted that Energy Department Govt. of Punjab attaches great importance for the promotion based on indigenous resources such as solar, wind or biogas, etc. The proposed micro power plant is a hybrid project with a combined capacity of 350.960 KWp, comprising of 300.960 KWp Photo Voltaic based solar generation facility combined with a 50 KWp biogas generation facility. The electricity generated will be supplied to the local community of the Village 563/EB tehsil and district Vehari in the province of Punjab. The proposed generation facility will have a number of benefits including improvement in the voltage profile of the area, reduction in loses of the system, environmental improvement. Further, the community will benefit from the additional biogas if available and availability of byproduct in the form of slurry to be used as fertilizer and soil enricher. In view of the said, PPDB support the grant of generation licence.



(ii). The Authority reviewed the above comments of PPDB and found the same in favor of grant of the Generation Licence. Accordingly, the Authority considered it appropriate to process the application of EDGoPb for the grant of generation licence as stipulated in the NEPRA Licensing (Generation) Rules, 2000 (the "Generation Rules") and the Licensing Regulations.

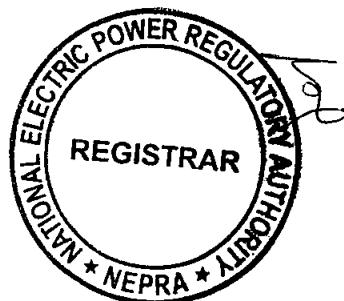
**(C). Analysis/Findings**

(i). The Authority has examined the submissions of EDGoPb including the information provided with its application, comments of the stakeholder(s), provisions of the NEPRA Act and the relevant rules & regulations in the matter. The observations of the Authority in the matter are explained in the following paragraphs.

(ii). The applicant i.e. EDGoPb is a statutory body of the Govt. of Punjab (GoPb) entrusted with the objective of taking various initiatives pertaining to electrification within the province. In this regard, the department is actively involved in different projects including large scale projects for National Grid operating on coal, RLNG and solar. Further, a massive plan has been initiated to tap the potential of solar energy by deploying solar Panels across various segments including household, school, colleges and hospital.

(iii). In this regard, the Authority has observed that under Section-24 of the NEPRA Act, the applicants/licensees are required to be companies registered under the Companies Ordinance, 1984 (XLVII of 1984) or Companies Act 2017. Therefore, EDGoPb requested the Authority for exemption of the said requirement. In this regard, the Authority is empowered to grant exemption to the said requirement on case to case basis. Therefore, considering the fact that EDGoPb is owned by the government of the Punjab and developing the plant as a rural welfare project, the Authority acceded to the request of EDGoPb for the said exemption.

(iv). Regarding the project, the Authority has observed that EDGoPb after going through a competitive bidding process has developed a community based PV based solar and Biogas based hybrid generation facility with a cumulative Installed



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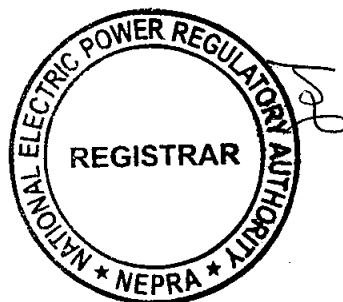
Capacity of 350.960 KWp out of which 300.960 KWp will be of solar and remaining 50 KWp will be of Biogas. EDGoPb plans supplying to local community which are already consumers of the local utility i.e. Multan Electric Supply Company Limited (MEPCO) using its network/infrastructure. The existing 11/0.440 KV feeder of MEPCO will be utilized. In this regard the utility has already given its consent for purchasing electric power from the generation facility.

(v). It is further observed that the generation facility is located at the tail end of the feeder whereby severe voltage issues are faced by the consumers. Therefore, the Authority considers that setting up the generation facility/power plant at the tail end of 11 KV feeder will provide relief and help to the national grid regarding reduction of line losses and improvement of power factor and voltage profile of the area.

(vi). Regarding impact of the project on the environment, EDGoPb informed that necessary due diligence has been completed and there will be no environmental impact of the proposed arrangement. In this regard, the Initial Environmental Examination (IEE) has also been conducted confirming no negative impacts of the project. Further, EDGoPb has also confirmed that it will comply with the concerned environmental standards.

(vii). Regarding term of Generation Licence, the Rule-5(1) of the Generation Rules stipulates that the term of a Generation Licence is to be consistent with the maximum expected useful life of the units comprised in a generating facility, except where an applicant consents to a shorter term. According to the information provided by EDGoPb, the hybrid generation facility consisting of solar and biomass generation has already been set up and is ready to be connected to the system of MEPCO. In view of the international standards, the Authority considers that the generation facility may have a useful life of twenty five (25) years from its operation.

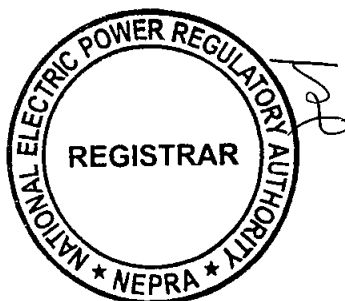
(viii). Regarding the tariff, the Authority hereby clarifies that under Section-7(3)(a) of the NEPRA Act, determining tariff, rate and charges etc. is the sole prerogative of the Authority. It is pertinent to mention that the Authority has allowed



MEPCO to acquire power from this facility for which it will submit a Power Acquisition Contract for consideration of the Authority. In view of the above, EDGoPb is required to charge the utility only such tariff which the Authority has determined, approved or specified for the generation facility.

(ix). Regarding the Rule-3(5) of the Generation Rules which stipulates that the Authority may refuse to issue a generation licence where the site, technology, design, fuel, tariff or other relevant matters pertaining to the generation facility/power plant proposed in an application for a generation licence are either not suitable on environmental grounds or do not satisfy the least cost option criteria. In this regard, the Rule-3(5) of the Generation Rules stipulates the conditions pertaining to Least Cost Option Criteria which includes: (a). sustainable development or optimum utilization of the RE or non-RE resources proposed for generation of electric power; (b). the availability of indigenous fuel and other resources; (c). the comparative costs of the construction, operation and maintenance of the proposed generation facility/power plant against the preferences indicated by the Authority; (d). the cost and right-of-way considerations related to the provision of transmission and interconnection facilities; (e). the constraints on the transmission system likely to result from the proposed generation facility/power plant and the costs of the transmission system expansion required to remove such constraints; (f). the short-term and the long term forecasts for additional capacity requirements; (g). the tariff resulting or likely to result from the construction or operation of the proposed generation facility/power plant; and (h). the optimum utilization of various sites in the context of both the short-term and the long-term requirements of the electric power industry as a whole.

2 (x). In consideration of the above, the Authority considers that the proposed project will result in optimum utilization of the RE which was earlier untapped, resulting in pollution free electric power. It is pertinent to mention that generation facility will operate on indigenous renewable sources and such resources should have preference for the energy security. As explained in the preceding paragraphs above, the company will be supplying to MEPCO through existing feeders directly which only involve laying



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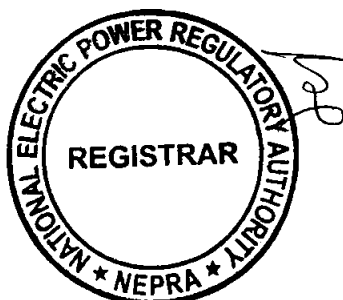
a few meters length of feeder which concludes that the project will not face any constraints in transmission of power. Further, being located in the close vicinity of the load, the project will not result in cost and right-of-way issue for the provision of interconnection facilities. In view of the said, the Authority considers that the project of EDGoPb fulfills the eligibility criteria for grant of the Generation Licence as stipulated in the NEPRA Act, rules and regulations and other applicable documents.

**(E). Grant of Generation Licence**

(i). The Authority considers that 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 consideration of above and reasons explained in the preceding paragraphs, the Authority is of the considered opinion that for sustainable development, all indigenous power generation resources including hydel must be developed on priority basis.

(ii). The Authority is of the considered opinion that increasing the per capita consumption of electricity can directly stimulate faster economic growth and indirectly achieve enhanced social development. In short, the economic growth of any country is directly linked with the availability of safe, secure, reliable, and cheaper supply of electricity. In view of the said, the Authority considers that for sustainable development, the availability of electricity to the consumers at an affordable price must be ensured.

(iii). The Authority has observed that lately the demand supply situation of electric power in the country has improved considerably, however, the transmission and distribution constraints are still existing. In view of the said, the consumers of far flung areas still facing issues of reliability and continuity of supply, due to for which consumers of such areas/villages are in dire need of affordable and reliable sources of electricity. In this regard, the initiatives of EDGoPb worth consideration and appreciation as the same will provide supply to electricity starved consumers of the area.

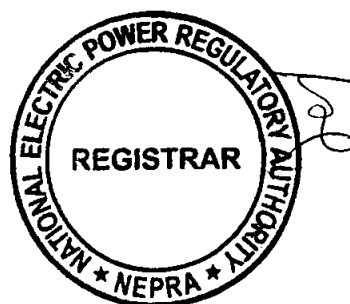


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(iv). The Rule-5(1) of the Generation Rules stipulates that the term of a Generation Licence is to be consistent with the maximum expected useful life of the units comprised in a generating facility, except where an applicant consents to a shorter term. According to the information provided by EDGoPb, the Commercial Operation Date (COD) of the generation facility is March 31, 2021 and will have a useful life of twenty five (25) years from its COD. In this regard, EDGoPb has requested that the term of the proposed Generation Licence may be fixed as twenty five (25) years. In consideration of the said, the Authority considers that the submissions of EDGoPb are in line with the industry standards and norms. In view of the said, the Authority fixes the term of the Generation Licence as thirty (30) years from COD of the project, subject to the Section 14-B of the NEPRA Act.

(v). Regarding the rates, charges and terms & conditions of the tariff, the Authority hereby clarifies that under Section- 7(3)(a) of the NEPRA Act, determining tariff, rate and charges, etc. is the sole prerogative of the Authority. It is pertinent to mention that the Authority has allowed MEPCO to acquire power from this facility for which it will submit a Power Acquisition Contract for consideration of the Authority. In view of the said, the Authority considers appropriate to direct EDGoPb to charge the power purchaser/utility only such tariff which has been determined, approved, or specified by it. In view of the said, the Authority decides to include a specific article in the Generation Licence. Further, the Authority directs EDGoPb to adhere to the said in letter and spirit without any exception.

(vi). About the compliance with the environmental standards, as discussed in the preceding paragraphs, EDGoPb has informed that necessary due diligence has been completed and there will be no environmental impact of the proposed arrangement. Further, EDGoPb has also carried out the required IEE of the project confirming no negative impacts of the project. Also, EDGoPb has confirmed that it will comply with the concerned environmental standards. In view of the importance of the issue, the Authority has decided to include a specific article in the Generation Licence






along with other terms and conditions making it obligatory for EDGoPb to always comply with relevant environmental standards.


(vii). In view of the above, the Authority hereby approves the grant of Generation Licence to EDGoPb on the terms and conditions 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, regulations framed thereunder and other applicable documents.

**Authority**

Rafique Ahmed Shaikh  
(Member)

  
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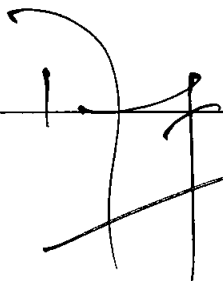
Rehmatullah Baloch  
(Member)

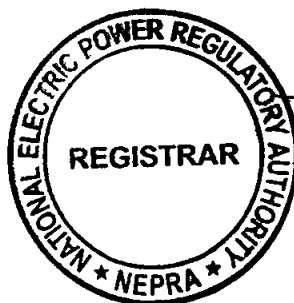
  
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Saif Ullah Chattha  
(Member)

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Tauseef H. Farooqi  
(Chairman)

  
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**National Electric Power Regulatory Authority  
(NEPRA)  
Islamabad – Pakistan**

**GENERATION LICENCE**

**No. SGC/153/2021**

In exercise of the powers conferred upon the National Electric Power Regulatory Authority (NEPRA) under Section 14B of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997/Amendment Act 2018, the Authority hereby grants a Generation Licence to:


**Directorate of Power Projects, Energy Department, Govt. of the  
Punjab**

**for its Generation Facilities located at village 563/EB, tehsil and  
district Vehari, in the Province of Punjab**

(Total Installed Capacity:  $\approx$  350.960 KWp Gross)

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

Given under my hand this on 30<sup>th</sup> day of April Two Thousand  
& Twenty One and expires on 30<sup>th</sup> day of March Two  
Thousand & Forty-Six.

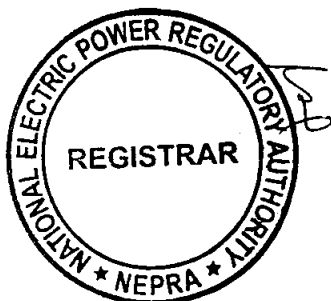
  
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**Article-1**  
**Definitions**

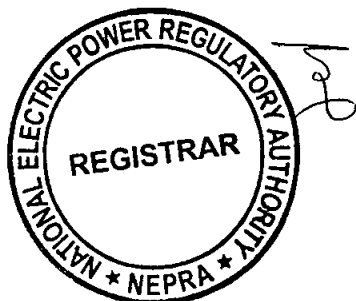
**1.1.1 In this licence**

- (a). "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 as amended or replaced from time to time;
- (b). "Applicable Documents" mean the Act, the rules and regulations framed by the Authority under the Act, any documents or instruments issued or determinations made by the Authority under any of the foregoing or pursuant to the exercise of its powers under the Act, the Grid Code, the applicable Distribution Code, the Commercial Code if any, or the documents or instruments made by the Licensee pursuant to its generation licence, in each case of a binding nature applicable to the Licensee or, where applicable, to its affiliates and to which the Licensee or any of its affiliates may be subject;
- (c). "Applicable Law" means all the Applicable Documents;
- (d). "Authority" means the National Electric Power Regulatory Authority constituted under Section-3 of the Act;
- (e). "Bus Bar" means a system of conductors in the Generation Facility of the Licensee on which the electric power from the Generation Facility is collected for supplying to the Power Purchaser;
- (f). "Carbon Credits" mean the amount of Carbon Dioxide (CO<sub>2</sub>) and other greenhouse gases not produced as a result of generation of electric energy by the Generation Facility and other environmental air quality credits and related emissions reduction credits or benefits (economic or otherwise) related to the generation of electric energy by the Generation Facility, which

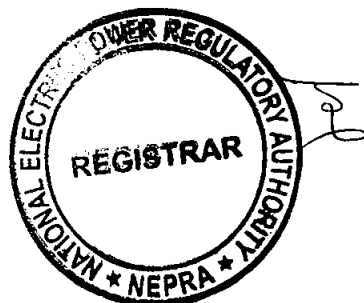


are available or can be obtained in relation to the Generation Facility after the COD;

- (g). "Commercial Code" means the commercial code prepared by CPPA-G under National Electric Power Regulatory Authority (Market Operator, Registration, Standards and Procedure) Rules, 2015 as amended or replaced from time to time;
- (h). "Commercial Operations Date (COD)" means the day immediately following the date on which the Generation Facility of the Licensee is commissioned;
- (i). "Commissioning" means the undertaking of the Commissioning Tests of the Generation Facility as stipulated in the EPA;
- (j). "CPPA-G" means Central Power Purchasing Agency (Guarantee) Limited, or any other entity created for the like purpose;
- (k). "Distribution Code" means the distribution code prepared by the concerned XW-DISCO and approved by the Authority, as may be revised from time to time with necessary approval of the Authority;
- (l). "Energy Purchase Agreement (EPA)" 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, as may be amended by the parties thereto from time to time;
- (m). "Generation Facility" means the power generation facility of the Licensee consisting of 300.960 KW Solar Power Plant/Solar Farm and 50 KW Biogas based power plant;



- (n). "Generation Rules" mean the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000 as amended or replaced from time to time;
- (o). "Grid Code" means the grid code prepared and revised from time to time by NTDC with necessary approval of the Authority;
- (p). "Licensee" means **Directorate of Power Projects Energy Department Government of Punjab** or its successors or permitted assigns;
- (q). "Licensing Regulations" mean the National Electric Power Regulatory Authority Licensing (Application & Modification Procedure) Regulations, 1999 as amended or replaced from time to time;
- (r). "MEPCO" means Multan Electric Power Company Limited or its successors or permitted assigns;
- (s). "Net Delivered Energy" means the net electric energy expressed in kWh generated by the Generation Facility of the Licensee at its outgoing Bus Bar and delivered to the Power Purchaser;
- (t). "NTDC" means National Transmission and Despatch Company Limited or its successors or permitted assigns;
- (u). "Power Purchaser" means CPPA-G which will be purchasing electric energy from the Licensee either on behalf of all XW-DISCOs or any single XW-DISCO, pursuant to an EPA for procurement of electric energy;
- (v). "Solar Power Plant/Solar Farm" means a cluster of photovoltaic cells in the same location used for production of electric power;



(w). "XW-DISCO" means an Ex-WAPDA distribution company engaged in the distribution of electric power".

1.2 The words and expressions used but not defined herein bear the meaning given thereto in the Act or Generation Rules and Licensing Regulations issued under the Act.

**Article-2**  
**Applicability of Law**

This licence is issued subject to the provisions of the Applicable Law, as amended from time to time.

**Article-3**  
**Generation Facilities**

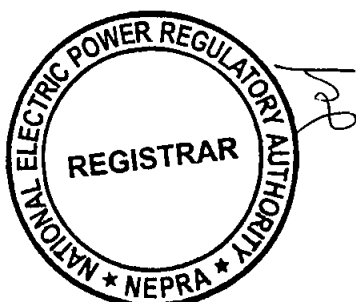
3.1 The location, size (capacity in MW), technology, interconnection arrangements, technical limits, technical functional specifications and other details specific to the Generation Facility of the Licensee are set out in Schedule-I of this licence.

3.2 The net capacity/Net Delivered Energy of the Generation Facility of the Licensee is set out in Schedule-II of this licence. The Licensee shall provide the final arrangement, technical and financial specifications and other specific details pertaining to its Generation Facility before its COD.

**Article-4**  
**Term of Licence**

4.1 This licence shall become effective from the date of its issuance and will have a term of twenty-five (25) years from the COD of the Generation Facility of the Licensee subject to Section 14-B of the Act.

4.2 Unless suspended or revoked earlier, the Licensee may apply for renewal of this Licence ninety (90) days prior to the expiry of the above term, as stipulated in the Licensing Regulations.



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

The Licensee shall pay to the Authority the licence fee as stipulated in the National Electric Power Regulatory Authority (Fees) Rules, 2002 as amended or replaced from time to time.

**Article-6**  
**Tariff**

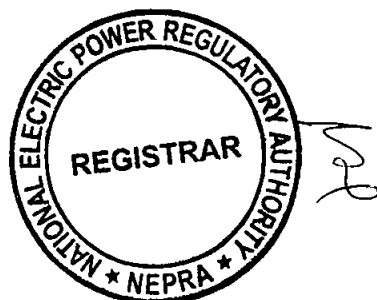
The Licensee shall charge only such tariff from the Power Purchaser which has been determined, approved or specified by the Authority.

**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.

7.2 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.

7.3 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.



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**Article-8**  
**Maintenance of Records**

For the purpose of sub-rule(1) of Rule-19 of the Generation 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 or replaced from time to time.

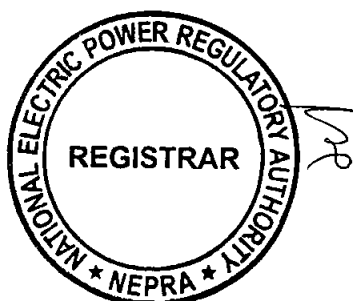
**Article-10**  
**Compliance with Environmental & Safety Standards**

10.1 The Generation Facility of the Licensee shall comply with the environmental and safety standards as may be prescribed by the relevant competent authority from time to time.

10.2 The Licensee shall provide a certificate on a bi-annual basis, confirming that the operation of its Generation Facility is in conformity with required environmental standards as prescribed by the relevant competent authority.

**Article-11**  
**Power off take Point and Voltage**

The Licensee shall deliver the electric energy to the Power Purchaser at the outgoing Bus Bar of its Generation Facility. The Licensee shall be responsible for the up-gradation (step up) of generation voltage up to the required dispersal voltage level.





**Article-12**  
**Provision of Information**

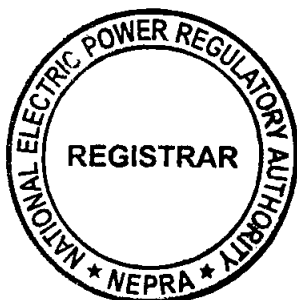
In accordance with provisions of Section-44 of the Act, the Licensee shall be obligated to provide the required information in any form as desired by the Authority without any exception.

**Article-13**  
**Emissions Trading /Carbon Credits**

The Licensee shall process and obtain expeditiously the Carbon Credits admissible to the Generation Facility. The Licensee shall share the said proceeds with the Power Purchaser as per the Policy.

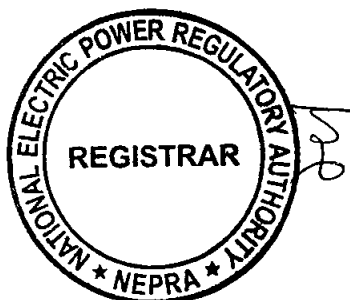
**Article-14**  
**Compliance with Applicable Law**

The Licensee shall comply with the provisions of the Applicable Law, guidelines, directions and prohibitory orders of the Authority as issued from time to time.

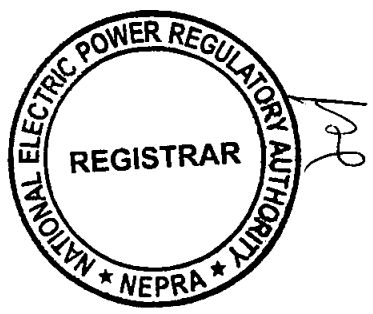
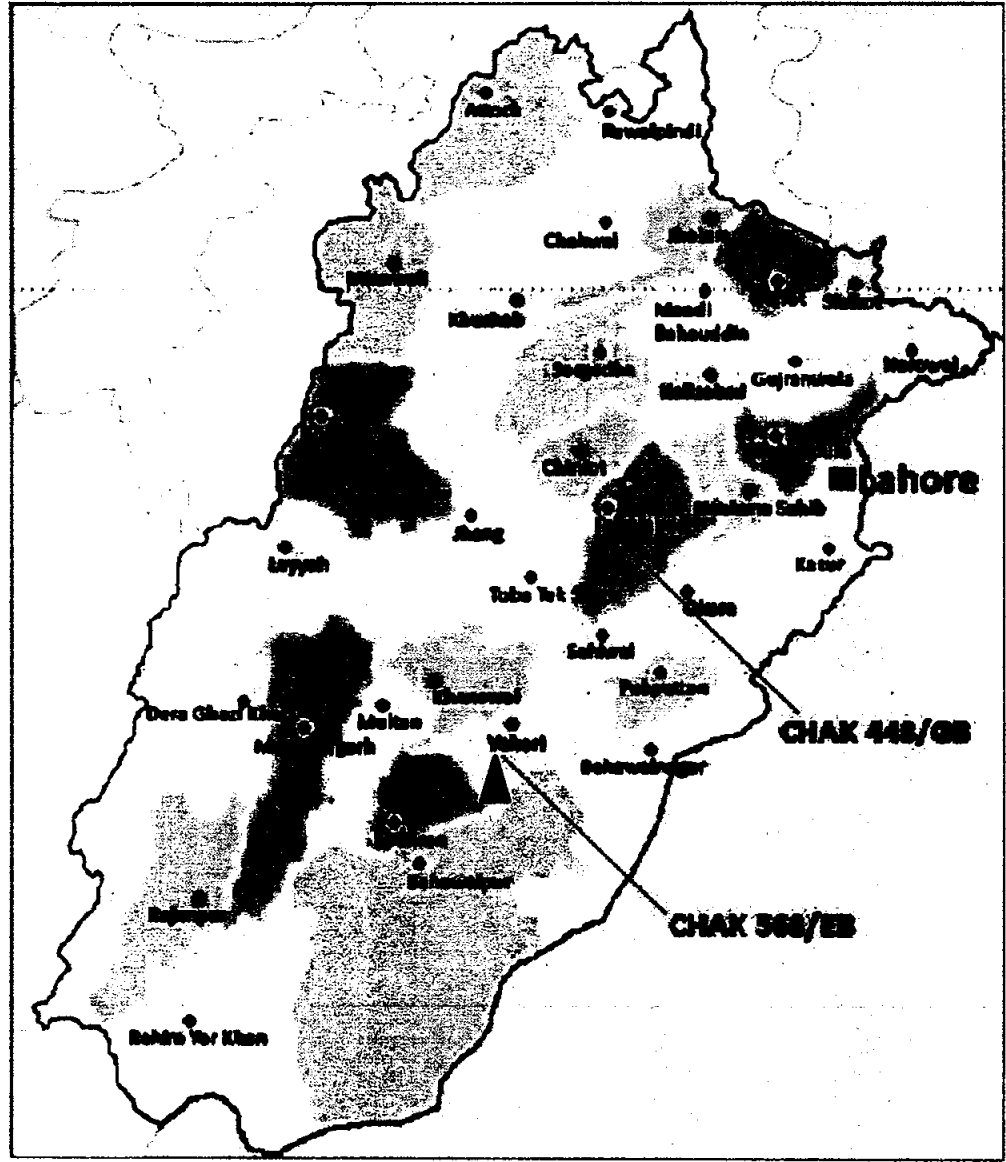


## **SCHEDULE-I**

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.

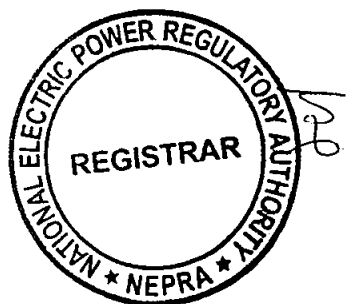
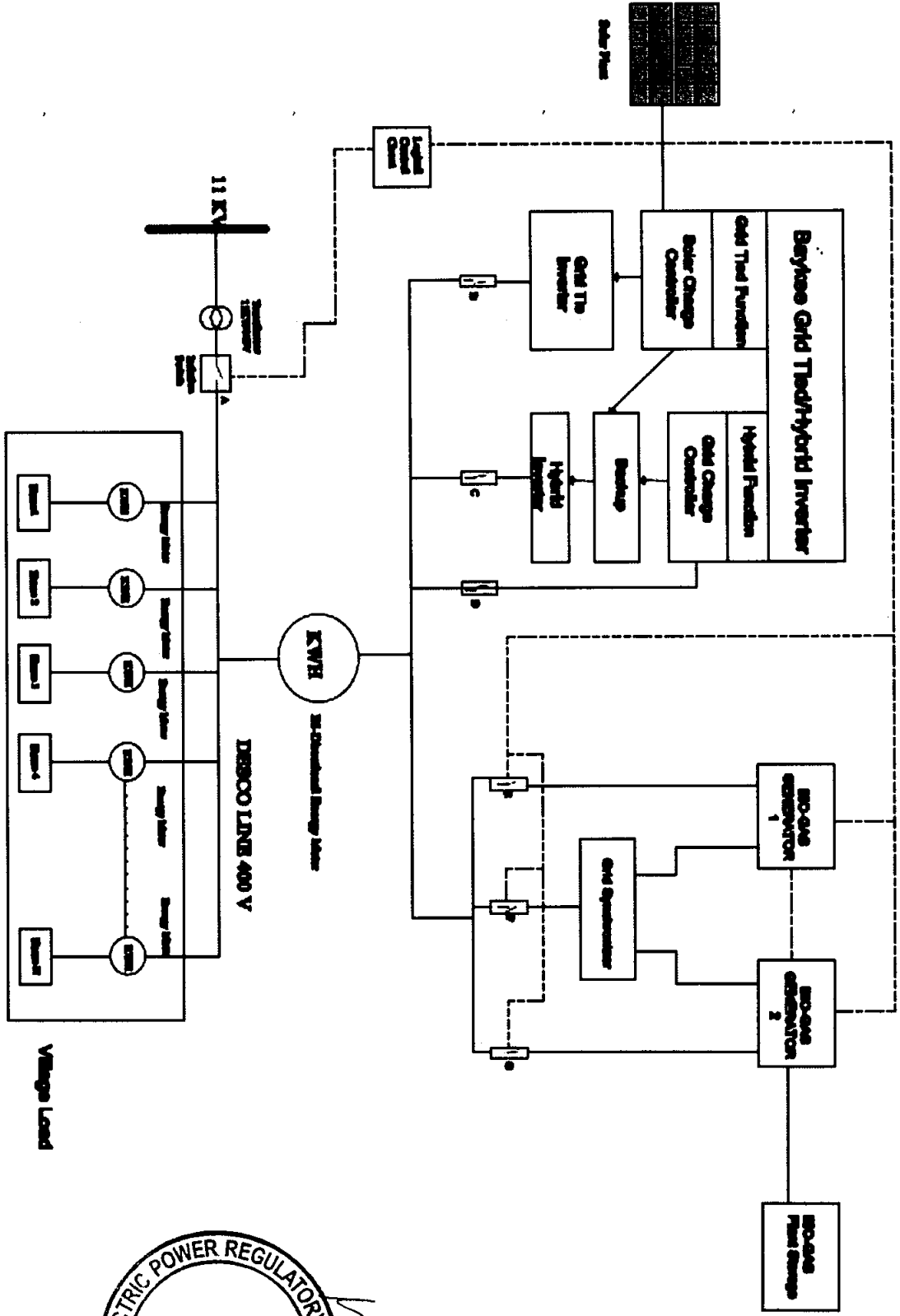


**Location of the Generation Facility of the Licensee on the Map of Punjab**



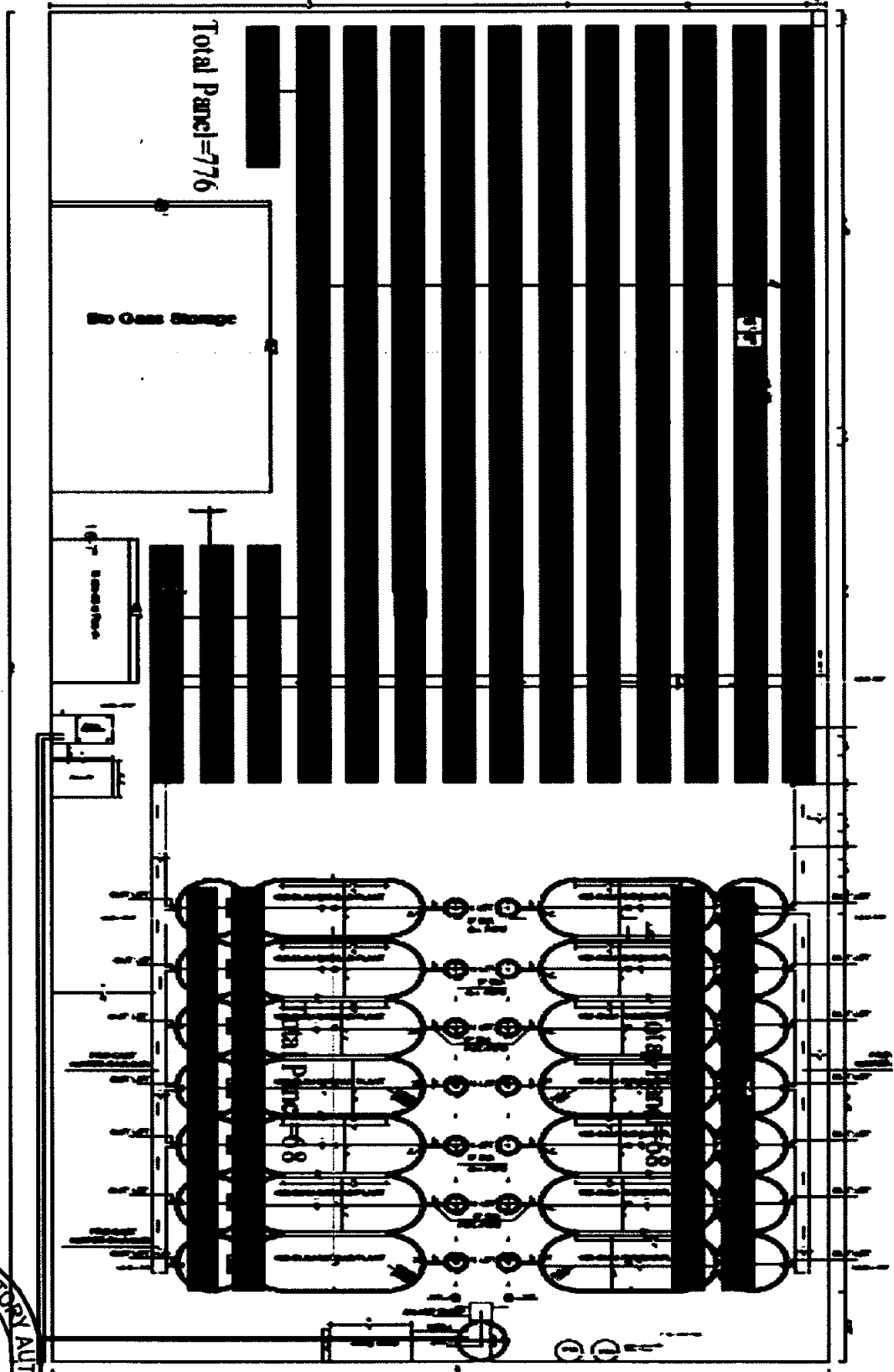
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**Block Diagram of the Generation Facility of the Licensee**



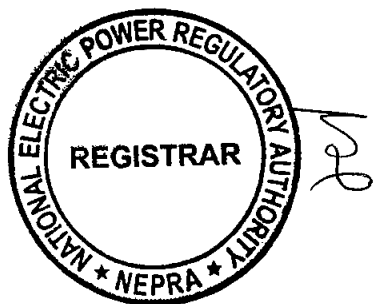
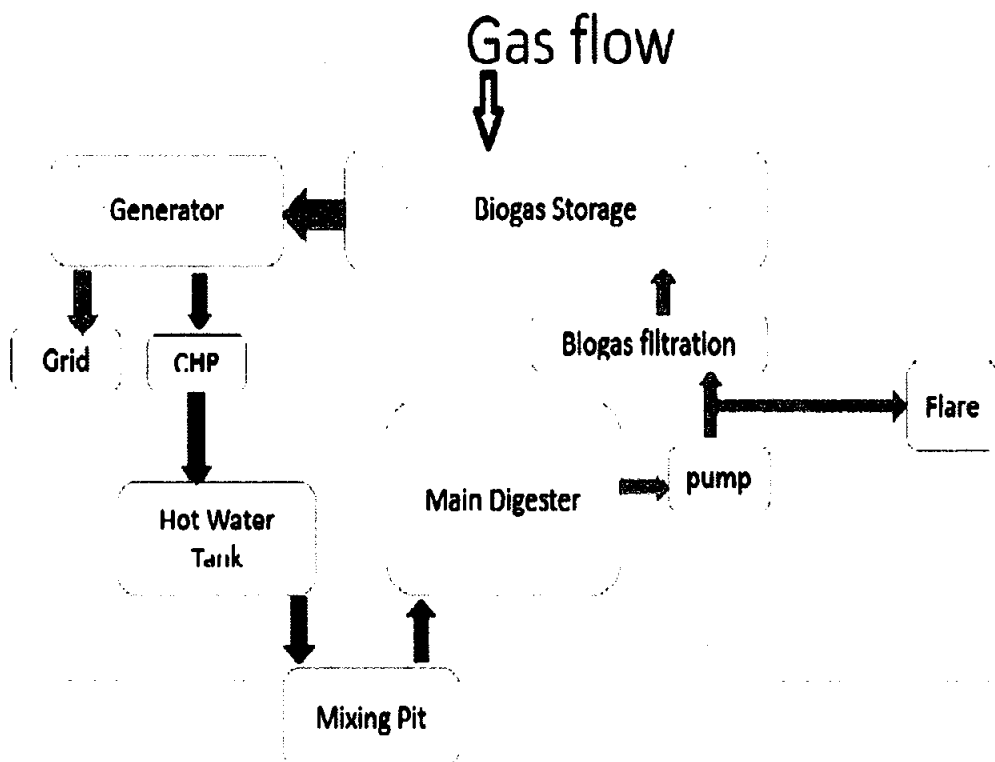
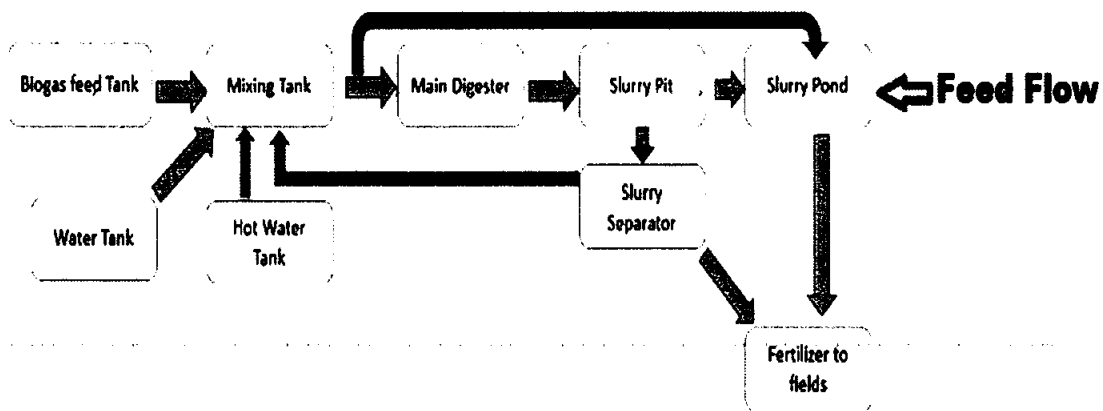
10

**Layout of the Generation Facility of the Licensee**

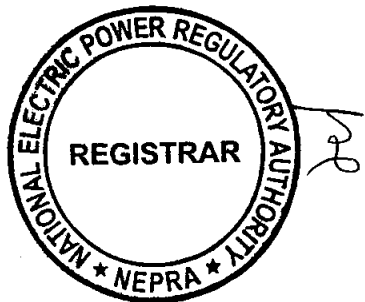
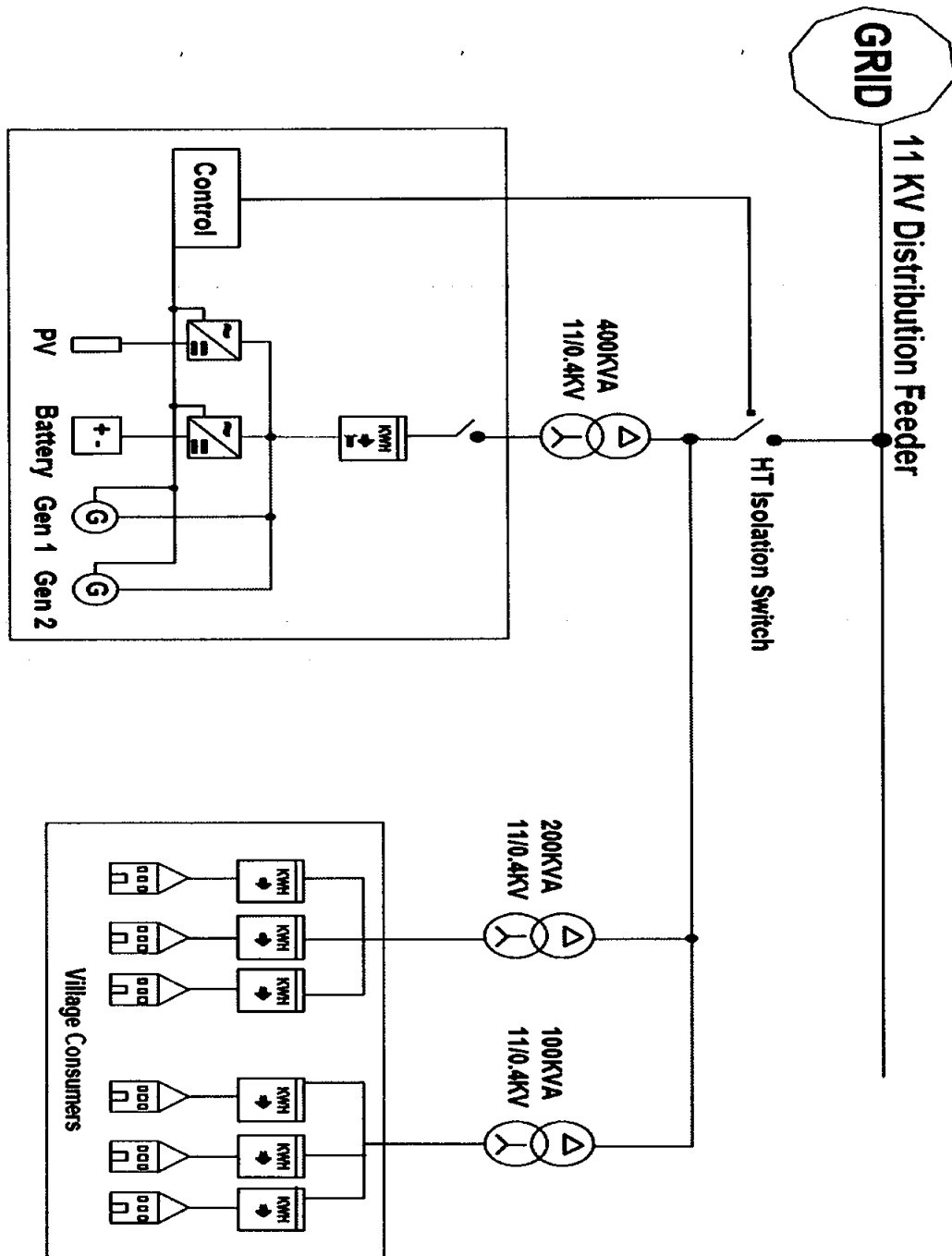


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**Flow Chart of the Biogas Plant**



**Single Line Diagram (Electrical) of the Generation Facility of the Licensee**



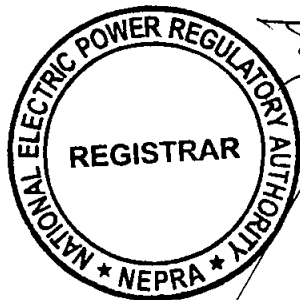
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**Interconnection Arrangement for  
Dispersal of Electric Energy/Power from the Generation Facility of  
the Licensee**

The electric power generated from the generation facilities of the Licensee/Directorate of Power Projects Energy Department Government of Punjab (EDGoPb) shall be dispersed to the load centre of MEPCO through existing 11/0440 KV feeders.

(2). Any change in the above Interconnection Arrangement/Transmission Facility duly agreed by Licensee/EDGoPb and MEPCO, shall be communicated to the Authority in due course of time.





**Detail of**  
**Generation Facility/Solar Power Plant/**  
**Solar Farm**

**(A). General Information**

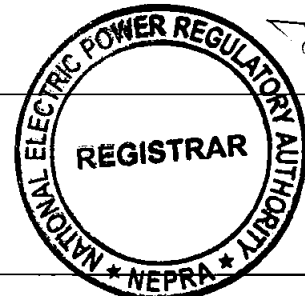
(i).	Name of the Licensee/ Company	Directorate of Power Projects Energy Department Government of Punjab
(ii).	Registered/Business Office of the Licensee/ Company	206 Shadman-I, Opposite Rehmania Masjid Lahore.
(iii).	Location of the Generation Facility	Village 563/EB tehsil and district Vehari in the province of Punjab
(iv).	Type of Generation Facility	Solar Photovoltaic (PV) Cell + Biogas Digester

**(B). Power Generation Technology & Capacity**

(i).	Type of Technology	Poly Crystalline PV cell + Bio Gas	
(ii).	System Type	Grid Connected	
(iii).	Installed capacity of the Generation Facility (KW)	PV Cell	Bio Gas
		300.960KWp	50.00KWp
(iv).	Number of Solar Panels/Bio Digester	912× 330Watt	14

**(C). Other Details**

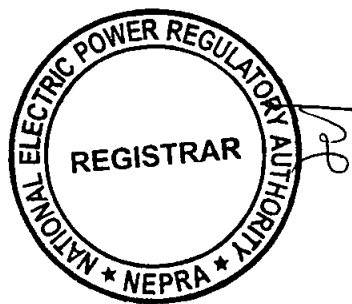
(i).	COD of the Generation facility/Solar Power Plant/Solar farm/Biogas Plant	March 31, 2021
(ii).	Expected Useful life of the Generation facility/Solar Power Plant/Solar farm/ Biogas Plant from the COD	25 Years



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## SCHEDULE-II

The Total Installed Gross ISO Capacity of the generation facility /Power Plant/, Total Annual full load (Hours), Average Sun Availability, Total Gross Generation of the Generation Facility/Solar Farm (in kWh), Annual Energy Generation (25 years Equivalent Net Annual Production-AEP) KWh and net Capacity Factor of the Generation Facility/Power Plant of licensee is given in this schedule.

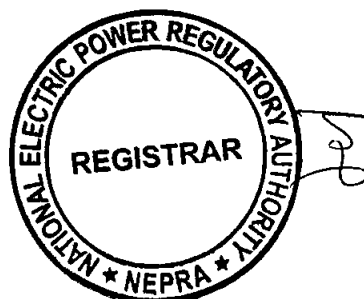


## SCHEDULE-II

Serial No.	Description	Solar Plant	Biogas Plant
(1).	Total installed Capacity of Generation Facility	300.960 KWp	50.00 KWp
(2).	Average Sun Hours Availability /Day (Irradiation on inclined surface)	08.00 Hours	N/A
(3).	Day Per year	365	365
(4).	Daily Plant generating capacity (As per Simulation)	1200kWh	1100 kWh (Max)
	Expected Total Generation in 25 years Life Span	9,855,000 KWH	9,033,750 KWH (Max)
	Net Capacity Factor	16.61%	91.67%

**Note**

All the above figures are indicative as provided by the Licensee. The Net Delivered Energy available to Power Purchaser for dispatch will be determined through procedures contained in the Energy Purchase Agreement (EPA) or the Applicable Document(s).



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