



National Electric Power Regulatory Authority

Islamic Republic of Pakistan

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No. NEPRA/DG(Lic)/LAG-512/3537-44

April 21, 2022

Mr. Maqsood Ahmed
Chief Executive Officer
Atlas Energy Limited
64-XX, Khayaban-e-Iqbal
DHA, Phase-III, Lahore

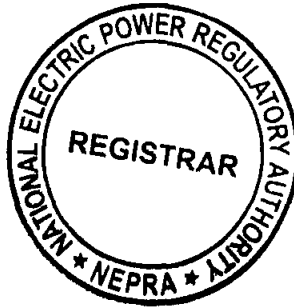
Subject: Grant of Generation Licence No. SGC/165/2022
Licence Application No. LAG-512
Atlas Energy Limited (AEL)

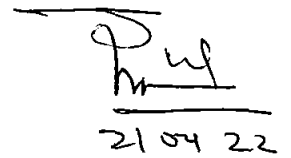
Reference: Your application submitted vide letter No. nil dated 29.11.2021

Enclosed please find herewith Generation Licence No. SGC/165/2022 granted by National Electric Power Regulatory Authority (NEPRA) to Atlas Energy Limited (AEL) for its 4.928 MWp solar based generation located at Atlas Honda Limited, 26/27km Lahore-Sheikhupura Road, District Sheikhupura in the province of Punjab, pursuant to Section 14(B) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, as amended or replaced from time to time. Further, the determination of the Authority in the subject matter is also attached.

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

Enclosure: As Above




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(Syed Safer Hussain)

Copy to:

1. Secretary, Power Division, Ministry of Energy, 'A' Block, Pak Secretariat, Islamabad
2. Secretary, Ministry of Science & Technology, Government of Pakistan, Evacuee Trust Building, G-5, Islamabad
3. Managing Director, NTDC, 414 WAPDA House, Lahore
4. Chief Executive Officer, CPPA(G), 73 East, A.K. Fazl-ul-Haq Road, Blue Area, Islamabad
5. Chief Executive Officer, Alternative Energy Development Board (AEDB), 2nd Floor, OPF Building, G-5/2, Islamabad
6. Chief Executive Officer, Lahore Electric Supply Company (LESCO), 22-A, Queens Road, Lahore
7. Director General, Environmental Protection Department, Government of the Punjab, National Hockey Stadium, Ferozpur Road, Lahore

National Electric Power Regulatory Authority
(NEPRA)

Determination of the Authority
in the Matter of Application of Atlas Energy Limited for the
Grant of Generation Licence

April 21, 2022
Case No. LAG-512

(A). Filing of Application

(i). Atlas Energy Limited (AEL) submitted an application on December 01, 2021 for the grant of generation licence in terms of Section-14B of Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "NEPRA Act") read with the relevant provisions of the NEPRA Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021 (the "Licensing Regulations").

(ii). The Registrar examined the submitted application and found that the application was deficient in terms of essential documents/information as envisaged in the Licensing Regulations. Accordingly, the Registrar directed AEL for submitting the missing documents/information as required under the said regulations. AEL completed the submission of missing information/documentation by December 13, 2021. Accordingly, the Registrar decided to proceed further in the matter and registered the application as stipulated in Regulation-6 of the Licensing Regulations. The Registrar allotted a registration number to the application and forwarded the application to the Licensing Department for processing.

(iii). In consideration to the above, the Registrar published a brief summary of the particulars of the project for which grant of licence has been sought and an invitation to the general public to submit comments in the matter. In consideration of the said, notice was published on December 31, 2021 in one (01) English and one (01) Urdu newspapers, inviting comments of general public,

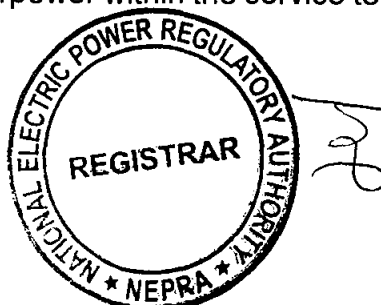


interested and affected persons in the matter as stipulated in Regulation-7 of the Licensing Regulations. In addition to the said, the Registrar also sent letters to different stakeholders on December 31, 2021, soliciting their comments for assistance of the Authority.

(B). Comments of Stakeholders

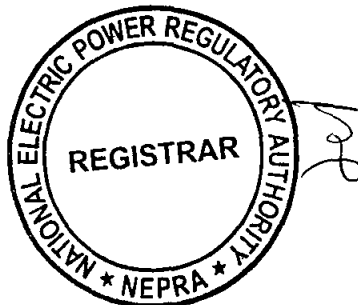
(i). In reply to the above, the Authority received comments from two (02) stakeholders including Central Power Purchasing Agency (Guarantee) Limited (CPPAGL) and Lahore Electric Supply Company Limited (LESCO). The salient points of the comments offered by stakeholders are summarized below: -

- (a). CPPAGL submitted that AEL is planning to set up a Photo Voltaic (PV) cell based generation facility of 4.9278 MW_p for supplying/selling to Atlas Honda Limited (AHL) as its Bulk Power Consumer (BPC). As per the existing tariff structure for the end consumer, the major portion of fixed charge (Capacity, UoSC, MOF, DM) is being recovered through sale of energy to end consumers (i.e. Volumetric Charges). As a result, the more the number of units sold, the less will be the per unit rate for the fixed capacity charges and vice versa. In the view of foregoing, it is requested that further comments in this matter may be obtained from relevant Distribution Company i.e. LESCO, because AHL is currently its consumer; and
- (b). LESCO remarked that AEL plans to supply to AHL as BPC which is its consumer with a sanctioned load of 4.90 MW under B-3 tariff. If AHL plans on getting electric power supply from AEL, it must give LESCO a notice of one (01) year before the stoppage as stipulated under Section-22(2) of the NEPRA Act. Further, AEL cannot lawfully be involved in sale of electricity/power within the service territory of LESCO. In case



AEL is allowed the arrangement, the consumption of AHL from the grid/LESCO will drop considerably resulting in loss of business to the utility. In this regard, it is clarified that LESCO is already on the list of Privatization and due to said, no action can be taken that can result in:- (a). Sale or transfer of licenses, permits etc.; or (b). Closing of any line of business. It is neither permissible under the Utility Practices nor any law that a BPC can have two (02) separate electric power connections/sources from two (02) separate, distinct and independent companies/sources at the same time therefore this BPC cannot be allowed to have two (02) independent connections simultaneously from LESCO and AEL etc. CPPAGL on such arrangements had raised certain legal, technical and financial implications vide its letters No. CPPA-G/CEO/NEPRA/6086-91 dated September 14, 2018 and No. CPPA-G/CTO/DGM(Renewable)/ Zero Carbon/23861-65 dated November 24, 2020 and the same may also be considered as integral part of the comments by LESCO before issuance of said generation licence.

(ii). The Authority considered the above comments and in view of the observations of CPPAGL and LESCO, considered it appropriate to seek perspective of AEL on the same. On the observations of the said stakeholders, AEL submitted that AHL will not stop the purchase of electricity from the utility. The proposed generation facilities are based on PV cell which is clean energy and have no environmental concerns but in fact will displace the fossil fuel-based energy. It is understood that the current tariff for distribution companies is on energy and capacity basis and shifting of the consumers at the same volume may cause burden for the balance/left over consumers. However, sale of electricity is increasing 10% month on monthly basis therefore existing consumer will not suffer of at all. In this regard, the best way for any utility is to increase the consumption of electricity and to give connections to thousands of the customers which are



waiting for months to get the same. On one side utilities are depriving the consumers from supply of electricity and on the other hand there is allocation of the fixed cost on less number of units produced and consumed. The pending applications are for thousands of MW and as per very recent news published in Business recorder, there are almost 650,000 pending applications for new connections in the Utilities/DISCO(s) leading to non-utilization of 1,950 megawatt (MW) electricity load. It is worth mentioning that out of the total pendency, some 55,000 applications are submitted by industrial consumers, 25,000 by tube-well owners, 40,000 by commercial consumes with rest of the applications by domestic consumers. In this regard, the Authority itself has suggested CPPAGL and DISCO(s) in its determination to clear the pendency of new connections which will result in widening of the consumer base. Regarding the proposed project, it was submitted that the proposed project will be beneficial due to (a). reduction of the manufacturing cost of the product as the client/BPC is already manufacturing and exporting which will keep it competitive hence increase in export; (b). the electricity produced being clean energy impacting unlimited number of benefits to the environment; (c). the electricity being generated from Renewable Resource-RE i.e. solar which is reducing the import of fuel for the equivalent number of units being produced through imported fuel; (d). all imported fuels being paid in foreign currency and units produced through the above system will save the amount of foreign exchange required to buy the imported fuel for equivalent number of units as well as increase of cost due to devaluation of Rupee. It is pertinent to mention that ten (10) units produced from oil, gas and coal cost averaging one dollar to the nation which reduces the scarce forex reserves of the country. With higher current account deficit Pak Rupee will further depreciate, culminating in higher cost of imported fuel translating into higher cost of electricity due to fuel adjustment charges. Indigenous and clean energy will save the negative impact of currency devaluation and (e). Useless rooftop/free ground space being used for above generation; otherwise most precious national land of the country might have been used for the installation of any other power generation facility. All vacant rooftops may be declared first priority for installation of distributed solar systems to avoid



the use of precious land. It is understood that BPC(s) are already allowed under the NEPRA Act to have supply from other than DISCO therefore, any market design must duly consider these provisions. Therefore, the Authority may consider the application and issue the generation license.

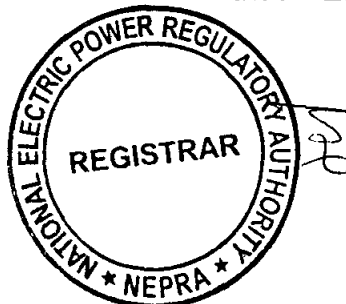
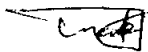
(iii). The Authority considered the above submissions and considered it appropriate to proceed further in the matter of the application of AEL for the consideration of the grant of generation licence as stipulated in the NEPRA Licensing (Generation) Rules, 2000 (the "Generation Rules") and Licensing Regulations.

(C). Evaluations/Findings

(i). The Authority examined the submissions of AEL including the information provided with its application for the grant of the generation licence, the comments of the stakeholders, rejoinder submitted by the company/applicant/AEL, the relevant rules & regulations in the matter.

(ii). The Authority has observed that the applicant i.e. AEL is an entity incorporated under Section-32 of the Companies Ordinance, 1984 (XLVII of 1984), having Corporate Universal Identification No. 0099710, dated May 18, 2016. It is a public limited company with the principal line of business to design, insure, build, establish, own, operate, maintain, manage electric power generating plants for the generation, supply & transmission of electric power and in relation thereto including solar energy system, its manufacturing through poly silicon and chemical technology, processing, casting, cell manufacturing, module manufacturing and installation thereof, installing, running, owning and managing biomass/waste-to-energy power plant, and dealing in all other forms or services associated therewith.

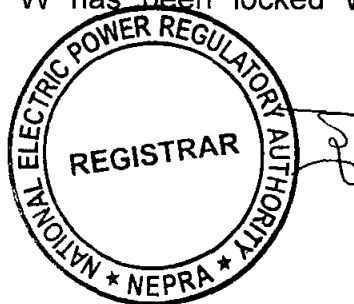
(iii). The Authority has noted that the applicant company i.e. AEL is a group company of the Shirazi Trading Company (Pvt.) Limited, which has a portfolio involving "Business Solutions", "Health Care", "Industrial Solutions" and "Power Generation". It is pertinent to mention that AEL is already involved in



owning, operation and maintenance of a 225 MW oil fired generation facility near Shiekhupura in the province of Punjab supplying to National Grid for almost a decade now. AEL/Shirazi Group is one of the strongest company in terms of financial and technical capabilities which now plans to enter into the market of Renewable Energy (RE) and installed a number of small to medium level projects as EPC or on Business to Business (B2B) models.

(iv). The Authority has observed that AEL through its current application is pursuing a generation licence for setting up a PV based generation facility of 4.9278 MW_P to be located at at AHL (Test Track Area, Stamping Building, Spare Parts Logistics Building and Complete Built Unit Building), to be located at 26/27km Lahore-Sheikhupura Road, Sheikhupura in the province of Punjab. In consideration of the said, it is pertinent to mention that AEL plans on supplying to the aforementioned entity/AHL as BPC through cable(s) located on private property owned by the BPC. According to the submitted information, the total cost of the project will be about Pak Rs. 532.212 million which will be financed through a combination of debt (80% of the total cost) and equity (20% of the total cost). In this regard, all the lead banks have expressed to finance the debt portion of the project.

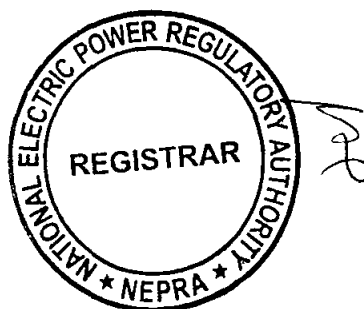
(v). The sponsors of the project carried out a feasibility study of the project including *inter alia*, solar power plant equipment details, PV-sitting details, power production estimates based on solar irradiation data of the project sites, soil tests reports, technical details pertaining to selected photovoltaic (PV) cells/panels and other allied equipment to be used in the solar power plant, electrical studies, environmental study and project financing etc. The review of the feasibility study reveals that for the proposed location to achieve the capacity of 4.9278 MW_P the company will be installing 9042 PV cells/panel each of 545 Watt. In consideration of the said, it is clarified that the company plans on installing PV cells/panels from Tier-I manufactures including Jinko Solar, JA Solar, Renesola or LONGI. It is pertinent to mention that the company has confirmed that the deal for purchase of PV Cells of JAM72S30-545 W has been locked with JA Solar where the



manufacturer has assured an average capacity factor of 16.00% at the site of the proposed generation facility.

(vi). The Authority has considered the submissions of AEL and has observed that the supply from the proposed generation facility will be supplied to a BPC in the name of AHL as explained in the preceding paragraphs. According to the system study of the project, the dispersal to the BPC will be made at 220/440 volts through cables located/placed on the roof top/private property owned by the BPC not involving any public or third party. In this regard, it is pertinent to mention that BPC is a defined term as stipulated in Section-2 (ii) of the NEPRA Act. According to the said, a BPC is a consumer which purchases or receives electric power, at one premises, in an amount of one megawatt or more or in such other amount and voltage level and with such other characteristics as the Authority may specify and the Authority may specify different amounts and voltage levels and with such other characteristics for different areas. In terms of Section-2 (xxva) of the NEPRA Act, for the purpose of specified means specified by regulations made by the Authority under the NEPRA Act. It is pertinent to mention that the relevant regulations in this regard are still under formation and in the absence of the same the Authority has been allowing even less than 1.00 MW to be treated as BPC therefore, the load of the above mentioned entity explained in the preceding Paras can be considered as BPC.

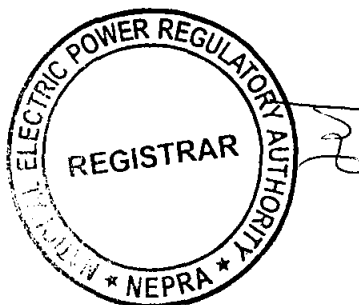
(vii). Further to the above, Section-2(v) of the NEPRA Act defines the term "Distribution" wherein the ownership, operation, management and control of distribution facilities located on private property and used solely to move or deliver electric power to the person owning, operating, managing and controlling those facilities or to tenants thereof is not included in the definition of "distribution". As explained above, the facilities to be used for delivery of electric power to above BPC are located on private property (without involving any public property or any third party) will be owned, operated, managed and controlled by the BPC therefore, the supply of electric power to AHL by AEL



does not constitute a distribution activity under the NEPRA Act, and a distribution licence will not be required by the company.

(viii). Further, the Authority has also considered the submissions of AEL that necessary due diligence has been completed and there will be no environmental impact of the proposed arrangement as PV cells/panels will be utilizing only the existing infrastructure of roof top of buildings. AEL has confirmed that it will comply with the concerned environmental standards. In view of the said, the Authority considers that AEL is made obligatory to comply with the relevant environmental standards for which a separate article will be included in the proposed generation licence.

(ix). The grant of generation licence is governed by the provisions of Rule-3 of the Generation Rules. The Authority has observed that AEL has provided the details of the proposed generation facility about (a). location; (b). size; (c). technology; (d). interconnection arrangement; (e). technical limits; (f). technical functional specification and (g). other specific/relevant details as stipulated in Rule-3 (1) of the Generation Rules. According to the Rule-3(5) of the Generation Rules, the Authority may refuse to issue a generation licence where the site, technology, design, fuel, tariff or other relevant matters pertaining to the proposed generation facility/solar power plant/roof top solar proposed in an application for a generation licence are either not suitable on environmental grounds or do not satisfy the Least Cost Option Criteria (LCOC). In this regard, the Rule-3(5) of the Generation Rules stipulates the conditions pertaining to LCOC 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/solar power plant/roof top solar 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/solar power plant/roof top solar 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/solar power plant/roof top solar; 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.

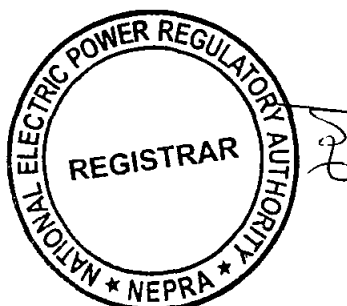
(x). In view of the above, the Authority considers that the proposal of AEL for installing PV based generation facility will result in optimum utilization of the RE which is currently untapped, resulting in pollution free electric power. It is pertinent to mention that solar is an indigenous resource and such resources should be given preference for the energy security. As explained in the preceding paragraphs above, the company will be supplying electric power to BPC(s) directly which only involve laying small feeder(s), this concludes that the project will not face any constraints in transmission of electric power. Further, being located in the same vicinity as that of the BPC, the project will not result in cost and right-of-way issues for the provision of interconnection facilities. In view of the said, the Authority considers that the project of AEL fulfills the eligibility criteria for the grant of generation licence as stipulated in the NEPRA Act, rules and regulations and other applicable documents.

(D). Grant of 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 view of the said, the Authority is of the considered opinion that for sustainable development, all indigenous power generation resources especially RE must be developed on priority basis.



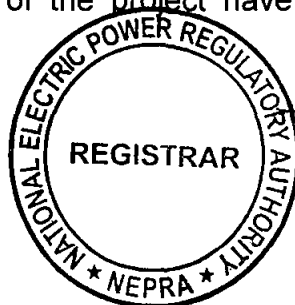




(ii). The Authority observes that the existing energy mix of the country is heavily skewed towards thermal power plants, mainly operating on imported fossil fuels. The continuous import of fossil fuels not only creates pressure on the precious foreign exchange reserves of the country but is also an environmental concern. Therefore, in order to achieve sustainable development, it is imperative that indigenous resources especially RE, are given priority for power generation and their development is encouraged. The Authority is really encouraged to observe that with each passing day, the cost of RE technologies is showing downward trend making the same affordable for commercial use. The Authority is also encouraged to observe that the Govt. of Pakistan is planning to enhance the share of RE from its current level of 5% of the installed capacity to 30% of the total installed capacity by 2030. Furthermore, a number of initiatives are also being undertaken in the private sector in this regard.

(iii). The Authority has observed that in the current case, AEL has approached for the grant of a generation licence for setting up a PV based generation facility with a cumulative Installed Capacity of approximately 1.82MW_p for supplying to AHL/BPC(s) which is also an existing consumer of the local utility i.e. LESCO. The Authority considers that the above proposal of AEL is in line with the provisions of the NEPRA Act, relevant rules and regulations framed thereunder and vision of the Govt. of Pakistan to enhance the contribution of RE in generation mix of electric power. The project will not only help AEL in diversifying its portfolio but will also enhance the energy security of the AHL/BPC. Further, the project will also help in reducing the carbon emission by generating clean electricity, thus improving the environment.

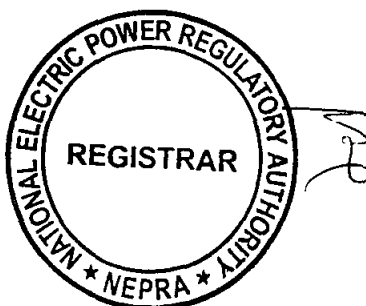
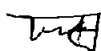
(iv). As explained above, AEL has provided the details of location, technology, size, net capacity/energy yield, interconnection arrangements, technical details and other related information for the proposed PV based generation facility/solar power plant/roof top solar. In this regard, the Authority has observed that sponsors of the project have acquired/available with them the



required premises/space for setting up the distinct PV based generation facilities. The said details are being incorporated in the generation licence.

(v). The Authority has observed that proposed generation facility of AEL will be used for supplying to a BPC. According to Section-2(ii) of the NEPRA Act, a consumer which purchases or receives electric power at one premises, in an amount of one megawatt or more or in such amount and voltage level and with such characteristics as the Authority may determine/specify is treated as BPC. It is pertinent to mention that the relevant regulation in this regard are still under formulation and in the absence of the same the Authority has been allowing even amount of less than 1.00 MW to be treated as BPC therefore, the Authority allows the above mentioned entity/AHL as explained in the preceding Paras to be BPC of AEL.

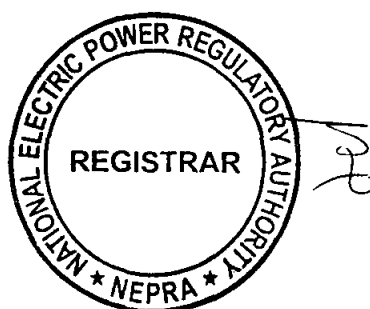
(vi). Regarding supply to the BPC, the Authority observes that the BPC and the proposed generation facilities of AEL are located within the same premises and the BPC will be supplied through underground cable/feeder of 220/440 volts. Pursuant to proviso to Section-21 of the NEPRA Act, the Authority is empowered to allow a generation company to sell electric power to a BPC located in the service territory of a distribution company. In view of the said, the Authority allows the AEL to sell electricity to BPC. Further, under Section-2(v) of the NEPRA Act, 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 is located within the same premises and no public or third party properties are involved, the supply of power to BPC by AEL does not constitute a distribution activity under the NEPRA Act, and AEL will not require a distribution licence for supplying to the BPC.



(vii). The term of a generation licence under Rule-5(1) of the Generation Rules is required to match with the maximum expected useful life of the units comprised in a generating facility. According to the information provided by AEL, the Commercial Operation Date (COD) of the proposed generation facility/solar power plant/roof top solar will be June 30, 2022 and it will have a useful life of around twenty five (25) years from its COD. In this regard, AEL has requested that the term of the proposed generation licence may be fixed as per the said useful life of generation facility/solar power plant/ Roof Top Solar. The Authority considers that said submission of AEL about the useful life of the generation facility/solar power plant/roof top solar and the subsequent request of AEL to fix the term of generation licence is consistent with international benchmarks therefore, the Authority fixes the term of the generation licence to twenty five (25) years from COD of the generation facility/project.

(viii). Regarding compliance with the environmental standards, AEL has confirmed that it will comply with the required standards during the term of the generation licence. In view of the importance of the issue, the Authority has decided to include a separate article in the generation licence along with other terms and conditions making it obligatory for AEL to comply with relevant environmental standards at all times.

(ix). Regarding the rates, charges and terms and conditions of tariff between AEL and its BPC, it is reiterated that under Section-7(3)(a) of the NEPRA Act, determining tariff, rate and charges etc. is the sole prerogative of the Authority. However, the Authority observes that the tariff agreed between AEL and its BPC, does not affect any other consumer or third party. Therefore for the purpose of tariff, the Authority considers it appropriate to direct AEL and its BPC to agree on a bilateral agreement and accordingly AEL will be allowed to charge the agreed tariff subsequent to the grant of the generation licence.



(x). The Authority has duly considered the comments of different stakeholders as explained above. In this regard, the Authority has observed that CPPAGL and LESCO have raised various concerns on the proposal of AEL of supplying the proposed BPC/AHL including (a). AEL cannot lawfully sell electricity/power within its service territory due to the Exclusivity granted to it; (b). requirement of one (01) year notice by AHL if it plans switching to AEL as stipulated under Section-22(2) of NEPRA Act; (c). the consumption of AHL from the grid/LESCO will drop considerably resulting in loss of business to the utility; (d). LESCO is already on the list of privatization and due to said, no action can be taken that can result (i). Sale or transfer of licenses, permits etc.; or (ii). Closing of any line of business; (e). a BPC cannot have two separate electric power connections/sources; and (f). observations of CPPAGL raised in similar cases.

(xi). In consideration to the above, the Authority has observed that AEL has submitted rejoinders to the above observations of the stakeholders as explained in the preceding paragraphs which the Authority considers tenable. However, the Authority considers it appropriate to give its findings on the above mentioned observations and address the same in the current determination in the matter of application for the grant of generation licence of AEL. Regarding the observation of LESCO that it has exclusivity under its licence and due to the said, AEL cannot lawfully sell to AHL due to its exclusivity, it is clarified that under its existing distribution licence LESCO has the same which will expire March 31, 2022 and after that the utility cannot claim any exclusivity considering the fact that legislature through the amendments in the NEPRA Act of 2018 took away as the same. Further to the said, the Authority will like to elaborate that under Section-21 of the NEPRA Act, a generation company is allowed supplying to BPC under the provisions the said provisions. In consideration of the said, the AEL has confirmed that its project will achieve COD after the expiry of the exclusive right of LESCO therefore, there is no violation of the rights of LESCO under its existing Distribution Licence. About the observations of LESCO that the BPC is required to serve it a notice before switching to a generation company under Section-22(2) of NEPRA



Act, the Authority hereby clarifies that the said requirement of serving notice is applicable only once a consumer completely switches to another Distribution Company whereas, in the current case the consumer/AHL has confirmed that it will continue to maintain its supply from LESCO therefore, the question of notice period does not arise. About the impact on the tariff of allowing the arrangement for BPC(s) to have supply from generation companies, the Authority considers that due to the current structure of tariff the observation of CPPAGL and LESCO carries significance however, at the same time it is worth considering that AEL will only be meeting only be supplying a very small fraction (of around 5-6%) of the sanction load of AHL which can be attributed to its natural growth meaning thereby there will not be any adverse impact on the bases line consumption pattern of AHL from the utility. Regarding the observation of LESCO that as per best utility practices, AHL should not be allowed to have dual connections, the Authority considers there is no prohibition for such an arrangement and the Authority has been allowing the same and accordingly allows AHL to have the connection from AEL while maintaining connection from LESCO. However, the Authority directs AEL and AHL to install suitable system for safety and protection of its facilities to avoid any unwanted situation. About the comments of CPPAGL and LESCO that the arrangement will result in less consumption from the grid/utility thus resulting in less contribution towards cross-subsidization, as explained in the preceding paragraphs that despite contracting from the generation company, AHL will retain the connection from the utility and will have the bases line consumption thus not affecting the various charges it is paying to LESCO. Further, the Authority considers that issues of such costs are beyond the scope of the matter under consideration which pertains to the grant of a generation licence for which AEL has completed all the regulatory requirements as explained in the preceding paragraph and qualify for the same. In view of the said, the Authority considers that the observations of CPPAGL and LESCO stand addressed and settled.

(xii). Further to the above, the Authority has observed that the honourable Islamabad High Court in its judgement dated July 08, 2021 in the matter of W.P. No. 1592 of 2020 (Islamabad Electric Supply Company Limited VS National




Electric Power Regulatory Authority, etc.) had decided that during term of the existing distribution licences, the DISCO(s) will have their exclusivity as per the original NEPRA Act and any other generation company cannot provide electric power to any BPC. In this regard, the Authority has observed that the current distribution licence of LESCO has already expired on March 31, 2022. Further, LESCO has already submitted a request for renewal of its Distribution Licence which is in advance stage of processing and is expected to be decided in terms of the relevant provisions of the NEPRA Act as amended in the year 2018.

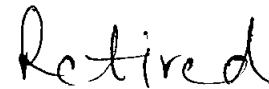
(xiii). In consideration of the above, the Authority hereby approves the grant of generation licence to AEL on the terms and conditions set out in the generation licence annexed to this determination. The grant of generation licence will be subject to the provisions contained in the NEPRA Act, relevant rules, regulations framed thereunder and other applicable documents. Further to the said, the Authority directs AEL to apply for a Supplier Licence under Section-23E of the NEPRA Act, once the necessary/required rules and regulations on the subject are notified and if there is a requirement for such a licence.

Authority:

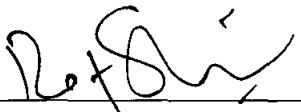
Engr. Maqsood Anwar Khan
(Member)



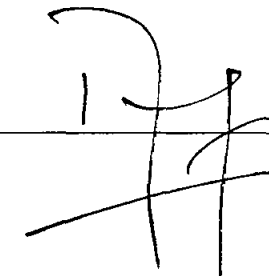
Engr. Rehmatullah Baloch
(Member)



Engr. Rafique Ahmed Shaikh
(Member)



Engr. Tauseef H. Farooqi
(Chairman)



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

Islamabad – Pakistan

GENERATION LICENCE

No. SGC/165/2022

In exercise of the powers conferred upon the National Electric Power Regulatory Authority (NEPRA) under Section-14(B) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, as amended or replaced from time to time, the Authority hereby grants a Generation Licence to:

Atlas Energy Limited

Incorporated under Section-32 of
the Companies Ordinance, 1984 (XLVII of 1984) having Corporate Universal
Identification No. 0099710, dated May 18, 2016

**for its PV based Generation Facility located at Atlas Honda
Limited, 26/27km Lahore-Sheikhupura Road, Sheikhupura, in the
Province of Punjab**

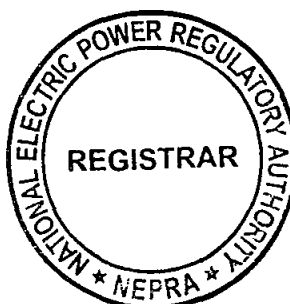
(Installed Capacity: \approx 4.928 MW_p)

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

Given under my hand on 21st day of April Two Thousand &
Twenty-Two and expires on 29th day of June Two Thousand &
Forty-Seven


Registrar

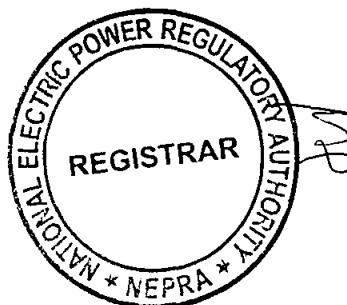
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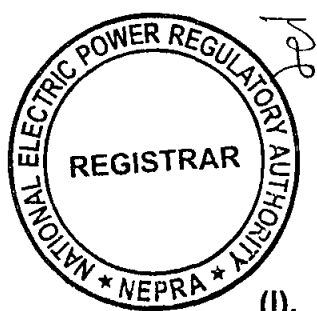
Article-1
Definitions

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). "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). "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 specify and the Authority may specify different amounts and voltage levels and with such other characteristics for different areas;



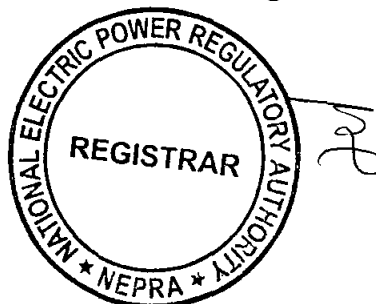
- (f). "Bus Bar" means a system of conductors in the generation facility/Solar Power Plant/Roof Top Solar of the Licensee on which the electric power from all the photovoltaic cells is collected for supplying to the Power Purchaser;
- (g). "Commercial Code" means the commercial code prepared under the 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/Solar Power Plant/Roof Top Solar of the Licensee is Commissioned;
- (i). "Commissioned" means the successful completion of commissioning of the generation facility/Solar Power Plant/Roof Top Solar for continuous operation and despatch to the Power Purchaser;
- (j). "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;
- (k). "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/Solar Power Plant/ Roof Top Solar, as may be amended by the parties thereto from time to time;
- (l). "Generation Rules" mean the National Electric Power Regulatory Authority Licensing (Generation) Rules, 2000 as amended or replaced from time to time;



- (m). "Grid Code" means the grid code prepared and revised from time to time by NTDC with necessary approval of the Authority;
- (n). "Licence" means this licence granted to the Licensee for its generation facility/Roof Top Solar;
- (o). "Licensee" means **Atlas Energy Limited** or its successors or permitted assigns;
- (p). "Licensing Regulations" mean the National Electric Power Regulatory Authority Licensing (Application, Modification, Extension and Cancellation) Procedure Regulations, 2021 as amended or replaced from time to time;
- (q). "Net Delivered Energy" means the net electric energy expressed in kWh that is generated by the generation facility/Solar Power Plant/Roof Top Solar of the Licensee at its outgoing Bus Bar and delivered to the Power Purchaser;
- (r). "Power Purchaser" means the BPC which will be purchasing electric power from the Licensee, pursuant to a EPA for procurement of electric power;
- (s). "Roof Top Solar" means a cluster of photovoltaic cells installed on the roof top of a building or any other suitable place in the same location used for production of electric power";
- (t). "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 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 or replaced from time to time.

Article-3
Generation Facilities

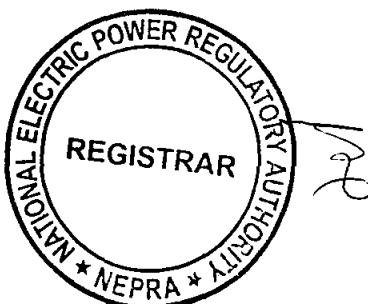
3.1 The location, size (capacity in MW), technology, interconnection arrangements, technical limits, technical functional specifications and other details specific to the generation facility/Solar Power Plant or Roof Top Solar of the Licensee are set out in Schedule-I of this Licence.

3.2 The net capacity/Net Delivered Energy of the generation facility/Solar Power Plant or Roof Top Solar 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/Solar Power Plant or Roof Top Solar before it is Commissioned.

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/Solar Power Plant or Roof Top Solar, subject to the provisions of 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 Generation Rules read with 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) Regulations, 2021 as amended or replaced from time to time.

Article-6
Tariff

The Licensee is allowed to charge the Power Purchaser/BPC a mutually agreed tariff.

Article-7
Competitive Trading Arrangement

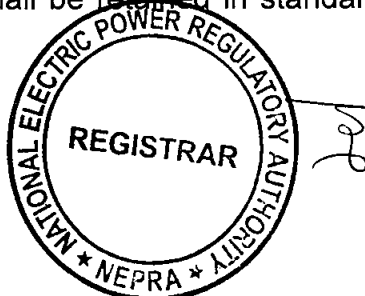
7.1 The Licensee shall participate in such manner as may be directed by the Authority from time to time for development of a Competitive Trading Arrangement.

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.

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/Solar Power Plant or Roof Top Solar of the Licensee shall comply with the environmental and safety standards as may be prescribed by the relevant competent authority as amended or replaced from time to time.

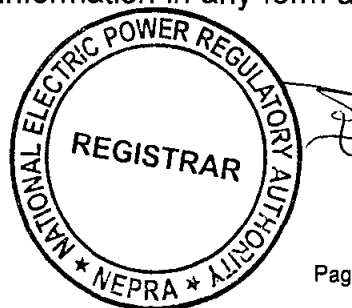
10.2 The Licensee shall provide a certificate on a bi-annual basis, confirming that the operation of its generation facility/Solar Power Plant or Roof Top Solar is in conformity with required environmental standards as prescribed by the relevant competent authority as amended or replaced from time to time.

Article-11
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/Solar Power Plant or Roof Top Solar. 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.

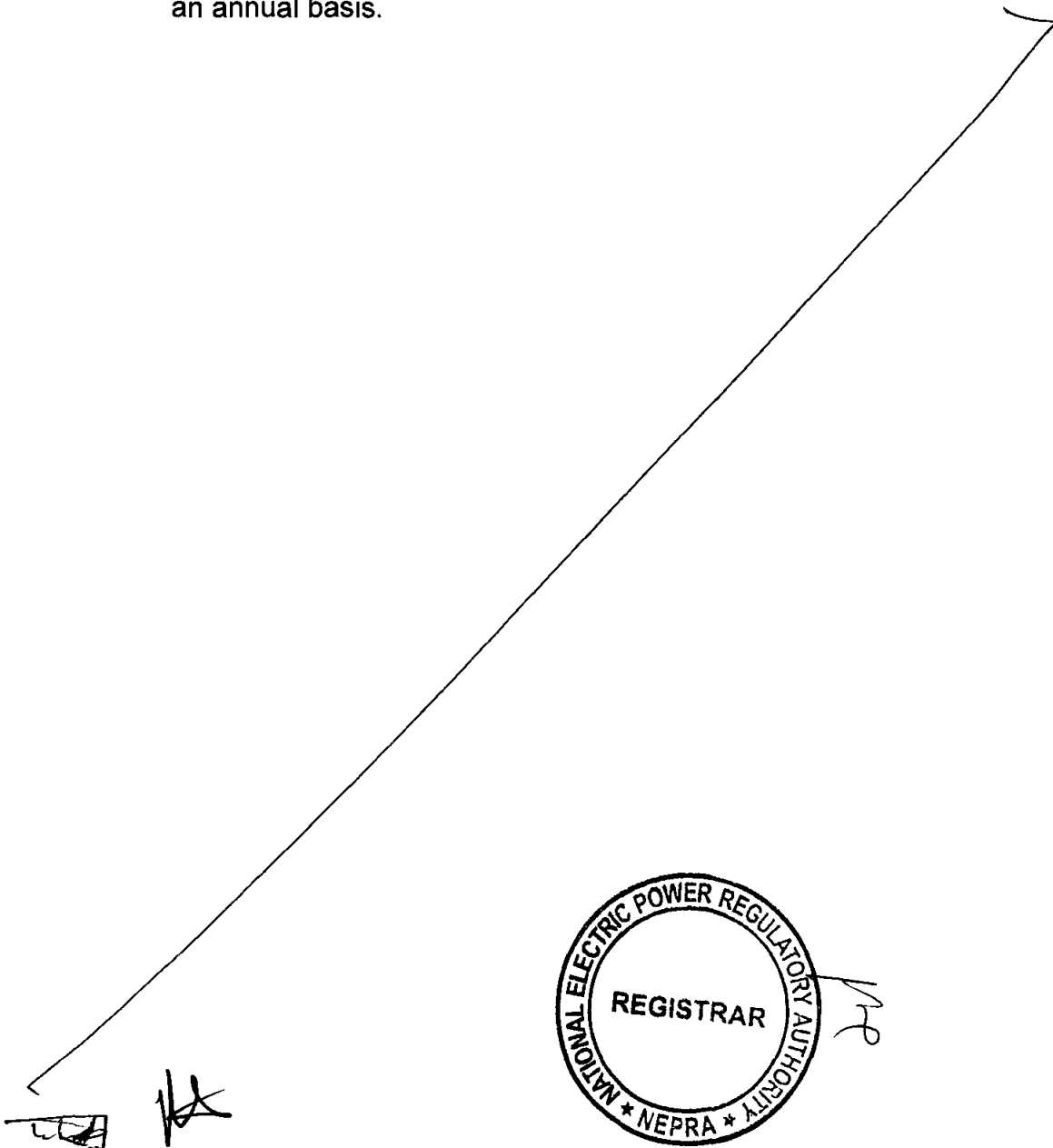


Article-13
Compliance with Applicable Law

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.

Article-14
Corporate Social Responsibility

The Licensee shall provide the descriptive as well as monetary disclosure of its activities pertaining to corporate social responsibility (CSR) on an annual basis.





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.



Generation Licence
Atlas Energy Limited
At Atlas Honda Limited
26/27km Lahore-Sheikhupura Road
Sheikhupura
in the Province of Punjab

**Location of the
Generation Facility/Solar Power Plant/Roof Top Solar
of the Licensee**

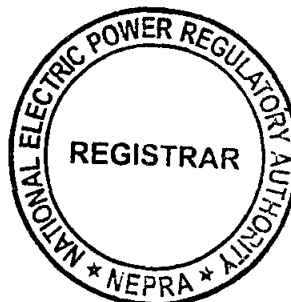


**Location: Atlas Honda Limited,
Atlas Honda Limited, 26/27 Km Lahore-Sheikhupura Road,
Sheikhupura.**

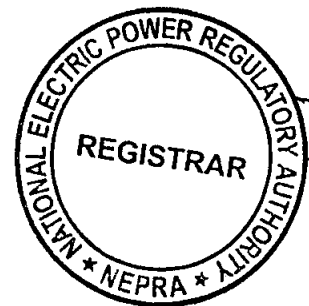
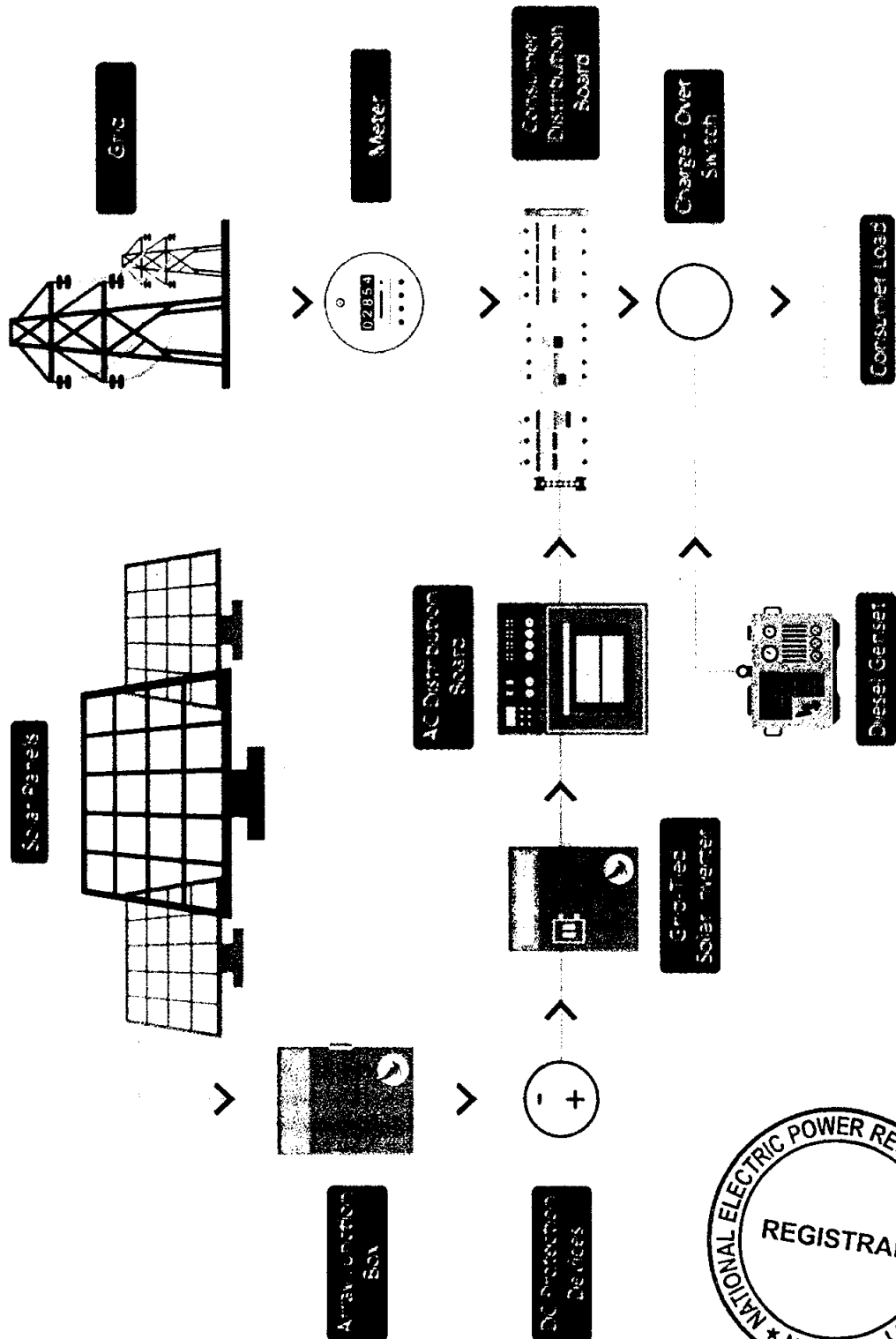


**Land Coordinates of the
Generation Facility/Solar Power Plant/Roof Top Solar
of the Licensee**

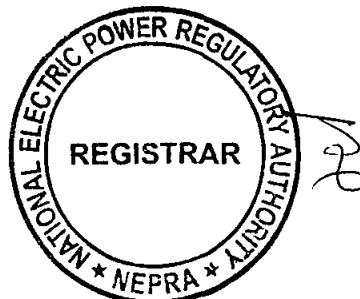
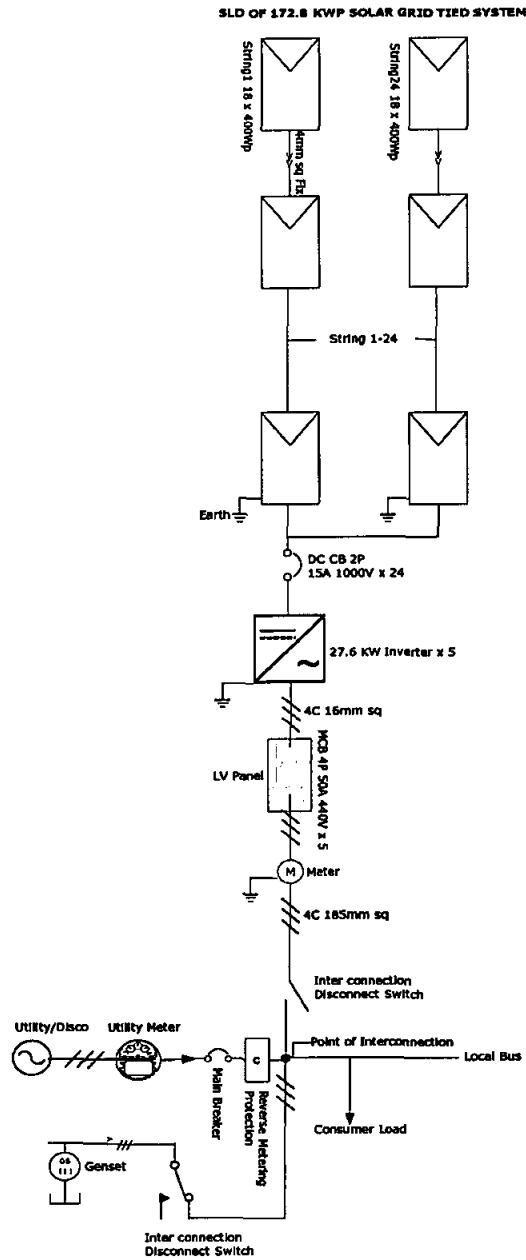
Location	Area/ Roof	Site Coordinates
Atlas Honda Limited 26-27 Km Lahore-Sheikhupura Road, Sheikhupura.		
1	Test Track Area	Latitude: 31° 41' 08.9" N Longitude: 74° 05' 13.2" E Field Type Fixed tilt plane Field Parameters: Tilt 20° & Azimuth 4°
2	Stamping Building	Latitude: 31° 40' 55.2" N Longitude: 74° 05' 13.9" E Field Type Fixed tilt plane Field Parameters: Tilt 5° & Azimuth 0°
3	Spare Parts Logistics (SPL)	Latitude: 31° 40' 52.7" N Longitude: 74° 05' 37.5" E Field Type Fixed tilt plane Field Parameters: Tilt 5° & Azimuth 0°
4	Complete Built Unit (CBU)	Latitude: 31° 40' 57.6" N Longitude: 74° 05' 37.5" E Field Type Fixed tilt plane Field Parameters: Tilt 5° & Azimuth 0°



**Process Flow Diagram of the
Generation Facility/Solar Power Plant/Rooftop Solar of the
Licensee**



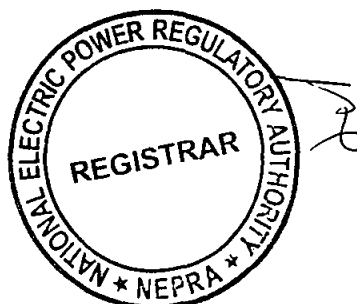
Single Line Diagram
of the Generation Facility/Solar Power Plant/Solar Farm of the
Licensee



**Interconnection Arrangement/Transmission Facilities for
Dispersal of Power from the Generation Facility/Solar Power
Plant/Solar Farm/Roof Top Solar of the Licensee**

The electric power generated from the generation facility/Solar Power Plant/Solar Farm /Roof Top Solar of the Atlas Energy Limited-AEL/Licensee will be delivered/supplied to Atlas Honda Limited/AHL as a Bulk Power Consumer (BPC).

(2). The details pertaining to BPC, the supply arrangements and other relating information are provided in the subsequent description of this schedule. Any changes in the said, shall be communicated to the Authority in due course of time.



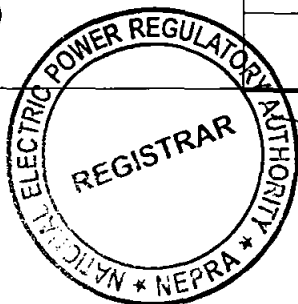
Details of Generation Facility/Solar Power Plant/ Solar Farm

(A). General Information

(i).	Name of the Company/Licensee	Atlas Energy Limited
(ii).	Registered/ Business office of the Company/Licensee	64/XX Khayaban-e-Iqbal, DHA Phase-III Lahore.
(iii).	Type of the generation facility/Solar Power Plant/Solar Farm	Photovoltaic (PV) Cell
(iv).	Location(s) of the generation facility Solar Power Plant/ Solar Farm	Atlas Honda Limited, 26/27 Km Lahore-Sheikhupura Road, Sheikhupura.
		(a). Test Track Area (2465.58 kWp)
		(b). Stamping Building (209.280 kWp)
		(c). Spare Parts Logistics Building (1,091.09 kWp)
		(d). Complete Built Unit Building (1,161.94 kWp)

(B). Solar Power Generation Technology & Capacity

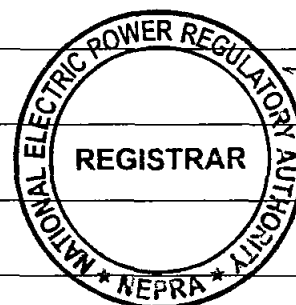
(i).	Type of Technology	Photovoltaic (PV) Cell	
(ii).	System Type	On-Grid	
(iii).	Installed Capacity of the generation facility Solar Power Plant/ Solar Farm (MW/KW)	4.9278 MW _P	
(iv).	No. of Panel/Modules	9,042 x 545 Watt	
(v).	PV Array	Nos. of Strings	357
		Modules in a string	94
(vi).	Invertor(s)	Quantity	19
		Make	Huawei

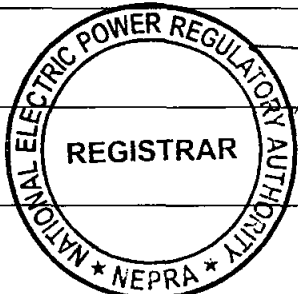


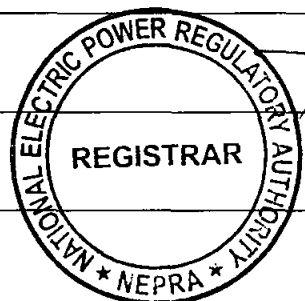
		Capacity of each unit	200 kW
		Quantity	03
		Make	Huawei
		Capacity of each unit	60 kW

(C). Technical Details of Equipment

(a).	<u>Solar Panels – PV Modules</u>	
(i).	Type of Module	JAM72S30-545/MR
(ii).	Type of Cell	Mono crystalline
(iii).	Dimension of each Module	2279x1135x35mm(89.72x44.68x1.38 inch)
(iv).	Total Module Area	2.586,665 m ²
(v).	Frame of Panel	Anodized aluminium alloy
(vi).	Weight of one Module	28.6 kg
(vii).	No of Solar Cells in each module	144 (6×24)
(viii).	Efficiency of module	21.1%
(ix).	Maximum Power (P _{max})	545 W _P
(x).	Voltage @ P _{max}	41.8 V
(xi).	Current @ P _{max}	13.04 A
(xii).	Open circuit voltage (V _{oc})	49.8V
(xiii).	Short circuit current (I _{sc})	13.93A
(xiv).	Maximum system open Circuit Voltage	1000VDC (IEC)
(b).	<u>Inverters (200 KW-SUN2000-200KTL-H2) (60kW-SUN2000-60KTL-M0)</u>	
(i).	Input Operating Voltage Range	500 V to 1500 V
(ii).	Efficiency of inverter	99 %
(iii).	Max. Allowable Input voltage	1500V
(iv).	Max. Current	30 A
(v).	Max. Power Point Tracking Range	500 V to 1500 V



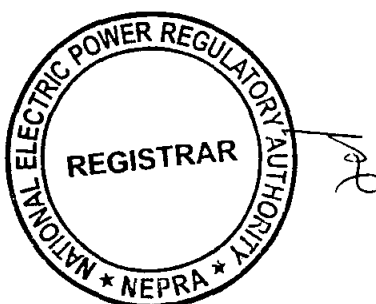
(vi).	Output electrical system	3 Phase AC	
(vii).	Rated Output Voltage	800 V, 3W + PE	
(viii).	Power Factor (adjustable)	0.8 LG...0.8 LD	
(ix).	Power control	MPP tracker	
(x).	Rated Frequency	50 Hz	
(xi).	Environmental Enclosures	Relative Humidity	4-100%, condensing
		Audible Noise	68 dB(A) @ 1m
		Operating Elevation	2000 m
		Operating temperature	-25 to +60°C
(xii).	Grid Operating protection	A	DC circuit breaker
		B	AC circuit breaker
		C	DC overload protection (Type 2)
		D	Overheat protection
		E	Grid monitoring
		F	Insulation monitoring
		G	Ground fault monitoring
(c).	<u>Data Collecting System</u>		
(i).	System Data	Continuous online logging with data logging software to portal.	
(d).	<u>Unit Transformer</u>		
(i)	Rated Power [kVA]	2200	
(ii)	Rated High Voltage [V]	11000	
(iii)	Rated Low Voltage [V]	800	



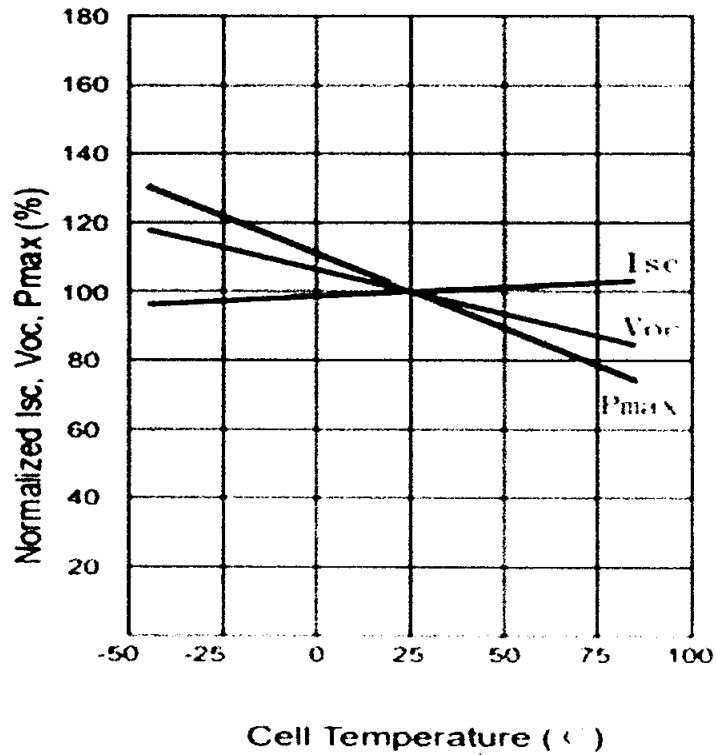
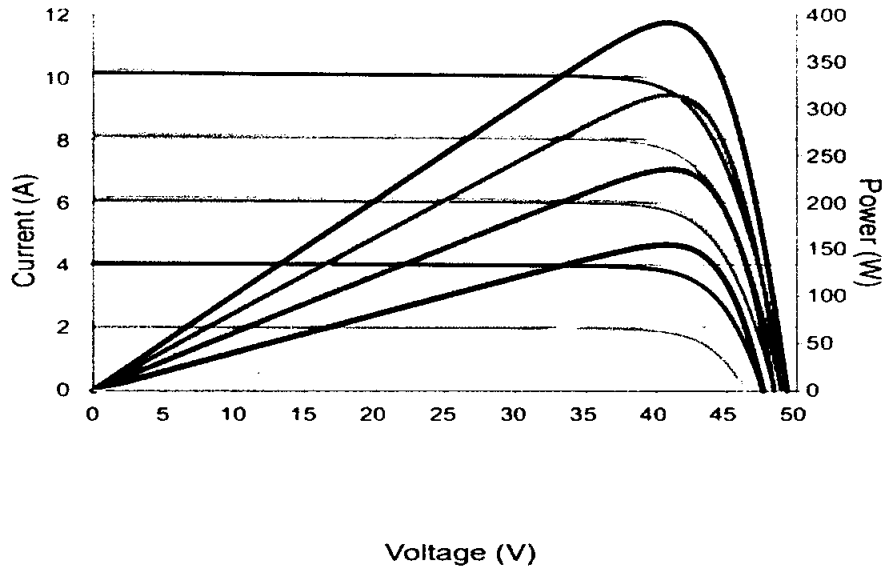
(iv)	Number of Phases [ϕ]	3
(v)	Insulation Class	A
(vi)	No. of HV Taps	6
(vii)	Type of Cooling	ONAN
(viii)	No-Load Loss [kW]	3.1
(ix)	Load Loss at Principal Tap [kW]	22.0
(x)	Impedance [%]	6.0
(xi)	HV Line Current [A]	115.47
(xii)	LV Line Current [A]	1587.71
(xiii)	Frequency [Hz]	50 HZ

(D). Other Details

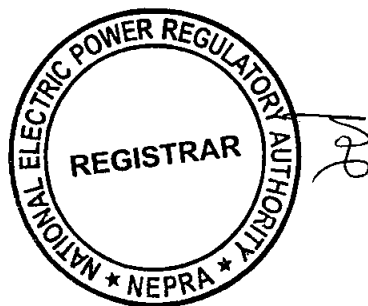
(i).	Expected COD of the generation facility Solar Power Plant/ Roof Top Solar	June 30, 2022
(ii).	Expected useful Life of the generation facility/Solar Power Plant/Roof Top Solar from the COD	25 years



V-I Curve
Generation Facility/Solar Power Plant/Roof Top Solar
of the Licensee

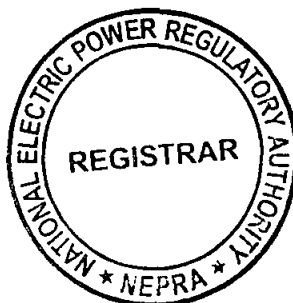


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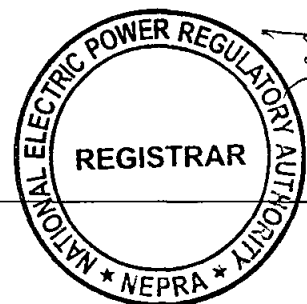
Information
Regarding Bulk Power Consumer(s)/BPC(s) to be
Supplied by the Licensee

(i).	No. of Consumers	One (01)
(ii).	Location of consumers (distance and/or identity of premises)	Atlas Honda Limited 26/27 Km Lahore-Sheikhupura Road Sheikhupura.
(iii).	Contracted Capacity and Load Factor for consumer	4.928 MW _P / 10-15%
(iv).	Specify Whether	
	(a).	The consumer is an Associate undertaking of the Licensee -If yes, specify percentage ownership of equity; Yes
	(b).	There are common directorships: Yes
	(c).	Either can exercise influence or control over the other. Yes
(v).	Specify nature of contractual Relationship	
	(a).	Between each consumer and Licensee. Licensee will construct, own and operate the solar generation facilities and provide electricity to BPC.
	(b).	Consumer and Distribution Company. AHL is an Existing Consumer of LESCO
(vi)	Any other network information deemed relevant for disclosure to or consideration of the Authority.	Not Applicable



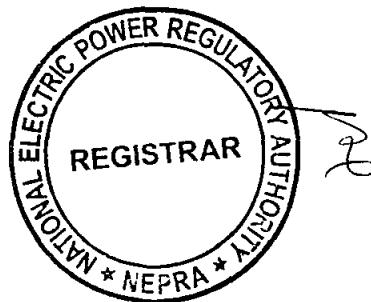
Information
Regarding Distribution Network for Supply of Electric
Power to BPC

(i).	No. of Feeders	One (01)
(ii).	Length of Each Feeder (Meter)	50-100 meter
(iii).	Length of Each Feeder to each Consumer	-do-
(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.	The underground cable supplying to BPC from the generation facility will be located on private property owned by BPC
(v).	Whether owned by Licensee, Consumer or Distribution Company -(deal with each Feeder Separately)	
	(a).	If owned by Distribution Company, particulars of contractual arrangement
	(b).	Operation and maintenance responsibility for each feeder
(vi).	Whether connection with network of Distribution Company exists (whether active or not)- If yes, provide details of connection arrangements (both technical and contractual)	Yes
(vii).	Any other network information deemed relevant for disclosure to or consideration of the Authority.	NA



SCHEDULE-II

The Total Installed Gross ISO Capacity of the Generation Facility/Power Plant/Solar Plant (MW), 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/Solar Farm of Licensee are given in this Schedule.

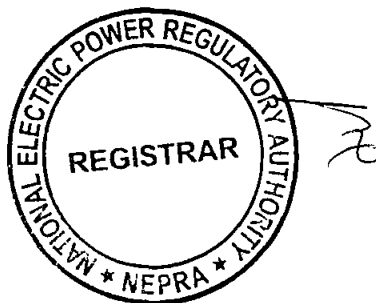


SCHEDULE-II

(1).	Total Installed Capacity of the Generation Facility/Solar Power Plant/Solar Farm	4.9278 MW _P
(2).	Average Sun Hour Availability/ Day (Irradiation on Inclined Surface)	8 to 8.5 Hours
(3).	No. of days per year	365
(4).	Annual generating capacity of Generation Facility/Solar Power Plant/Solar Farm (As Per Simulation)	6,759 MWh
(5).	Total (approximated) expected generation of the Generation Facility/Solar Power Plant/Solar Farm during the twenty five (25) years term of this licence	157,369 MWh
(6).	Annual generation of Generation Facility/Solar Power Plant/Solar Farm based on 24 hours working	43,168 MWh
(7).	Net Capacity Factor of Generation Facility/Solar Power Plant/Solar Farm	16.00 %

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).



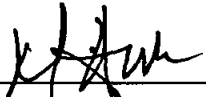
Authorization
by National Electric Power Regulatory Authority (NEPRA) to
Atlas Energy Limited

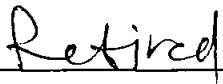
Incorporated under Section-32 of
the Companies Ordinance, 1984 (XLVII of 1984) having Corporate Universal
Identification No. 0099710, dated May 18, 2016


NEPRA GENERATION LICENCE No. SGC/165/2022
For Sale to Bulk Power Consumer(s)


Pursuant to Section-22 of the Act and Rule-7 of the NEPRA Licensing (Generation) Rules-2000, the Authority hereby authorize Atlas Energy Limited-AEL (the Licensee) to engage in second-tier supply business, limited to the following consumers:-

- (a). Atlas Honda Limited-AHL, 26/27km Lahore-Sheikhupura Road, Sheikhupura in the Province of Punjab.

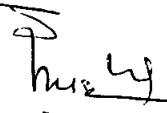

Engr. Maqsood Anwar Khan
(Member)


Engr. Rehmatullah Baloch
(Member)


Engr. Rafique Ahmed Shaikh
(Member)


Engr. Tauseef H. Farooqi
Chairman




21.04.22