

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/LAG-395/21373-78

August 13, 2020

Sheikh Muhammad Abdullah,
Company Secretary,
NASDA Green Energy (Private) Limited,
26-A, S.M.C.H.S, Off Shahrah-e-Faisal,
Karachi-74400
Contact No. 021-34315191

**Subject: Modification-I in Generation Licence No. WPGL/49/2017
Licence Application No. LAG-395
NASDA Green Energy (Private) Limited (NGEPL)**

Reference: NGEPL's LPM submitted vide letter dated October 16, 2019.

The Authority has approved Modification in Generation Licence No. WPGL/49/2017 dated August 03, 2017 in respect of NASDA Green Energy (Private) Limited (NGEPL), 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 NGEPL along with Modification-I in the Generation Licence No. WPGL/49/2017 as approved by the Authority.

Encl: As above



[Handwritten signature] 13/8/20
(Iftikhar Ali Khan)

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)
Islamabad – Pakistan**

GENERATION LICENCE

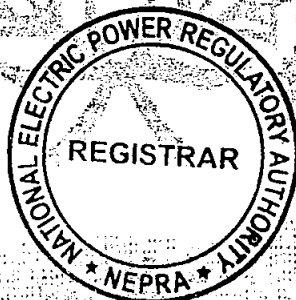
No. WPGL/49/2017

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/49/2017 dated August 03, 2017 granted to NASDA Green Energy (Pvt.) 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 **October 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**.

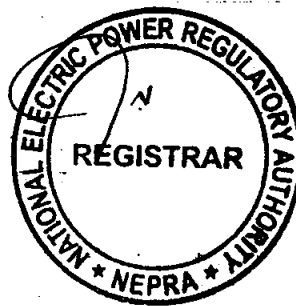
This **Modification-I** is given under my hand on this 13th ^{August} day of July Two
Thousand & Twenty


Registrar



Annexure-A

Modification-I

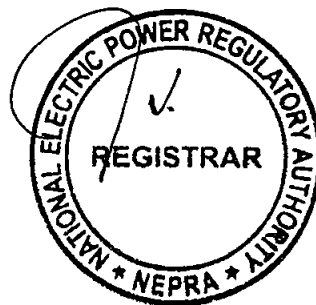


(i). Changes made in Articles of the Generation Licence

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

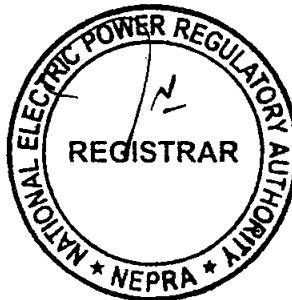
- (a). At Para D(i) under Detail of the Generation Facility/Wind Power Plant/Wind Farm, the anticipated COD has been changed from October 31, 2019 to February 18, 2021.
- (b). At Para D(ii) under Detail of the Generation Facility/Wind Power Plant/Wind Farm, the Minimum Expected Useful Life has been changed 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	3373
(3).	Average Wind Turbine Generator (WTG) Availability	97.0 %
(4).	Total Gross Generation of the Generation Facility/Wind Farm (in GWh)	191.67
(5).	Array & Miscellaneous Losses (in GWh)	13.42
(6).	Availability Losses (in GWh)	5.75
(7).	Balance of Plant Losses (in GWh)	3.83
(8).	Annual Energy Generation (25 years equivalent Net AEP) (in GWh)	168.67
(9).	Net Capacity Factor	38.51 %



National Electric Power Regulatory Authority
(NEPRA)

Determination of the Authority
in the Matter of Licensee Proposed Modification in the
Generation Licence of NASDA Green Energy (Private) Limited

August 13
~~July~~, 2020
Case No. LAG-395

(A). Background

(i). The Authority in terms of Section-15 (now Section-14B) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (the "NEPRA Act"), granted a Generation Licence (No. WPGL/49/2017 dated August 03, 2017) to NASDA Green Energy (Private) Limited (NGEPL) for its 50.00 MW generation facility/Wind Power Plant (WPP).

(ii). The above mentioned generation facility/WPP of NGEPL is to be located at Jhimpir wind corridor, district Thatta, in the province of Sindh and envisaged consisting of twenty-five (25) Wind Turbine Generators (WTGs) of Gamesa (G114-2.0 MW) with net capacity factor of 35%. The term of the Generation Licence is twenty (20) years from the expected Commercial Operation Date (COD) of the project.

(B). Communication of Modification

(i). In accordance with Regulation-10(2) of the NEPRA Licensing (Application & Modification Procedure) Regulations, 1999 (the "Licensing Regulations"), NGEPL communicated a Licensee Proposed Modification (LPM) in its existing Generation Licence on October 24, 2019.

(ii). In the "text of the proposed modification", NGEPL submitted about changing (i). the net capacity factor of the generation facility/WPP from 35% to 38.51%; (ii). the anticipated COD from October 31, 2019 to February 18, 2021 and (iii). term of Generation Licence from 20 years to 25 years. Regarding the "statement of the reasons in support of the modification", it submitted that the proposed modification in the Generation Licence are merely to match the terms of the Tariff Determination of the project.



(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", NGEPL submitted that communicated LPM will not have any adverse impact on its tariff, quality of service, and performance & obligations under its Generation Licence.

(C). Processing of LPM

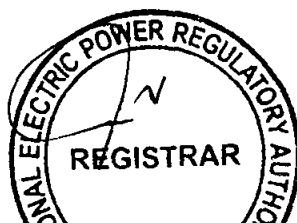
(i). After completion of all the required information as stipulated under the Regulation-10(2) and 10(3) of the Licensing Regulations, by NGEPL, the Registrar published the communicated LPM on November 14, 2019, in one (01) Urdu (Nawa-i-Waqt) and one (01) English (Express Tribune) newspaper, informing 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 14, 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 four (04) stakeholders including Engineering Development Board (EDB), Karachi Shipyard and Engineering Works Limited (KSEW), National Transmission and Despatch Company Limited (NTDC) 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 commented that its facilities located near Karachi can manufacture the towers for wind turbines at competitive rates. NGEPL may consider the services of KSEW for modification, erection and installation of its WPP;



- (c). NTDC submitted that it has no objection on the change of COD and capacity factor of the project as mention in the LPM; and
- (d). MoST stated 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 NGEPL on the observations of the EDB and KSEW. In response, NGEPL submitted that in the present project it has already executed firm and binding equipment supply contracts however, it will make its best efforts to utilize locally available resources in execution of the project.

(iii). The Authority has examined the submissions/rejoinders of NGEPL 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). Evaluations/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 NGEPL, the provisions of the Policy for Development of Renewable Energy for Power Generation 2006 (the "RE Policy"), comments of the stakeholder, rejoinders of NGEPL and relevant rules & regulations

(ii). In this regard, the Authority has observed that originally it granted a Generation Licence (No. WPGL/49/2017 dated August 03, 2017) to NGEPL with an installed capacity of 50.0 MW for a period/term of twenty (20) years from the anticipated COD of the WPP (i.e. October 31, 2019) whereas the net capacity factor of the WPP is 35%.

(iii). According to the communicated LPM under consideration, the company/Licensee/NGEPL intends to change (i). the net capacity factor of the WPP from 35% to 38.51%; (ii). the anticipated COD of the WPP from October 31, 2019 to February 18, 2021; and (iii). the term of Generation Licence from 20 years to 25 years. The ~~same~~ modifications have been proposed mainly to make the



Generation Licence consistent with the terms and conditions of tariff granted to NGEPL. 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 criteria of modification in licence, the Authority has observed that in terms of Regulation-10(5) of the Licensing Regulations, it is entitled to modify a licence 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.

(vi). 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



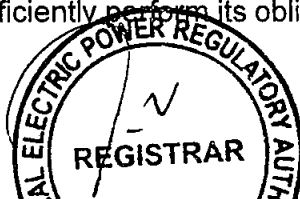
years) from 153.30 GWh to 168.67 GWh without making any changes the WTG technology and installed capacity of the generation facility/WPP.

(vii). Regarding the proposed to change in anticipated COD of the WPP from October 31, 2019 to February 18, 2021, the Authority has observed that according to the tariff granted to NGEPL, the targeted maximum construction period for the WPP after financial close is fifteen (15) months. In this regard, the Authority has observed that NGEPL has already achieved financial close on November 19, 2019 and the fifteen (15) months from financial close translates into February 18, 2021, as proposed by NGEPL.

(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/NGEPL has also requested for 25 years. Further, the cost plus tariff granted to NGEPL and other 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 NGEPL through determination (No. NEPRA/TRF-432/NGEPL-2018/18028-18030 dated November 19, 2018). The Authority considers 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, the Authority is of the considered opinion that (a). the proposed LPM will not have any adverse effect on the performance of NGEPL 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/NGEPL 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 of Section-26 of the NEPRA Act read with Regulation-10(11) of the Licensing Regulations approves the communicated LPM in the Generation Licence of NGEPL.

(ii). Accordingly, the Generation Licence (No. WPGL/49/2017 dated August 03, 2017) granted to NGEPL is hereby modified. 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)

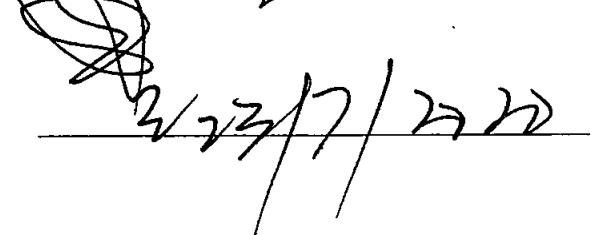
Rehmatullah Baloch
(Member)

Engr. Bahadur Shah
(Member)

Saif Ullah Chattha
(Member)

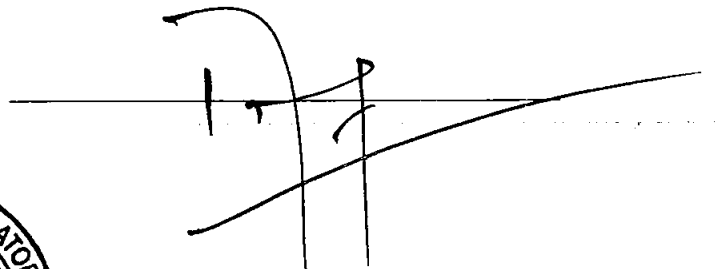
Tauseef H. Farooqi
(Chairman)

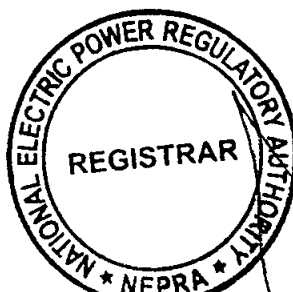

21/7/20


23/7/2020

(Did not Attend the meeting-Away)


23-7-2020





13-8-20