



Registrar

National Electric Power Regulatory Authority

Islamic Republic of Pakistan

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

No. NEPRA/R/LAG-343/19794-99

July 30, 2020

Mr. Khurshid Akhtar,
Director,
Act2 Wind (Private) Limited,
Office No. 1002, 10th Floor, Emerald Tower,
Near 2 Talwar, Karachi
Contact No. 021-35147573-74

**Subject: Modification-I in Generation Licence No. WPGL/39/2017
Licence Application No. LAG-343
Act2 Wind (Private) Limited (AWPL)**

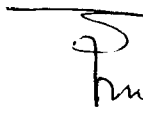
Reference: AWPL's LPM submitted vide letter dated October 31, 2019

The Authority has approved Modification in Generation Licence No. WPGL/39/2017 dated April 04, 2017 in respect of Act2 Wind (Private) Limited (AWPL), pursuant to Section 26 of the Regulation of Generation, Transmission, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997) read with Regulation 10(11) of the NEPRA Licensing (Application and Modification Procedure) Regulations 1999.

2. Enclosed please find herewith determination of the Authority in the matter of Licensee Proposed Modification in the Generation Licence of AWPL along with Modification-I in the Generation Licence No. WPGL/39/2017 as approved by the Authority.

Encl: As above




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(Syed Safeer Hussain)

Copy to:

1. Secretary, Power Division, Ministry of Energy, A-Block, Pak Secretariat, Islamabad.
2. Managing Director, NTDC, 414-WAPDA House, Lahore.
3. Chief Executive Officer, CPPA-G, ENERCON Building, Sector G-5/2, Islamabad.
4. Chief Executive Officer, Hyderabad Electric Supply Company Limited (HESCO), WAPDA Offices Complex, Hussainabad, Hyderabad
5. Director General, Environment Protection Department, Government of Sindh, Complex Plot No. ST-2/1, Korangi Industrial Area, Karachi.

National Electric Power Regulatory Authority
(NEPRA)

Determination of the Authority
in the Matter of Licensee Proposed Modification in the
Generation Licence of ACT2 Wind (Private) Limited

July 30, 2020
Case No. LAG-343

(A). Background

(i). The Authority under relevant Section of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "NEPRA Act"), granted a Generation Licence (No. WPGL/42/2017 dated April 04, 2017) to ACT2 Wind (Private) Limited (AWPL) for its 50.00 MW generation facility/Wind Power Plant (WPP) proposed to be located at tapo Jungsahi, district Thatta, in the province of Sindh.

(ii). Under the above mentioned Generation Licence, the WPP envisaged consisting of twenty (20) wind turbine generators of Goldwind (GW-121/2.50 MW) with net capacity factor of 35%. The Generation Licence was granted for a term of twenty (20) years from the expected Commercial Operation Date (COD) of the project (i.e. December 31, 2019).

(B). Communication of Modification

(i). In accordance with Regulation-10(2) of the NEPRA Licensing (Application & Modification Procedure) Regulations, 1999 (the "Licensing Regulations"), AWPL communicated a Licensee Proposed Modification (LPM) in its existing Generation Licence on November 04, 2019.

(ii). In the "text of the proposed modification", AWPL submitted about changing (i). the net capacity factor of the WPP from 35% to 38%; (ii). the anticipated COD of the WPP from December 31, 2019 to February 18, 2021; (iii). the term of generation licence from 20 years to 25 years and (iv). To correct the coordinates of WTGs. Regarding the "statement of the reasons in support of the modification", it submitted that the proposed modification in the Generation Licence is primarily for



matching the terms and conditions of the tariff determination of the Authority dated November 19, 2018.

(iii). About the "statement of the impact on the tariff, quality of service and the performance by the licensee of its obligations under the licence", AWPL submitted that the LPM shall not have any adverse impact on any of the said parameters.

(C). Processing of LPM

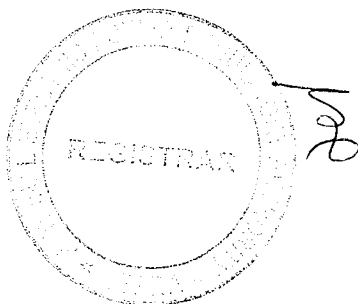
(i). After completion of all the required information as stipulated under the Regulation-10(2) and 10(3) of the Licensing Regulations, by AWPL, the Registrar published the communicated LPM on November 27, 2019, in one (01) Urdu (Express) and one (01) English (B/Recorder) newspaper, informing the general public about the communicated LPM and inviting their comments within a period of fourteen (14) days from the date of the said publication.

(ii). Apart from the above, separate letters were also sent to other stakeholders including Government Ministries and their attached departments, various representative organization, individual experts and others, on November 27, 2019. Through the said letters, the stakeholders were informed about the communicated LPM and publication of its notice in the press. Further, the said entities were invited to submit their views and comments in the matter, for assistance of the Authority.

(D). Comments of Stakeholders

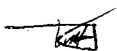
(i). In reply to the above, the Authority received comments from five (05) stakeholders including Engineering Development Board (EDB), Karachi Shipyard and Engineering Works Limited (KSEW), National Transmission and Despatch Company Limited (NTDC), Central Power Purchasing Agency (Guarantee) Limited and Ministry of Science and Technology (MoST). The comments offered by the said stakeholders are summarized in the following paragraphs:-

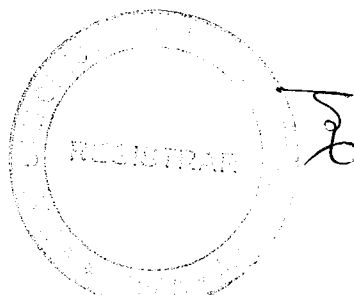
(a). EDB recommended that the sponsors should utilize indigenous resources available for execution of the project;



- (b). KSEW submitted that its facilities located near Karachi are capable of manufacturing the towers for wind turbines at competitive rates. AWPL may consider the services of KSEW for modification, erection and installation of its WPP;
- (c). NTDC informed that it is working on construction of interconnection arrangements for power evacuation of all the (4+11=15) WPPs in Category-II. It shall complete the interconnection arrangement for the 11 WPPs including AWPL by December 31, 2021 and on the best effort basis by September 30, 2021. Therefore, the Authority while deciding the COD of AWPL, may give due consideration to the same;
- (d). CPPA-G commented that while approving/reviewing the LPM certain factors are required to be considered. These factors include (a). recommendation/approval of the Cabinet Committee on Energy (CCoE) regarding category-II of renewable energy projects; (b). optimized efficiency, advanced technology and lower levelized tariff of WPPs as globally the new WPPs are being set-up at very low-cost; (c). the anticipated COD of the project as per Indicative Generation Capacity Expansion Plan (IGCEP) of NTDC; (d). completion of interconnection arrangement to evacuate power from AWPL; and (e) consent to purchase power from the AWPL is subject to confirmation from NTDC which is still awaited. Therefore, COD of the project should be decided based on the confirmation from NTDC for completion of construction of the Jhimpir-II G/S; and
- (e). MoST commented that the Authority may decide the matter on its own after considering all technical and financial parameters.

(ii). The Authority examined the above comments of stakeholders and considered it appropriate to seek perspective of AWPL on the observations of KSEW, EDB, NTDC and CPPA-G. On the observations of KSEW and EDB regarding



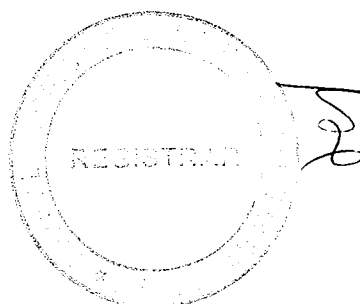


utilization of the indigenous resources/potential in the project, AWPL confirmed that it will make its best efforts to utilize locally available resources in execution of the project.

(iii). On the observations of CPPA-G regarding CCoE decision, AWPL submitted that the recommendations/approvals in the CCoE decision relate to guiding relevant governmental authorities on the 'way forward' to achieve financial closing for projects in different categories. As the Project has already successfully achieved financial closing on November 18, 2019, this point is already addressed.

(iv). About the observations of CPPA-G regarding efficiency and low tariff, AWPL submitted that the Authority through its determination No. NEPRA/TRF-424/AWPL-2-2017/17993-17995 dated November 19, 2018 (the "Tariff Determination"), has already granted a tariff at which CPPA-G is to purchase electricity from it in accordance with the terms of the Energy Purchase Agreement (EPA) dated November 11, 2019. The proposed modifications in the Generation Licence are not to reopen the technology or the cost of electricity that the Authority has already determined and approved, but merely to match the terms of the Tariff Determination and the Generation Licence. The approval of the LPM would enable the AWPL in fulfilling its obligations under the Tariff Determination. Moreover, the technology and the specifications of wind turbine have been approved by the Authority in the Generation Licence. The Company is not seeking to alter the same as the it has already attained financial close under the Implementation Agreement dated November 12, 2019 and is now moving towards completion of the Project. Further, AWPL has obtained financing from a consortium of foreign and local lenders on the basis of the approved project cost, levelized tariff and other financial factors approved by the Authority, and therefore is unable to vary its costing, lending or the price of electricity at such an advanced stage of development of the Project.

(v). On the comments of CPPA-G and NTDC regarding COD of the Project, AWPL inter alia submitted that the Authority has already awarded it a tariff for supplying electricity to CPPA-G in accordance with the terms of the EPA. The proposed modification in the Generation Licence envisages to align of the timelines with the tariff determination and RCOD defined in the EPA.



(vi). The Authority has examined the submissions/rejoinders of AWPL on the observations/comments of stakeholders and found the same plausible. Foregoing in view, the Authority considered it appropriate to proceed further with the communicated LPM as stipulated in the Licensing Regulations and the NEPRA Licensing (Generation) Rules, 2000 ("the Generation Rules").

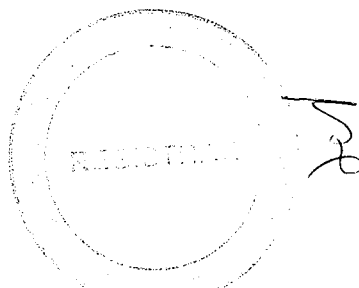
(E). Evaluation/Findings

(i). The Authority examined the entire case in detail including the already granted Generation Licence, communicated LPM, comments of stakeholders, rejoinders from the Licensee, granted cost plus tariff awarded to AWPL, the provisions of the Policy for Development of Renewable Energy for Power Generation 2006 (the "RE Policy"), comments of the stakeholder, rejoinders of AWPL and relevant rules & regulations

(ii). In this regard, the Authority observed that originally it granted a Generation Licence (No. WPG/L/42/2017 dated April 04, 2017) to AWPL for its of 50.0 MW generation facility/WPP. According to the existing Generation Licence the anticipated COD of the WPP is December 31, 2019.

(iii). According to the communicated LPM under consideration, the company/Licensee/AWP intends to change (i). the net capacity factor of the WPP from 35% to 38%; (ii). the anticipated COD of the WPP from December 31, 2019 to February 18, 2021; (iii). the term of generation licence from 20 years to 25 years and (iv). To correct the coordinates of WTGs. The said modifications have been proposed mainly to make the Generation Licence consistent with the terms and conditions of tariff granted to AWPL. Regarding LPM in the Generation Licence, the Authority has observed that Regulation-10(2) of the Licensing Regulations stipulates that a licensee may, at any time during the term of a licence, communicate to the Authority an LPM setting out (a). the text of the proposed modification; (b). a statement of the reasons in support of the modification; and (c). a statement of the impact on the tariff, quality of service and the performance by the licensee of its obligations under the licence.

(iv). In this regard, the Authority in terms of Section-26 of the NEPRA Act read with Regulation-10(5) of the Licensing Regulations is empowered to modify an

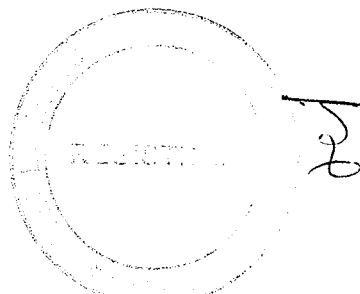
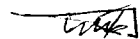


existing licence of a licensee subject to and in accordance with such further changes as the Authority may deem fit if, in the opinion of the Authority such modification (a). does not adversely affect the performance by the licensee of its obligations; (b). does not cause the Authority to act or acquiesce in any act or omission of the licensee in a manner contrary to the provisions of the NEPRA Act or the rules or regulations made pursuant to it; (c). is or is likely to be beneficial to the consumers; (d). is reasonably necessary for the licensee to effectively and efficiently perform its obligations under the licence; and (e). is reasonably necessary to ensure the continuous, safe and reliable supply of electric power to the consumers keeping in view the financial and technical viability of the licensee.

(v). Regarding the proposed changes in capacity factor and term of the Generation Licence, the Authority has observed that the proposed change in the net capacity factor of the WPP from 35% to 38% translates into enhancement of the net annual energy generation (over the project control period of twenty-five years) from 153.30 GWh to 166.44 GWh without making any changes the WTG technology and installed capacity of the generation facility/WPP.

(vi). Regarding the proposed change in the anticipated COD of the WPP from December 31, 2019 to February 18, 2021, the Authority has observed that according to the tariff granted to AWPL, the targeted maximum construction period for the WPP after financial close is fifteen (15) months. No adjustments are allowed in the tariff to account for financial impact of any delay in project construction. However, the failure of the company to complete the construction within fifteen months will not invalidate the tariff granted to it. AWPL has achieved financial close on November 19, 2019 and the fifteen (15) months from financial close translates into February 18, 2021, as proposed by AWPL.

(vii). On the observations of CPPA-G and NTDC regarding COD of the project, the Authority has observed that AWPL has a valid Generation Licence and tariff granted by the Authority. The communicated LPM is merely to make some features of the Generation Licence (including anticipated COD of the WPP) in line with the tariff granted to the Licensee/AWPL. Any change in actual COD of the project is required to be dealt with under the relevant provisions of the EPA, as agreed between the parties (i.e. CPPA-G & AWPL).



(viii). Regarding the proposed change in term of the Generation Licence, the Authority has observed that under Rules-5(1) of the Generation Rules the term of Generation Licence is to commensurate with the maximum expected useful life of the units comprised in a generation facility, except where an applicant for a Generation Licence consents to a shorter term. As per international benchmark, the useful life of wind turbine generators is considered normally as 20 to 25 years and the Licensee/AWPL has also requested for 25 years. Further, the cost plus tariff granted to AWPL and similar WPPs also envisages a control period of 25 years. Therefore, the Authority is of the view that the 25 years useful life of the generation facility is in-line with the said standards for useful life of WTGs.

(ix). Regarding the impact of the communicated LPM on the tariff, the Authority hereby clarifies that it has already granted cost-plus tariff to AWPL through determination (No. NEPRA/TRF-424/AWPL-2-2017/17993-17995 November 19, 2018). It is considered that the communicated LPM is in line with the granted tariff and will not have any adverse impact on its existing tariff.

(x). In view of foregoing in, the Authority is of the considered opinion that (a). the proposed LPM will not have any adverse effect on the performance of AWPL of its obligations under its Generation Licence considering the fact it is primarily to make it consistent with the terms and conditions of tariff determination; (b). the LPM will not cause the Authority to act or acquiesce in any act or omission of the Licensee in a manner contrary to the provisions of the NEPRA Act or the rules or regulations made pursuant to it; (c). the LPM is likely to be beneficial to the consumers in general as more amount of clean and cheap electricity will be available to the power purchaser; (d). the LPM is reasonably necessary for the Licensee/AWPL to effectively and efficiently perform its obligations under the Licence; and (e). the LPM is necessary to ensure the continuous, safe and reliable supply of electric power to the consumers keeping in view the financial and technical viability of the Licensee.

(F). Approval of LPM

(i). In view of the above, the Authority is satisfied that the Licensee has complied with all the requirements of the Licensing Regulations pertaining to the modification. Therefore, the Authority in terms in terms of Section-26 of the NEPRA Act read with Regulation-10(11) of the Licensing Regulations approves the




communicated LPM in the Generation Licence (No. WPGL/42/2017 dated April 04, 2017) of AWPL.


(ii). The changes made in the above mentioned Generation Licence are attached as annexure to this determination. The approval of the LPM is subject to the provisions contained in the NEPRA Act, relevant rules framed there under, terms & conditions of the Generation Licence and other applicable documents.

Authority


Rafique Ahmed Shaikh
(Member)


20/7/20

Rehmatullah Baloch
(Member)


21/7/2020

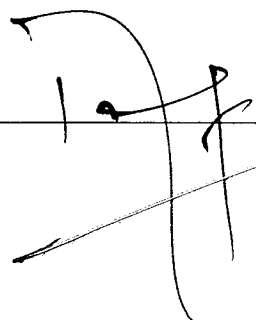
Saif Ullah Chattha
(Member)


21-7-2020

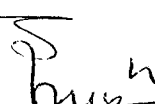
Engr. Bahadur Shah
Member/Vice Chairman)

(Did not Attend the meeting-Away)

Tauseef H. Farooqi
(Chairman)






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

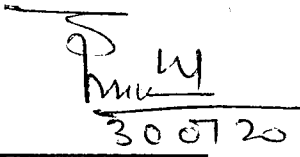
GENERATION LICENCE

No. WPGL/39/2017

In exercise of the Powers conferred under Section-26 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, the Authority hereby modifies the Generation Licence (No. WPGL/42/2017 dated April 04, 2017 granted to ACT2 Wind (Private) Limited), to the extent of changes mentioned hereunder:

- (a). In the **Face Sheet** of the original Generation Licence, the expiry date has been changed from **December 30, 2039** to **February 17, 2046**.
- (b). Changes made in the **Articles, Schedule-I & Schedule-II** of the Generation Licence are attached as **Annexure-A**.

This **Modification-I** is given under my hand on this 30th day of July Two Thousand & Twenty

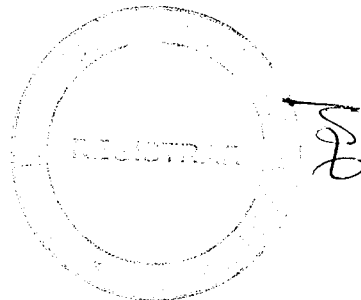


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Registrar





Annexure-A



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(i). Changes made in Articles of the Generation Licence:

Article-4.1 of the Generation Licence is rephrased as:
"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/Wind Power Plant/Wind Farm of the Licensee, subject to provisions of Section-14B of the Act."

(ii). Changes made in Schedule-I of the Generation Licence

(a) At Page-4 the coordinates of the Wind Turbine Generators (WTGs) are changed/modified as following:

WTG No.	Latitude (E)	Longitude (N)
(a). WTG01	24,98204	68.81559
WTG02	24,97942	68.81776
WTG03	24,97680	68.81992
WTG04	24,97418	68.82208
WTG05	24,96894	68.82641
WTG06	24,96632	68.82856
WTG07	24,96108	68.83289
WTG08	24,95846	68.83506
WTG09	24,95584	68.83724
WTG10	24,95322	68.83937
WTG11	24,94799	68.84369
WTG12	24,94537	68.84585
WTG13	24,94275	68.84802
WTG14	24,94013	68.85018
WTG15	24,93751	68.85234
WTG16	24,93489	68.85450
WTG17	24,93227	68.85666
WTG18	24,92965	68.88588
WTG19	24,92703	68.86098
WTG20	24,92441	68.86314

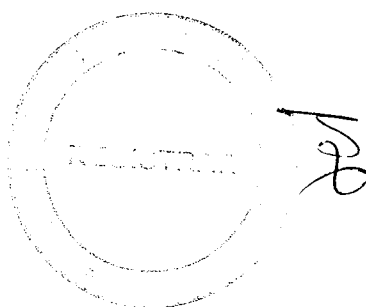
(b). At Para D(i) the under Detail of the Generation Facility/Wind Power Plant/Wind Farm, the anticipated Commercial Operation Date has been changed from **December 31, 2019 to February 18, 2021.**

(c). At Para D(ii) under Detail of the Generation Facility/Wind Power Plant/Wind Farm, the Minimum Expected Useful Life has been changed from **20 years to 25 years.**

(iii). Changes made in Schedule-II of the Generation Licence

The detail appearing at Schedule-II of the generation licence is replaced with the following:-

(1).	Total Installed Gross ISO Capacity of the Generation Facility /Wind Farm (in MW)	50.00
(2).	Total Annual Full Load Hours	3328.80
(3).	Average Wind Turbine Generator (WTG) Availability	98.0 %
(4).	Total Gross Generation of the Generation Facility/Wind Farm (in GWh)	185.518
(5).	Array & Miscellaneous Losses (in GWh)	10.729
(6).	Availability Losses (in GWh)	3.710
(7).	Balance of Plant Losses (in GWh)	4.638
(8).	Annual Energy Generation (25 years equivalent Net AEP) (in GWh)	166.44
(9).	Net Capacity Factor	38 %



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