



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.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/R/DL/LAG-372/ 3749-54

March 20, 2017

Mr. M. Saeed Ch.
Chief Executive
Hunza Power (Private) Limited (HPPL)
1-A, New Muslim Town,
Lahore.
Phone. +92-42-111-161-161

Subject: **Grant of Generation Licence No. IGSP/L/76/2017**
Licence Application No. LAG-372
Hunza Power (Private) Limited (HPPL)

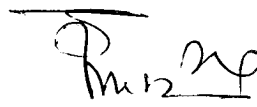
Reference: *Your application vide letter No. nil, dated October 27, 2016 (received on November 01, 2016).*

Enclosed please find herewith Determination of the Authority in the matter of Application of Hunza Power (Private) Limited (HPPL) for the Grant of Generation Licence along with Generation Licence No. IGSP/L/76/2016 annexed to this determination granted by the National Electric Power Regulatory Authority (NEPRA) to HPPL for its 49.80 MW Bagasse based Co-Generation Facility located at Dargai Shah, Athara Hazari, District Jhang, in the province of Punjab, pursuant to Section 15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).

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

Enclosure: **Generation Licence**
(IGSP/L/76/2016)




(Syed Safer Hussain) 20.03.17

Copy to:

1. Chief Executive Officer, Alternative Energy Development Board (AEDB), 2nd Floor, OPF Building, G-5/2, Islamabad
2. Chief Executive Officer, NTDC, 414-WAPDA House, Lahore
3. Chief Executive Officer, CPPA-G, 6th Floor, Shaheed-r-Millat Secretariat, Jinnah Avenue, Blue Area, Islamabad
4. Chief Executive Officer, Faisalabad Electric Supply Company Limited (FESCO), Abdullahpur, Canal Bank Road, Faisalabad
5. Director General, Environment Protection Department, Government of Punjab, National Hockey Stadium, Ferozepur Road, Lahore.

National Electric Power Regulatory Authority
(NEPRA)

Determination of the Authority
in the Matter of Application of Hunza Power (Pvt.) Limited
for the Grant of Generation Licence

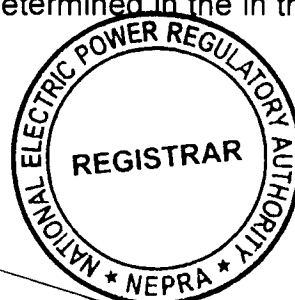
March 14, 2017
Case No. LAG-372

(A). Background

(i). In order to commercially harness the vast potential of the Renewable Energy (RE) Resources in the country, the Government of Pakistan (GoP) has set up an independent entity in the name of Alternative Energy Development Board (AEDB). In this regard, AEDB acts as a one window facilitator for the potential investors.

(ii). In this regard, the GoP through AEDB has formulated "the Policy for Development of Renewable Energy for Power Generation 2006" (hereafter the RE Policy). Initially the scope of the RE Policy included development of Hydro, Wind, and Solar Technologies. Later on, the GoP amended the scope of the Policy to include Power Projects based on Bagasse, Biomass, Waste-to-Energy and Bio-Energy, using High-Pressure (minimum 60 bar) Boiler Technology. Further, the GoP also extended the applicability of the Policy for an additional five (05) years w.e.f. March 06, 2013. In consideration of the said, AEDB has issued Letter of Intent (LOI) to different entrepreneurs/developers. One of such LOI has been issued to Hunza Power (Pvt.) Limited (HPPL) for setting up a 49.80 MW Bagasse based Power Project at Dargai Shah, Tehsil Athara Hazari, District Jhang, in the Province of Punjab.

(iii). According to the terms and conditions of the LOI, the sponsors of the project i.e. Hunza Group of Industries are obligated to obtain a Generation Licence from the Authority. Further to the said, the sponsors are also required to accept the Up-front Tariff for such projects that the Authority has determined in the in the year 2013.

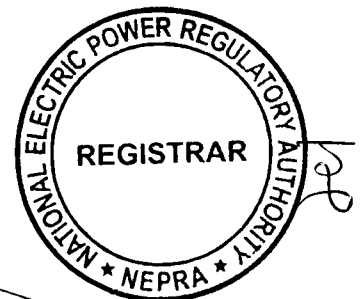


(B). Filing of Application

(i). In accordance with Section-15 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 ("the NEPRA Act"), HPPL submitted an application on October 27, 2016 for grant of the Generation Licence.

(ii). The Registrar examined the submitted application to confirm its compliance with the NEPRA Licensing (Application and Modification Procedure) Regulations, 1999 ("the Licensing Regulations"). It was observed that the application lacked some of required information/documentation as stipulated in the Licensing Regulations. Accordingly, the Registrar directed HPPL to submit the missing information/documentation. HPPL provided the same on November 07, 2016 and accordingly the Registrar submitted the case for the consideration of the Authority.

(iii). The Authority considered the matter and found the form and content of the application in substantial compliance with Regulation-3 of the Licensing Regulations. Accordingly, the Authority decided to admit the application for the grant of the Generation Licence as stipulated in Regulation-7 of the Licensing Regulations. The Authority approved the advertisement containing (a). the prospectus; (b). a notice to the general public about the admission of the application of HPPL, to invite the general public for submitting their comments as stipulated in Regulation-8 of the Licensing Regulations. Further, the Authority also approved the list of the relevant stakeholders including government ministries, their attached departments, representative organizations and individual experts informing about the admission of the application of HPPL and inviting their comments for the assistance of the Authority under Regulation-9 of the Licensing Regulations.



(iv). In consideration of the above, the advertisement was published in one (01) Urdu and one (01) English national newspaper i.e. "Daily Jang" and "Business Reader" on December 22, 2016. Apart from the said, separate letters were also sent to abovementioned relevant stakeholders on December 22, 2016.

(C). Comments of Stakeholders

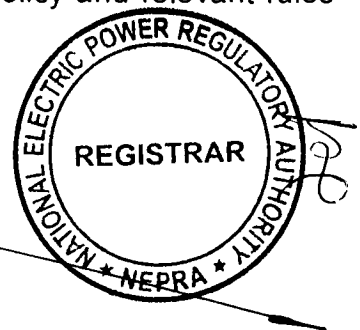
(i). In reply to the above, the Authority received comments from two (02) stakeholders including AEDB and Ministry of Petroleum and Natural Resources (MoP&NR). The salient points of the comments offered by the said stakeholder are summarized in the following paragraphs: -

- (a). AEDB confirmed the issuance of LOI for the project and supported issuance of Generation Licence to the company subject to submission of all codal formalities;
- (b). MoP&NR commented that the proposed generation facility of HPPL would be using Bagasse as fuel therefore, the ministry has no objection in the matter.

(ii). The Authority considered the above comments of stakeholders and found the same favorable. According, the Authority decided to process the application as stipulated in the Licensing Regulations and NEPRA Licensing (Generation) Rules, 2000 ("the Generation Rules").

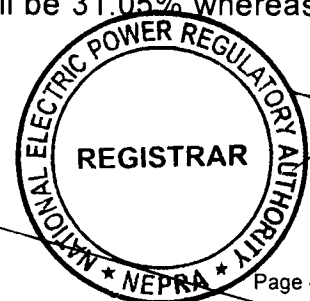
(D). Evaluation of the Case

(i). The Authority has examined the submissions of HPPL including the information provided in its application for the grant of Generation Licence. The Authority has duly considered the feasibility study of the project, interconnection & dispersal arrangement studies etc., provisions of the RE Policy and relevant rules & regulations.



(ii). The Authority has observed the main sponsor of the project is Hunza Group of Industries which is a leading producer of Sugar, Edible Oil, Vanaspati Ghee, Carbon Dioxide (CO₂) and Ethanol in the country for more than two decades. The group has two sugar mills producing white refined sugar, sugarcane molasses, ethanol, industrial alcohol and other allied products. The oil business of the group is even older than its sugar venture. The group owns and operate state of the art ghee mills for edible oil and vanaspati ghee. The two sugar mills are located in the Districts of Jhang and Faisalabad whereas the oil units have been set up in Eimanabad, District Gujranwala to cover the area of upper and central Punjab. The group has set up a few captive power plants in the above mentioned sugar and oil mills. Based on the financial strength and other evaluation parameters, AEDB issued LOI for setting up an approximately 50.00 MW Bagasse based generation facility/Co-Generation Facility/Power Plant at Dargai Shah, Tehsil Athara Hazari, District Jhang in the Province of Punjab. In order to implement the project, the sponsors incorporated a Special Purpose Vehicle (SPV) in the name of HPPL under Section-32 of the Companies Ordinance 1984. The memorandum of association of SPV *inter alia*, includes the business of power generation and sale as one of its business objects. The Authority has observed that SPV/HPPL carried out a feasibility study of the project including inter alia, proposed equipment for generation facility/Co-Generation Facility/Power Plant, soil tests reports, technical details pertaining to selected steam turbine generator and other allied equipment, electrical studies, environmental study and project financing etc. According to the feasibility study, the SPV i.e. HPPL will be setting up a 49.80 MW Bagasse based generation facility/Co-Generation Facility/Power Plant in district Jhang, in the Province of Punjab. In this regard, HPPL confirmed that 272 Kanal (34 Acres) of land has been acquired for the proposed project.

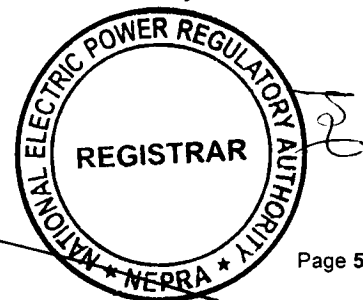
(iii). HPPL has confirmed that the proposed generation facility/Co-Generation Facility/Power Plant will be consisting of 2 x 24.90 MW of steam turbines (of extraction cum condensing type) with high pressure (110 bar) travelling grate boilers (with steam generation capacity of 135 TPH each). According to the submitted information, the gross efficiency of the proposed generation facility/Co-Generation Facility/Power Plant will be 31.05% whereas the



net efficiency of the same will be around 28.41% and is very reasonable for the proposed generation facility/Co-Generation Facility/Power Plant.

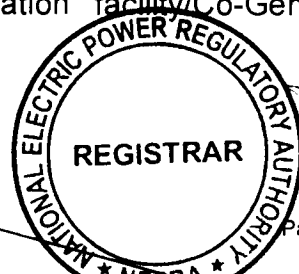
(iv). The proposed generation facility/Co-Generation Facility/Power Plant will be utilizing Bagasse for firing of boiler(s). In this regard, the Authority observes that the proposed generation facility/Co-Generation Facility/Power Plant will utilize the Bagasse generated from sugar mill of the group company in the name of Hunza Sugar Mills (Pvt.) Limited (HSMPL). In this regard, HPPL has confirmed that the generated Bagasse from HSMPL will be sufficient to operate the proposed generation facility/Co-Generation Facility/Power Plant to meet with the required plant factor and plant availability as stipulated in the determination of the Authority No. NEPRA/R/TRF-UBT-2013/5152-54, dated May 29, 2013 for the upfront tariff for Bagasse based projects. In this regard, HPPL has also confirmed that whenever there will be any shortage of Bagasse in area due to change in cane crop in the adjoining area of the sugar mill, either the Bagasse will be purchased from the market or other bio-mass including cane trash, cotton stick, mustard straw and rice husk etc. will be utilized for the operation of the generation facility/Co-Generation Facility/Power Plant. In view of the said, the Authority is satisfied that the project will have suitable availability of the Bagasse or alternative Biomass for the operation of the proposed generation facility/Co-Generation Facility/Power Plant.

(v). The Authority has observed that HPPL carried out the required interconnection and system stability study for dispersal of electric power from the proposed generation facility/Co-Generation power plant. According to the said study, the dispersal of electric power will be made on 132 KV Voltage. The dispersal/interconnection arrangement will be consisting of a 132 KV D/C Transmission Line (Measuring 3.00 KM in length) for making In-Out of 132 KV Garh Mahraja-Athara Hazari Transmission Line connecting the proposed generation facility/Co-Generation Facility/Power Plant of HPPL with the network of FESCO. In this regard, FESCO has also confirmed that necessary arrangements will be made ensuring availability of the dispersal arrangement well before the Commercial Operation Date (COD) of the generation facility/Co-Generation Facility/Power Plant.



(vi). The Authority is encouraged that the proposed project of HPPL will be utilizing Bagasse which is RE source but at the time it will be working as a conventional thermal power plant which may result environmental concerns. The Authority has observed that HPPL carried out the Initial Environment Examination Study and submitted the same for the consideration and approval of Environmental Protection Agency, Government of the Punjab (EPAGoPb). The Authority is satisfied that EPAGoPb has issued a No Objection Certificate for the construction of the project.

(vii). In terms of Rule-3 of the Generation Rules, the Authority may grant a Generation Licence to any person to engage in the generation business. The said rule stipulates various conditions pertaining to the grant of Generation Licence as explained in Rule-3(2), Rule-3(3), Rule-3(4), Rule-3(5) and Rule-3(6) of the Generation Rules. In the particular case under consideration, the Authority has observed that conditions of Rule-3(2) and Rule-3(3) stands satisfied as HPPL has provided details of location, technology, size, net capacity/energy yield, interconnection arrangements, technical limits, technical functional specifications and other details specific to the generation facilities. The provision of Rule-3(4) of the Generation Rules regarding holding a public hearing is not applicable as there is no issue which require this exercise. The Rule-3(5) of the Generation Rules 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/Co-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 of the Generation Rules also stipulates the conditions pertaining to least cost option criteria which include (a). sustainable development or optimum utilization of the renewable or non-renewable energy 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/Co-Generation Facility/Power Plant against the preferences indicated by the Authority; (d). the costs and rights-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/Co-Generation

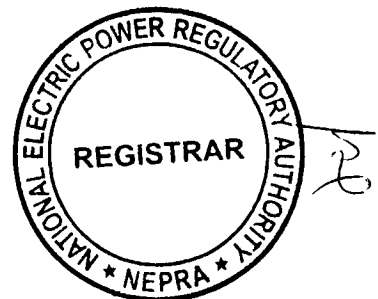


Facility/Power Plant and the costs of the transmission system expansion required to remove such constraints; (f). the short-term and the long-term forecasts for additional capacity requirements; (g). the tariffs resulting or likely to result from the construction or operation of the proposed generation facility/Co-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.

(viii). 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 Bagasse is an indigenous fuel and such fuels have a preference for the energy security. It is pertinent to mention that the Authority through its determination No. NEPRA/R/TRF-UBT-2013/5152-54, dated May 29, 2013 announced an Upfront Levelized Tariff for the future Bagasse projects which works out to be Pak. Rs. 10.4078/kWh which is very competitive considering the fact that not only cheap electric power will be generated but it will utilize the Bagasse and other Biomass which is otherwise burnt causing air and soil pollution.

(ix). As explained at Para-D(v) above, the sponsors of the project carried out the grid interconnection study which concludes that the project will not face any constraints in transmission system. Further, being located at reasonable distance from the thick population, the project will not result in costs and rights-of-way issues for the provision of transmission and interconnection facilities. It is pertinent to mention that FESCO has included the project in its long-term forecasts for additional capacity requirements. In view of the explanation give above, it is clear that the project fulfills the requirements of the Least Cost Option Criteria.

(x). In view of the clarification and justifications given above, the Authority is of the considered view that the project of HPPL fulfills the eligibility criteria for grant of Generation Licence as stipulated in the NEPRA Act, rules and regulations and other applicable documents.



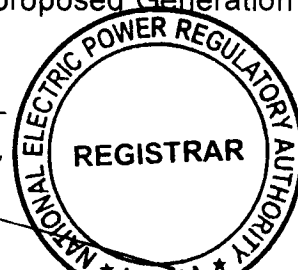
(E). Grant of Generation Licence

(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 renewable energy must be developed on priority basis.

(ii). The existing energy mix of the country is heavily skewed towards the thermal power plants, mainly operating on imported fossil fuel. The continuous import of fossil fuel not only creates 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 approved by the GoP, duly recognizes this very aspect of power generation through renewable energy and envisages that at least 5% of total national power generation capacity (i.e. 9700 MW) to be met through RE resources by 2030.

(iii). The Authority considers that the proposed project of HPPL is consistent with the provisions of Energy Security Action Plan 2005. 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 fuel but will also help reduction in carbon emission by generating clean electricity, thus improving the environment.

(iv). As explained at Para-D(vii) above, HPPL has provided the details of location, technology, size, net capacity/energy yield, interconnection arrangements, technical details and other related information for the proposed generation facility/Co-Generation Facility/Power Plant. In this regard, the Authority has observed that sponsors of the project have acquired the land for the project for setting up the generation facility/Co-Generation Facility/Power Plant. The said details have been incorporated in Schedule-I of the proposed Generation Licence.

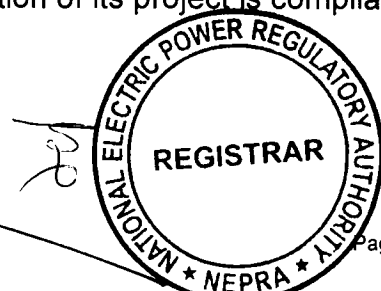


In this regard, the Authority directs HPPL to bring in its notice if there is any change in the same.

(v). The term of a Generation Licence under Rule-(5)(1) of the Generation Rules is to be commensurate with the maximum expected life of the units comprised in a generating facility. According to the information provided by HPPL, the Commercial Operation Date (COD) of the proposed generation facility/Co-Generation Facility/Power Plant will be July 31, 2018 and it will have a useful life of more than thirty (30) years from its COD. In this regard, HPPL has requested that the term of the proposed Generation Licence may be fixed to thirty (30) years in consistent with the term of the proposed Energy Purchase Agreement (EPA) to be signed with the Power Purchaser. The Authority considers that said submission about the useful life of the generation facility/Co-Generation Facility/Power Plant and the subsequent request of HPPL to fix the term of the Generation Licence is consistent with international benchmarks therefore, the Authority fixes the term of the Generation Licence to thirty (30) years from COD of the project.

(vi). Regarding the tariff, it is hereby clarified that under Section-7(3)(a) of the NEPRA Act, determining tariff, rate and charges etc. is the sole prerogative of the Authority. The Authority through determination No. NEPRA/TRF-376/HEPL-2017/2521 dated February 22, 2017 has granted an upfront tariff to HPPL In view of the said, the Authority through Article-6 of the Generation Licence directs HPPL to charge the power purchaser only such tariff which has been determined, approved or specified by the Authority. The Authority directs HPPL to adhere to the Article-6 of the Generation Licence in letter and spirit without any exception.

(vii). Regarding compliance with the environmental standards, the Authority directs HPPL to ensure that the project will comply with the environmental standards during the term of the Generation Licence. In view of the said, the Authority has included a separate article (i.e. Article-10) in the Generation Licence along with other terms and conditions that the licensee will comply with relevant environmental standards. Further, the Authority directs HPPL to submit a report on a bi-annual basis, confirming that operation of its project is compliant with



required environmental standards as prescribed by the concerned environmental protection agency.

(viii). The proposed generation facility/Co-Generation Facility/Power Plant of HPPL will be using RE resource for generation of electric power. Therefore, the project may qualify for the carbon credits under the Kyoto Protocol. Under the said protocol, projects coming into operation up to the year 2020 can qualify for the carbon credits. HPPL has informed that the project will achieve COD by July 31, 2018 which is within the deadline of the Koyoto Protocol. In view of this, an article (i.e. Article-12) for carbon credits and its sharing with the power purchaser has been included in the Generation Licence. In view of the said, the Authority directs HPPL to initiate the process in this regard at the earliest so that proceeds for the carbon credits are materialized. HPPL shall be required to share the proceeds of the carbon credits with the power purchaser as stipulated in Article-12 of the Generation Licence.

(ix). The Authority has observed that HPPL from its proposed generation facility/Co-Generation Facility/Power Plant will be supplying to the Power Purchaser approximately 34.00 MW and 44.00 MW of clean electric power during crushing and off season respectively. In addition to supplying the national grid, HPPL also plans supplying to HSMPL to the tune of 10.83 MW to 0.50 MW during crushing season and off season on mutually agreed rates. Regarding supply to HSMPL, the Authority observes that both HSMPL and HPPL are located within the same premises. Further, HSMPL will be supplied through two (02) 11 KV Overhead Feeders (measuring about 500 meters) not involving any public or third party. Further, the load level for HSMPL is above the minimum level (1.00 MW) to qualify as a Bulk Power Consumer (BPC) under the Act. Pursuant to Section-21 of the Act, the Authority is entitled allowing a Generation Company to sell electric power to a BPC located in the service territory of Distribution Company. In view of the said explanation, the Authority agrees to the proposed arrangement and allows HPPL to sell electricity to HSMPL. Further, the Section 2(v) of the NEPRA Act, wherein the ownership, operation, management and control of distribution facilities located on private property and used solely to move or deliver electric power to the person owning, operating, managing and controlling those facilities or to tenants

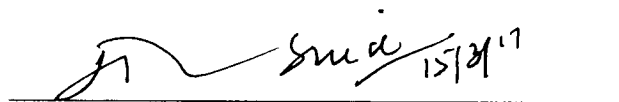


thereof has not been included in the definition of "distribution". Based on the said considerations that the proposed BPC in the name of HSMPL is located within the same premises and no public area is involved, the supply of power to HSMPL by HPPL does not constitute a distribution activity under the Act, and HPPL will not require a distribution licence for supplying to HSMPL. The matter of rates, charges and terms and conditions of tariff between HPPL and its BPC (i.e. HSMPL), does not affect any other consumer or third party. Therefore for the purpose of tariff, the Authority considers it appropriate directing HPPL and HSMPL to agree on a bilateral agreement and accordingly HPPL will be allowed to charge the agreed tariff subsequent to the grant of the Generation Licence.

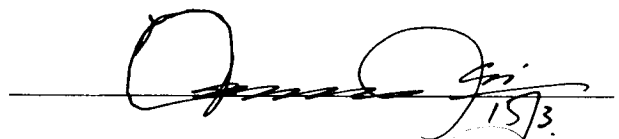
(x). In view of the above, the Authority hereby approves the grant of generation licence to HPPL on the terms and conditions set out in the Generation Licence annexed to this determination. The grant of Generation Licence will be subject to the provisions contained in the NEPRA Act, relevant rules, regulations framed there under and other applicable documents.

Authority:

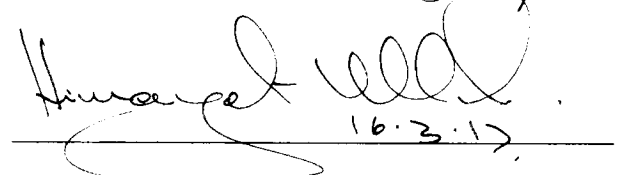
Maj. (R) Haroon Rashid
(Member)


15/3/17

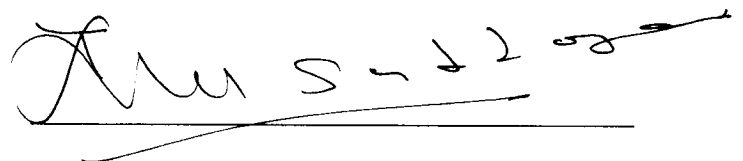
Syed Masood-ul-Hassan Naqvi
(Member)

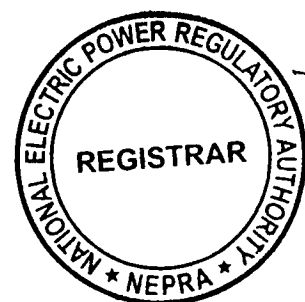

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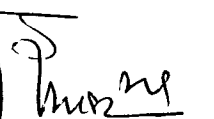
Himayat Ullah Khan
(Member/Vice Chairman)


16.3.17

Tariq Saddozai
(Chairman)






20.03.17

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

GENERATION LICENCE

No. IGSP/76/2017

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:

HUNZA POWER (PRIVATE) LIMITED

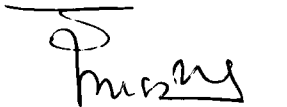
Incorporated under section-32 of Companies Ordinance 1984 having Corporate Universal Identification No. 0098818 dated April 07, 2016

for its Bagasse based Co-Generation Facility Located at Dargai Shah, Athara Hazari, District Jhang, in the Province of Punjab

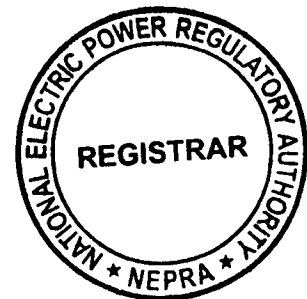
(Installed Capacity: 49.80 MW Gross ISO)

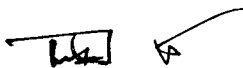
to engage in generation business subject to and in accordance with the Articles of this Licence.

Given under my hand this on 20th day of March Two Thousand & Seventeen and expires on 30th day of July Two Thousand & Forty Eight.


20.3.17

Registrar

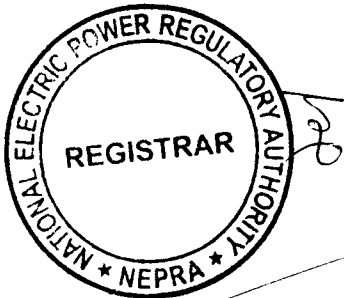




Article-1
Definitions

1.1 In this Licence

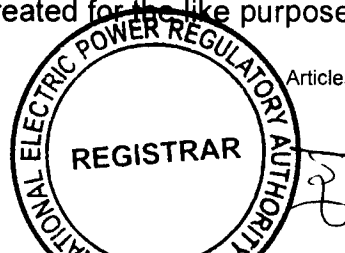
- (a). "Act" means the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 as amended or replaced from time to time;
- (b). "AEDB" means the Alternate Energy Development Board or any other entity created for the like purpose established by the GoP to facilitate, promote and encourage development of renewable energy in the country;
- (c). "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, 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;
- (d). "Applicable Law" means all the Applicable Documents;
- (e). "Authority" means the National Electric Power Regulatory Authority constituted under Section-3 of the Act;



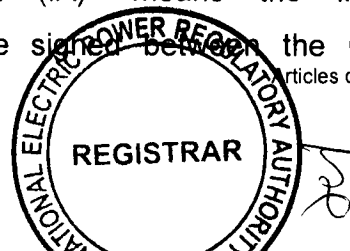
- (f). "Bulk Power Consumer (BPC)" means a consumer which purchases or receives electric power, at one premises, in an amount of one (01) megawatt or more or in such other amount and voltage level and with such other characteristics as the Authority may determine and the Authority may determine different amounts and voltage levels and with such other characteristics for different areas;
- (g). "Bus Bar" means a system of conductors in the generation facility/Co-Generation Facility/Power Plant of the Licensee on which the electric power from all the generators is collected for supplying to the Power Purchaser or BPC;
- (h). "Carbon Credits" mean the amount of Carbon Dioxide (CO₂) and other greenhouse gases not produced as a result of generation of energy by the generation facility/Co-Generation Facility/Power Plant 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/Co-Generation Facility/Power Plant, which are available or can be obtained in relation to the generation facility/Co-Generation Facility/Power Plant after the COD;
- (i). "Co-Generation Facility/Power Plant" means the generation facility for simultaneous production of both electric power and heat or steam for industrial processes from a common fuel source;
- (j). "Commercial Operations Date (COD)" means the day immediately following the date on which the generation facility/Co-Generation Facility/Power Plant of the Licensee is commissioned;
- (k). "CPPA-G" means Central Power Purchasing Agency (Guarantee) Limited or any other entity created for the like purpose;

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- (l). "Distribution Code" means the distribution code prepared by the concerned XW-DISCO and approved by the Authority, as it may be revised from time to time with necessary approval of the Authority;
- (m). "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/Co-Generation Facility/Power Plant, as may be amended by the parties thereto from time to time;
- (n). "FESCO" means Faisalabad Electric Supply Company Limited or its successors or permitted assigns;
- (o). "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 necessary approval by the Authority;
- (p). "GoP" means the Government of Pakistan acting through the AEDB which has issued or will be issuing to the Licensee a Letter of Support (LOS) for the design, engineering, construction, insuring, commissioning, operation and maintenance of the generation facility/Co-Generation Facility/Power Plant;
- (q). "IEC" means the International Electrotechnical Commission or its successors or permitted assigns;
- (r). "IEEE" means the Institute of Electrical and Electronics Engineers or its successors or permitted assigns;
- (s). "Implementation Agreement (IA)" means the implementation agreement signed or to be signed between the GoP and the



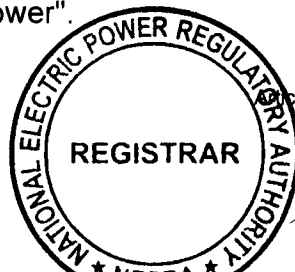
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Licensee in relation to this particular generation facility/Co-Generation Facility/Power Plant, as may be amended from time to time;

- (t). "Letter of Support (LOS)" means the letter of support issued or to be issued by the GoP through the AEDB to the Licensee;
- (u). "Licensee" means **Hunza Power (Pvt.) Limited** or its successors or permitted assigns;
- (v). "NTDC" means National Transmission and Despatch Company Limited or its successors or permitted assigns;
- (w). "Policy" means the Policy for Development of Renewable Energy for Power Generation, 2006 of Government of Pakistan as amended from time to time;
- (x). "Power Purchaser" means CPPA-G which will be purchasing electric power from the Licensee either on behalf of all XW-DISCOs or any single XW-DISCO, pursuant to the EPA for procurement of electric power;
- (y). "Licensing Regulations" mean the National Electric Power Regulatory Authority Licensing (Application & Modification Procedure) Regulations, 1999 as amended or replaced from time to time;
- (z). "Generation Rules" mean the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000 as amended or replaced from time to time;
- (aa). "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 rules and 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

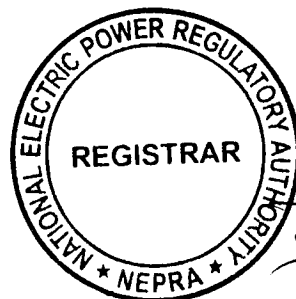
3.1 The location, size (capacity in MW), technology, interconnection arrangements, technical limits, technical functional specifications and other details specific to the generation facility/Co-Generation Facility/Power Plant of the Licensee are set out in Schedule-I of this licence.

3.2 The net capacity of the generation facility/Co-Generation Facility/Power Plant of the Licensee is set out in Schedule-II hereto. The Licensee shall provide the final arrangement, technical and financial specifications and other specific details pertaining to its generation facility/Co-Generation Facility/Power Plant 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 thirty (30) years from the COD of the generation facility/Co-Generation Facility/Power Plant of the Licensee.

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 the only such tariff 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. 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 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.



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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

10.1 The generation facility/Co-Generation Facility/Power Plant of the Licensee shall comply with the environmental and safety standards as may be prescribed by the relevant competent authority from time to time.

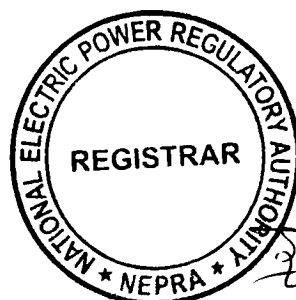
10.2 The Licensee shall provide a certificate on a bi-annual basis, confirming that the operation of its generation facility/Co-Generation Facility/Power Plant is in conformity with required environmental standards as prescribed by the relevant competent authority.

Article-11
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-12
Emissions Trading/Carbon Credits

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

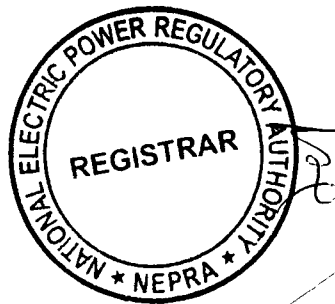


Article-13
Power off take Point and Voltage

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

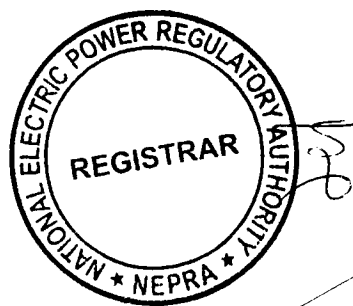
Article-14
Design & Manufacturing Standards

The generation facility/Co-Generation Facility/Power Plant of the Licensee shall be designed, manufactured and tested according to the latest IEC, IEEE or other equivalent standards. All the plant and equipment of the generation facility/Co-Generation Facility/Power Plant shall be unused and brand new.



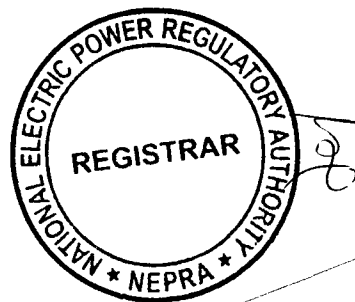
SCHEDULE-I

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/Co-Generation Facility/Power Plant of the Licensee are described in this Schedule.

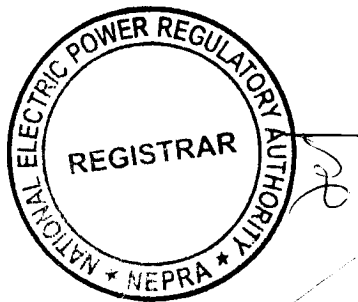
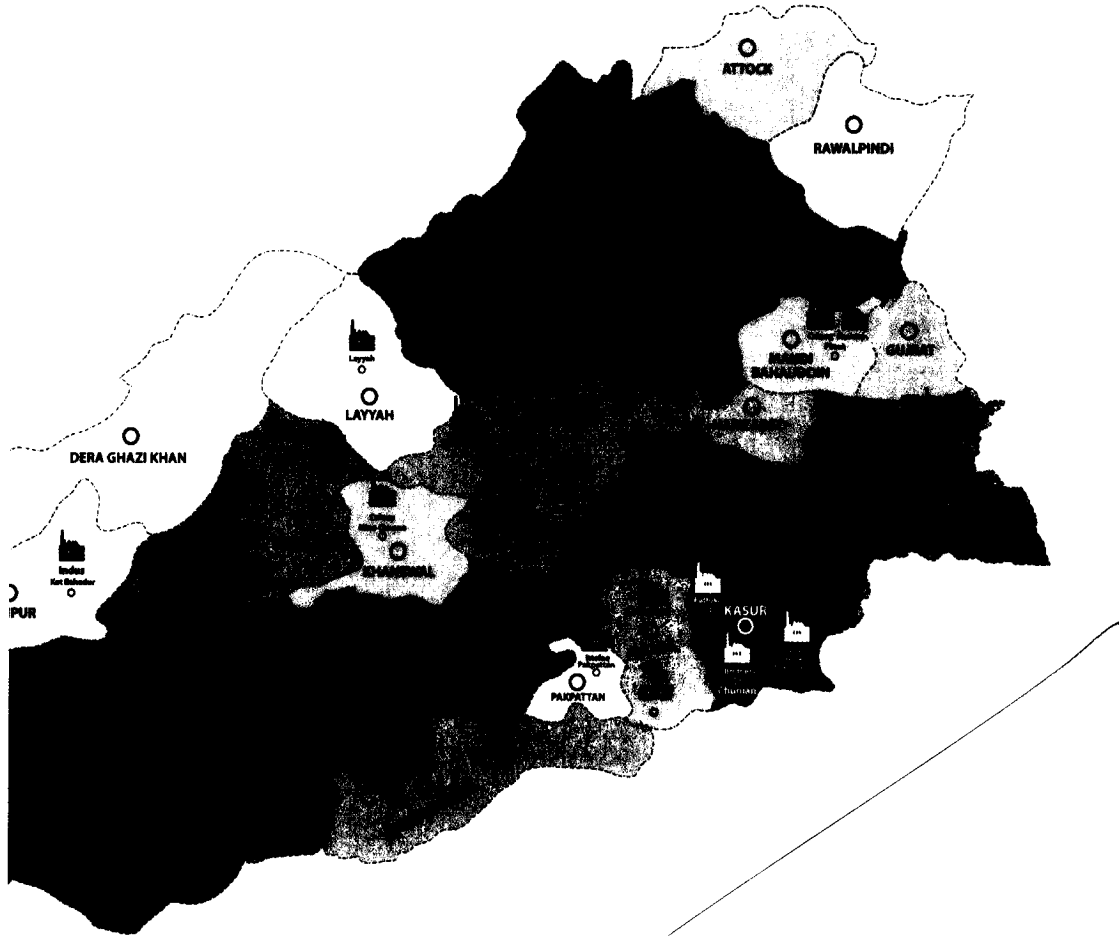


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**Site Location of the
Generation Facility/Co-Generation Facility/Power Plant of
Hunza Power (Pvt.) Limited (HPPL)**

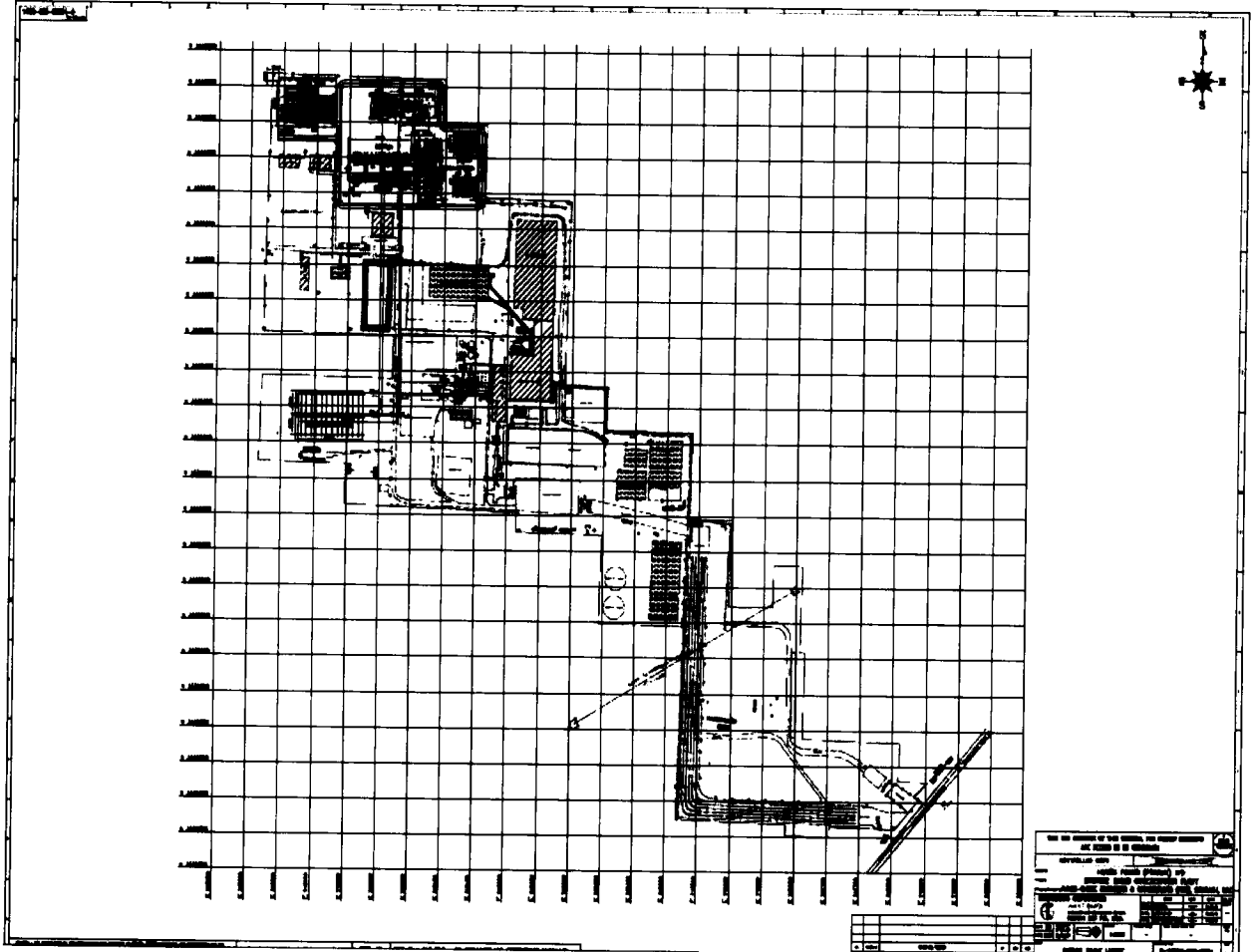


Site Map of the
Generation Facility/Co-Generation Facility/Power Plant of
HPPL



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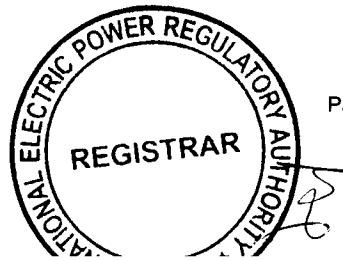
**Lay Out and Land Coordinates of the
 Generation Facility/Co-Generation Facility/Power Plant of
 HPPL**



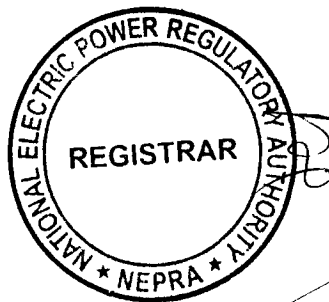
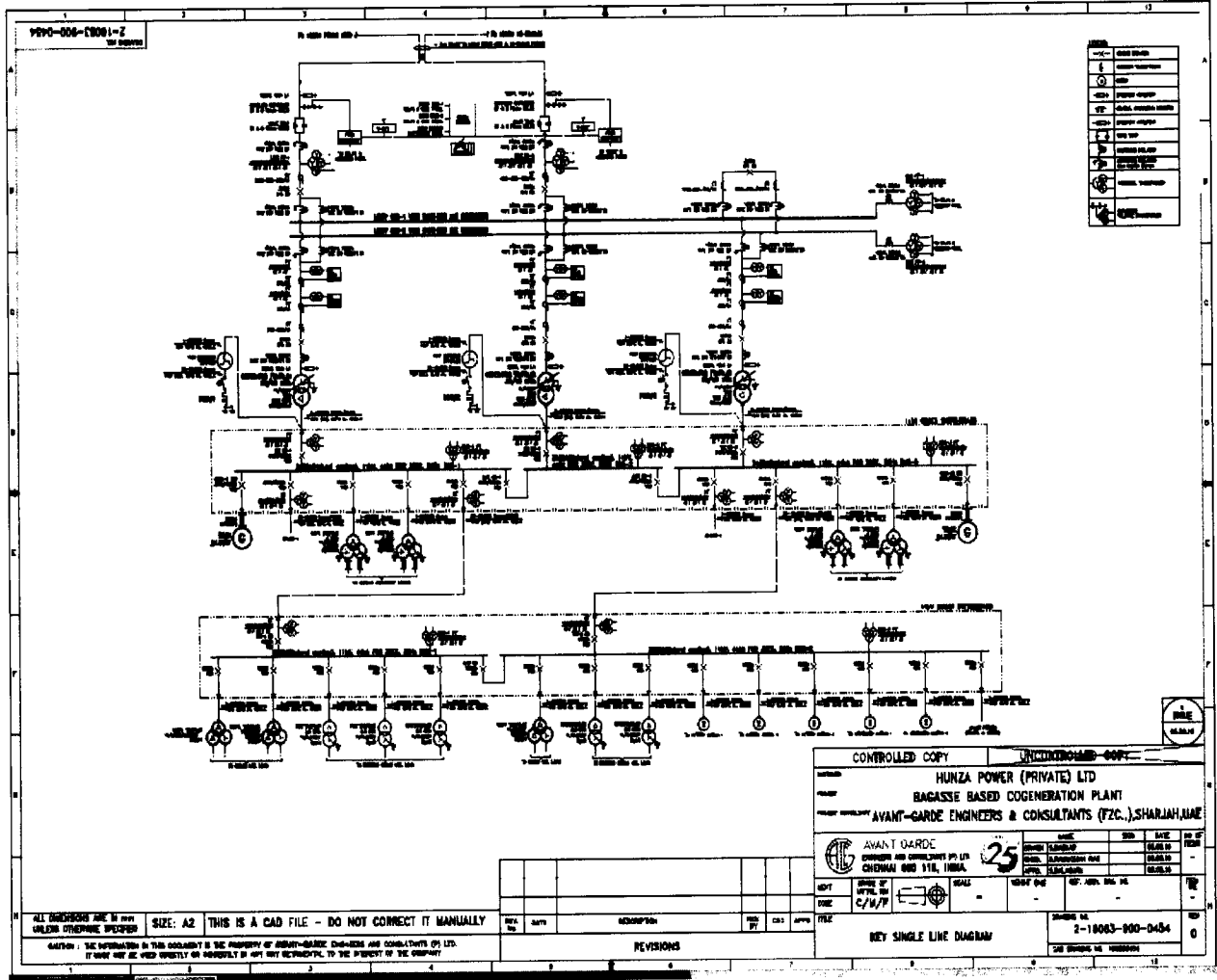
Total Land: 120 Acres

Boundary	Latitude	Longitude
Boundary-1	31.116265°	72.055458°
Boundary-2	31.116764°	72.051601°
Boundary-3	31.119918°	72.053771°
Boundary-4	31.119955°	72.056482°

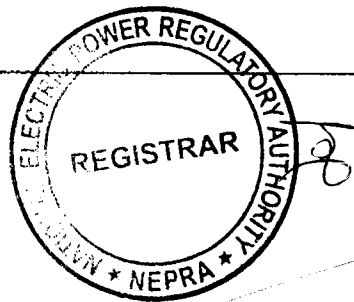
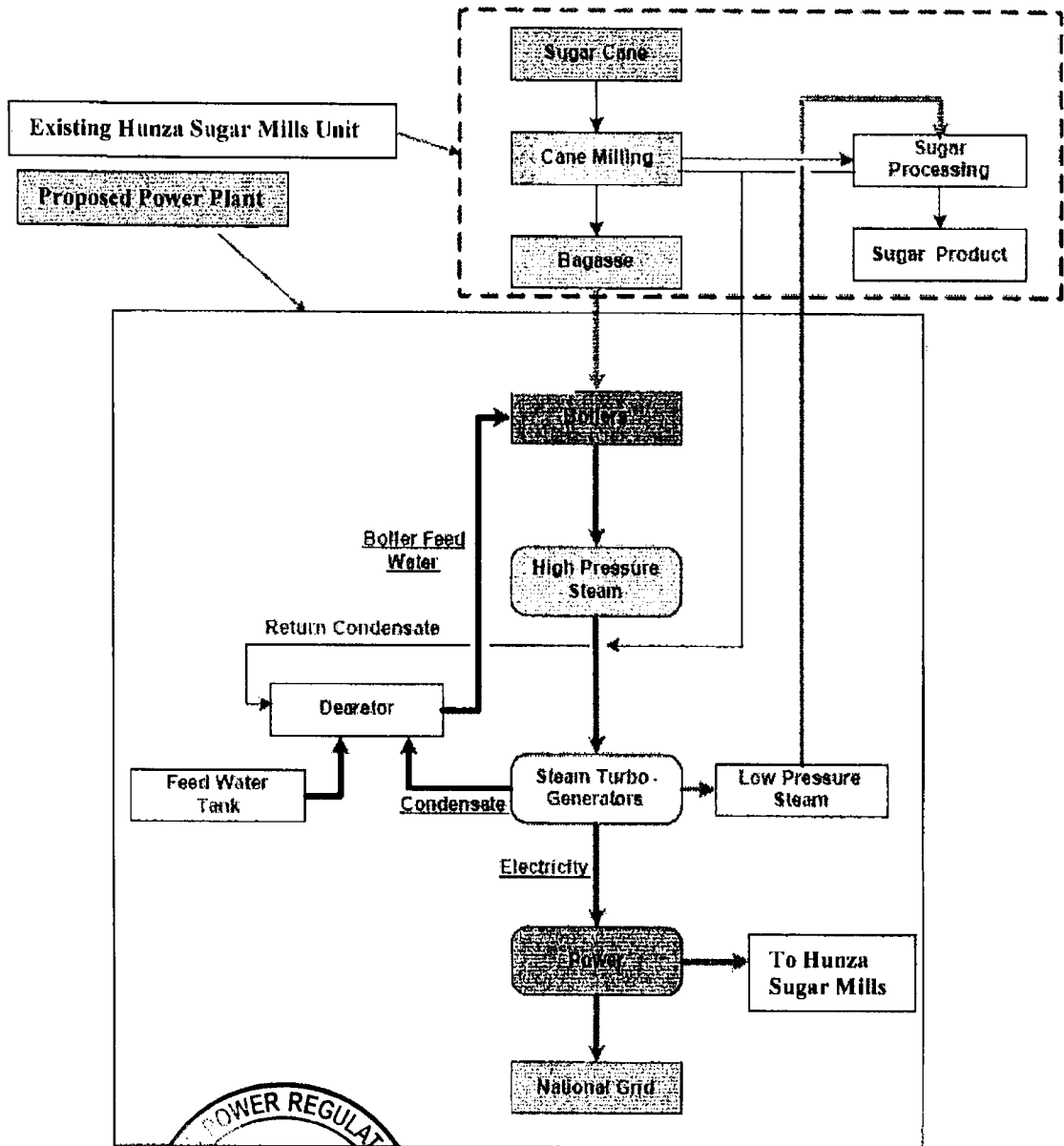
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Single Line Diagram (Electrical) of the Generation Facility/Co-Generation Facility/Power Plant of HPPL



Schematic Diagram of the Generation Facility/Co-Generation Facility/Power Plant of HPPL

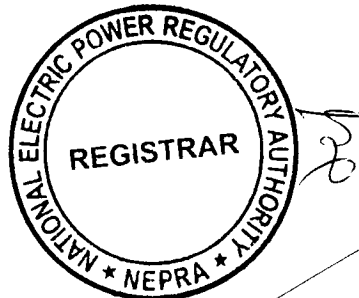


Interconnection Facilities/Transmission Arrangements
for Dispersal of Power from the Generation Facility/Co-Generation
Facility/Power Plant

The electric power from the bagasse based generation facility/Co-Generation facility/Power Plant of Hunza Power (Pvt.) Limited (HPPL) shall be dispersed to the load center of FESCO.

(2). The dispersal/interconnection arrangement will be consisting of a 132 KV D/C Transmission Line (Measuring 3.00 KM in length) for making In-Out of 132 KV Garh Mahraja-Athara Hazari Transmission Line connecting the proposed generation facility/Co-Generation Facility/Power Plant of HPPL with the network of FESCO.

(3). Any change in the above mentioned interconnection facilities/transmission arrangements for dispersal of power as agreed by the licensee, power purchaser and FESCO shall be communicated to the Authority in due course of time.



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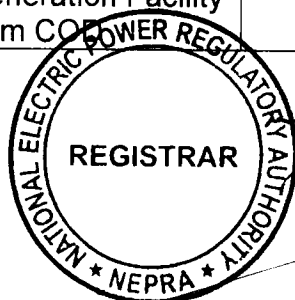
**Detail of
 Generation Facility/Co-Generation Facility/Power
 Plant of HPPL**

(A). General Information

(i).	Name of Company/Licensee	Hunza Power (Private) Limited
(ii).	Registered /Business Office of the Company	1-New Muslim, District Lahore, in the Province of Punjab
(iii).	Location of the Generation Facility	Dargai Shah, Athara Hazari District Jhang, in the Province of Punjab
(iv).	Type of Generation Facility	Bagasse based, high-pressure co-generation facility/thermal power plant.

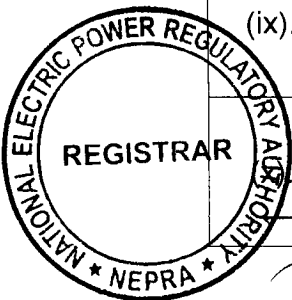
(B). Plant Configuration

(i).	Size/ Installed Capacity of the Generation Facility	49.80 MW.	
(ii).	Type of Technology	Conventional steam turbine based power plant (2x24.90 MW extraction cum condensing steam turbines) with 110 bar boiler.	
(iii).	Number of Units/Size (MW)	Steam Turbine	2 x 24.90 MW
(iv).	Unit Make/Model/Type & Year of Manufacture Etc.	Steam Turbine	HTC, China
		Boiler	Wuxi, China
(v).	COD of the Generation Facility (Anticipated)	July 31, 2018	
(vi).	Expected Useful Life of the Generation Facility from COD	30 Years	



(C). Detail of Fuel/Raw Material

(i).	Primary Fuel	Bagasse	
(ii).	Alternate Fuel	Other Biomass (cane trash, cotton stick, mustard straw and rice husk etc.)	
(iii).	Fuel Source (Imported/Indigenous)	Primary Fuel	Alternate Fuel
		Indigenous	Indigenous
(iv).	Fuel Supplier	Primary Fuel	Alternate Fuel
		Hunza Sugar Mills (Pvt.) Limited (HSMPL)	biomass suppliers (if available in the nearby area)
(v).	Supply Arrangement	Primary Fuel	Alternate Fuel
		Through Conveyor Belts/Loading Trucks/Tractor Trolleys etc.	Through Conveyor Belts/Loading Trucks/Tractor Trolleys etc.
(vi).	Sugarcane Crushing Capacity HSMPL	of	10,000 TCD
(vii).	Bagasse Generation Capacity HSMPL	of	2,900 Ton per day
(viii).	Storage facilities	Primary Fuel	Alternate Fuel
		Bulk Storage/Open Yard	Bulk Storage/Open Yard
(ix).	Capacity of Storage facilities	Primary Fuel	Alternate Fuel
		100,000 ton bulk storage	Included as part of the primary fuel storage
	Gross Storage Capacity	Primary Fuel	Alternate Fuel
		100,000 ton bulk storage	Included as part of the primary fuel storage



(D). Emission Values

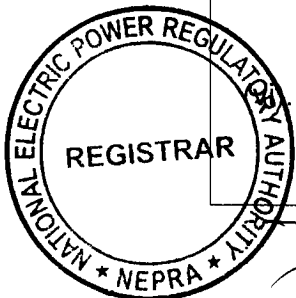
		Primary Fuel
(i).	SO _x (mg/Nm ³)	<100
(ii).	NO _x (mg/Nm ³)	<100
(iii).	CO (mg/Nm ³)	<200
(iv).	CO (%)	12.5%
(iv).	PM ₁₀ (mg/Nm ³)	<150

(E). Cooling System

(i).	Cooling Water Source/Cycle	Deep Bore Well/Cooling Tower/Closed Loop
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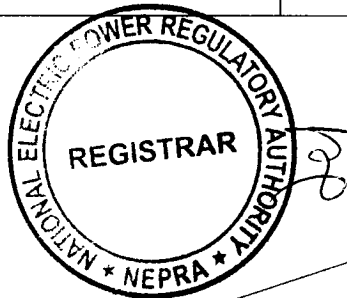
(F). Plant Characteristics

(i).	Generation Voltage	11.00 KV	
(ii).	Frequency	50 Hz	
(iii).	Power Factor	0.80 lagging - 0.95 leading	
(iv).	Automatic Generation Control (AGC)	Yes	
(v).	Ramping Rate	as per requirement of Grid Code	
	Time required to Synchronize to Grid	During cold start	150 minutes
		During warm start	90 minutes
		During Hot start	60 minutes



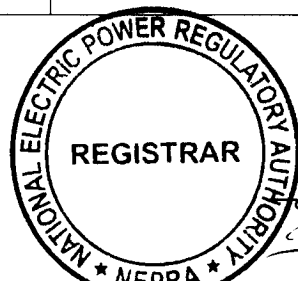
Information regarding
Bulk Power Consumer to be supplied by the Licensee (i.e. Hunza
Power (Private) Limited)

(i).	No. of Consumers	One (01)	
(ii).	Name of the Bulk Power Consumer (BPC)	Hunza Sugar Mills (Pvt.) Limited. (HSMPL)	
(iii).	Location of BPC (distance and/or identity of premises)	HSMPL is located immediately next to Hunza Power (Pvt.) Limited (HPPL)	
(iv).	Contracted Capacity and Load Factor for BPC	Load:10.83 MW Load Factor: 0.80	
(v).	Specify Whether		
	(a).	The consumer is an Associate undertaking of the Licensee -If yes, specify percentage ownership of equity;	BPC mentioned above is an associated undertaking of the HPPL. HSMPL currently holds 5% of HPPL equity. Further, both companies are having same members as shareholders and Board of Directors.
	(b).	There are common directorships:	Yes
	(c).	Either can exercise influence or control over the other.	Yes
(vi).	Specify nature of contractual Relationship		
	(a).	Between the BPC and the Licensee	Supply of electric power and steam on continuous basis during crushing season.
	(b).	Between BPCs and FESCO.	The HSMPL is B-2 consumer of FESCO with sanctioned load of 480 KW.
(vii)	Any other network information deemed relevant for disclosure to or consideration by the Authority.	N/A	



Information regarding
Distribution Network for Supplying Electric Power to Bulk Power
Consumer by the Licensee (i.e. Hunza Power (Private)
Limited

(i).	No. of Feeders	02 (Two)
(ii).	Length of Each Feeder (meters)	< 500 meter
(iii).	Length of Each Feeder to each Consumer	As above
(iv).	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 cross-over.	11 KV feeders supplying electric power to BPC are located on private property owned by BPC.
(v).	Whether owned by Licensee, BPC or Distribution Company FESCO-(deal with each Feeder Separately)	Owned by the BPC
	(a). If owned by FESCO, please furnish particulars of contractual arrangement	N/A
	(b). Operation and maintenance responsibility for each feeder	The Operation and Maintenance is the responsibility of BPC.
(vi).	Whether connection with network of FESCO exists (whether active or not)- If yes, provide details of connection arrangements (both technical and contractual)	Yes, the BPC is B-2 Consumers of FESCO
(vii).	Any other network information deemed relevant for disclosure to or consideration by the Authority.	N/A



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 are given in this Schedule

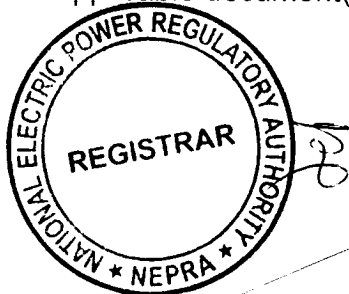


SCHEDULE-II

		<u>Season Operation</u>	<u>Off-Season Operation</u>
(1).	Total Gross Installed Capacity	49.80 MW	49.80 MW
(2).	De-rated Capacity at Mean Site Conditions	49.80 MW	49.80 MW
(3).	Auxiliary Consumption	04.23 MW	04.23 MW
(4).	Supply to BPC (i.e. HSMPL)	10.83 MW	00.50 MW
(5).	Net Capacity of the Plant at Mean Site Conditions	34.74 MW	45.07 MW

Note

All the above figures are indicative as provided by the licensee. The net capacity available to power purchaser for dispatch will be determined through procedure(s) contained in the power purchase agreement/bi-lateral agreement or any other applicable document(s).



Authorization
by National Electric Power Regulatory Authority (NEPRA) to
Hunza Power (Private) Limited

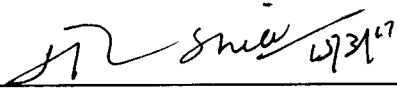
Incorporated under the Companies Ordinance, 1984
Under Corporate Universal Identification No. 0098818, dated April 07, 2016

For
Sale to Bulk Power Consumer

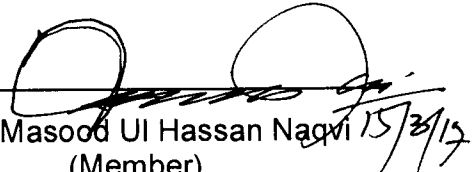
Pursuant to Section-21 of the Act and Rule-7 of the NEPRA Licensing (Generation) Rules-2000, the Authority hereby authorize Hunza Power (Private) Limited-HPPL (the Licensee) to engage in second-tier supply business, limited to the following consumers:-

- (a). Hunza Sugar Mills (Pvt.) Limited

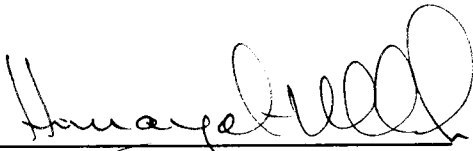
Authority



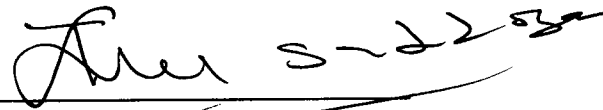
Maj. (R) Haroon Rashid
(Member)


15/3/17

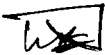
Syed Masood Ul Hassan Naqvi
(Member)

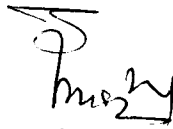


Himayat Ullah Khan
(Vice Chairman/Member)



Tariq Sadozai
(Chairman)




20.03.17

