



Registrar

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/R/LAG-02/33778-83

October 01, 2020

Chief Executive Officer,
Jamshoro Power Company Limited,
Mohra Jabal Dadu Road,
Jamshoro.
Contact No. 022-2021230

**Subject: Modification-IV in Generation Licence No. GL/01/2002
Licence Application No. LAG-02
Jamshoro Power Company Limited (JPCL)**


Reference: JPCL's LPM submitted vide letter No. CEPO/JPCL/TD/99-100 dated February 02, 2018.

It is intimated that the Authority has approved Modification in Generation Licence No. GL/01/2002 dated July 01, 2002 in respect of Jamshoro Power Company Limited (JPCL), pursuant to Section 26 of the NEPRA Act.

2. Enclosed please find herewith determination of the Authority in the matter of Licensee Proposed Modification in the Generation Licence of JPCL along with Modification-IV in the Generation Licence No. GL/01/2002 as approved by the Authority.

Encl: As above




01 x 20

(Syed Safer 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 Agency, 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 the Licensee Proposed Modification in the
Generation Licence of Jamshoro Power Company Limited with
respect to Change in Auxiliary Consumptions

October 01
September, 2020
Case No. LAG-02

(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. GL/01/2002, dated July 01, 2002 and subsequently modified from time to time) to Jamshoro Power Company Limited (JPCL/GENCO-I),

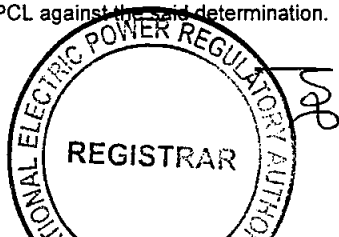
(ii). According to the latest modification dated February 13, 2020, the generation fleet of JPCL/GENCO-I consists of 880.00 MW Thermal Power Station Jamshoro-I (TPS Jamshoro-I) and the upcoming 1320.00 MW Thermal Power Station, Jamshoro-II (TPS Jamshoro-II)¹.

(B). Communication of Modification

(i). In accordance with Regulation-10(2) of the National Electric Power Regulatory Authority Licensing (Application & Modification Procedure) Regulations, 1999 (the "Licensing Regulations"), JPCL/GENCO-I communicated an LPM to the Authority on February 09, 2018.

(ii). In the Text of the Proposed Modification JPCL/GENCO-I proposed to revise the auxiliary consumption of its different generating units provided in its Generation Licence as per latest Tariff Determination/Dependable Capacity Test.

¹ The Authority through its determinations dated February 13, 2020 *inter alia* excluded GTPS Kotri (144 MW) from the generation licence of JPCL. Further, the Authority through its order dated September 04, 2020 also rejected the review petition filed by JPCL against the said determination.



(iii). Regarding the Statement of Reasons in Support of Modification, JPCL/GENCO-I, *inter alia*, stated that the Authority had provisionally mentioned the Operational Auxiliary Limits in its Generation Licence issued on July 01, 2002. As these values were provisional and had to be revised as per dependable capacity tests, but could not be revised in the Generation Licence, therefore, these values need to be revised.

(iv). About the "Statement of the Impact on the Tariff, Quality of Service and the Performance by the Licensee of its Obligations under the Licence", JPCL/GENCO-I submitted that there is no impact of the proposed amendment on the Tariff, Quality of Service and the Performance by the Licensee of its Obligation under the Licence.

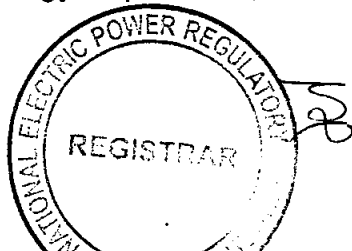
(C). Processing of LPM

(i). After completion of all the required information as stipulated under the Regulation-10(2) and 10(3) of the Licensing Regulations by JPCL, the Registrar published the communicated LPM on February 23, 2018 in one (01) English (The News) and one (01) Urdu (Daily Express) newspaper informing the general public and other stakeholders 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 government ministries, their attached departments and representative organizations etc. on February 23, 2018. Through the said letters, the stakeholders were informed about the communicated LPM and publication of notice in the press. Further, the said entities were invited to submit their views and comments in the matter for assisting the Authority.

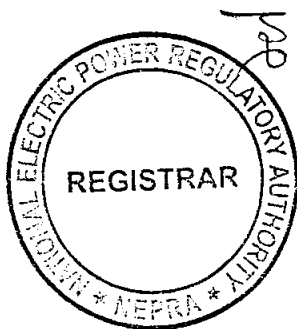
(D). Comments of Stakeholders

(i). In reply to the above, the Authority received comments from five (05) stakeholders including Sui Northern Gas Pipelines Limited (SNGPL), Board of Investment (BoI), Energy Department, Government of Sindh (EDGoS), Central Power



Purchasing Agency (Guarantee) Limited (CPPA-G) and Petroleum Division, Ministry of Energy (PDMoE). The salient points of the comments offered by the stakeholders are summarized in the following paragraphs: -

- (a). SNGPL submitted that the current application of modification in licence pertains to JPCL which falls under the area of operation of Sui Southern Gas Company Limited (SSGC);
- (b). Bol submitted that energy sector is the priority sector for the government. Affordable and smooth supply of energy is the backbone for industrial growth as well as attracting Foreign Direct Investment (FDI) in the country. Being an investment promoting and facilitating agency, Bol is also making its efforts to attract investment in the energy sector;
- (c). EDGoS submitted that it supports the LPM in accordance with the standards of the Authority;
- (d). CPPA-G in its comments submitted that the Current Dependable Capacity Test of Units 1-4 of TPS Jamshoro-I was conducted in May-June 2013, while the Initial Dependable Capacity Test of GTPS Kotri Units 3-7 was conducted in January 2005. Since then, no Dependable Capacity Test of both Complexes of JPCL has been conducted, so current capacities of JPCL generating units are not accurate, because of ageing affect the output/efficiency of the units would have been dropped due to deterioration in the machinery. It is clear that because of ageing factor the Auxiliary Consumption would also have been increased, consequently the output of generating units will be affected. JPCL has claimed enhanced capacity of the generating units which is objectionable and contradictory in the light of above comments. CPPA-G proposed that in order to determine the actual capacity of plants in the current scenario new Dependable Capacity Test & Heat Rate Test for the both

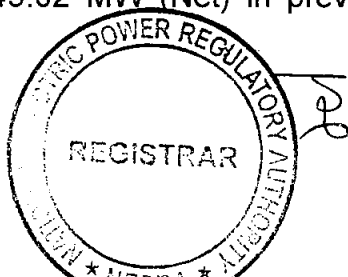


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Complexes of JPCL are required to be conducted in the presence of the representatives of NEPRA and CPPA-G as stipulated in Article-VI of the PPA. For more clarity of subject matter technical audit should also be carried out prior to approval of the said modification in the Generation Licence of JPCL; and

- (e). PDMoE submitted that JPCL is customer of SSGC under the category of Power Stations of WAPDA. The Gas Sales Agreement for supply of indigenous natural gas to TPS-Jamshoro-I & GTPS Kotri for 62 & 10 MMCFD respectively is subject to the availability of gas. In this regard, SSGC while highlighting shortage of natural gas in its system stated that supply of indigenous natural gas to TPS Jamshoro-I & GTPS Kotri will be on as and when available basis at present and in the coming years. Moreover, pursuant to the recent directives of the Government and RLNG allocations, SSGC has already offered 45 & 10 MMCFD RLNG to TPS Jamshoro-I & GTPS Kotri respectively and term sheet for RLNG supply is being negotiated. Therefore, the Authority is requested to consider the foregoing before proceeding further in the subject matter.

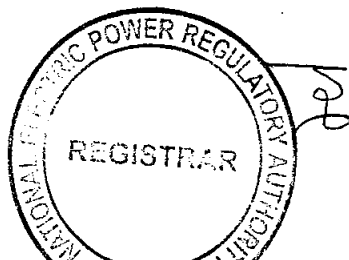
(ii). The Authority examined the above comments of the stakeholders and observed that CPPA-G and PDMoE have raised certain observations in the matter. Accordingly, the Authority considered it appropriate to seek perspective of JPCL on the same. JPCL in its response submitted that the current LPM to revise the Dependable Capacity as per 2014 Tariff Determination has been filed in compliance of directions of the Authority conveyed vide letters dated November 30, 2017 & January 10, 2018 respectively. It is important to note that during proceedings/hearing of Show Cause Notice, the Authority accepted the argument of JPCL to revise auxiliary limits on variable load. So, at this stage, argument of CPPA-G to carry out Dependable Capacity Test or determining accurate capacity is not justified. Tested Capacity of 2013 of TPS Jamshoro-I was wrongly entered i.e. 646.10 MW (Net) instead of 649.02 MW (Net) in previous modifications. The Authority has already



mentioned the correct tested capacity in Tariff Determination of 2014, so in proposed modification, JPCL has requested to modify correct tested capacity of TPS Jamshoro-I which is 649.02 MW. Further, JPCL has requested decreased capacity for GTPS Kotri from existing 128.46 MW (Net) to 106.50 MW (Net) as per 2005 tested capacity. Therefore, argument of CPPA-G that the JPCL has claimed enhanced capacity of generating units is not justified. The proposal of CPPA-G to determine the actual Capacity of plants as per Article-VI of the PPA is not justified, because the present LPM as stated above is carrying out in the light of NEPRA directives to revise capacity & auxiliary limit as per 2014 Tariff Determination. JPCL under Section-32 of the Companies Ordinance 1984 is registered in Security & Exchange Commission of Pakistan (SECP) and carries out yearly commercial/technical audit from the external auditor as per requirement of SECP & to run business activities. JPCL regularly submits audited report to the Authority being the Regulating Authority. Hence, the demand of CPPA-G regarding technical audit of subject matter prior to approval of the modification in Generation Licence is not justified.

(iii). In response to the comments of PDMoE, it was submitted that SSGC is well aware of the fact that Article-2.1, Para-2 of the GSA of TPS Jamshoro-I bounds consumer to consume minimum 53 MMCFD quantity of natural gas. In case of failure in utilization of the same, the Consumer shall pay the penalty on account of claimed amount at the rate specified in Article-IV of the GSA. Similarly, Article-2.2, Para-1 of the GSA bounds Seller to supply minimum 53 MMCFD quantity of natural gas. In case of failure in supply of minimum 53 MMCFD quantity of natural gas, the Seller shall pay the penalty on account of claimed amount at the rate specified in Article-IV of the GSA. It is important to note that Consumer and Seller raising claims on monthly basis against each other based on said Clauses of the GSA.

(iv). Further, arbitration process as per GSA Article-XI is under process to resolve pending claims against each other. As per the GSA of GTPS Kotri, supply of a maximum 30 MMCFD natural gas is subject to availability. Due to non-availability of natural gas in the system, SSGC has offered JPCL to sign RLNG Supply Term Sheet for supply of 45 MMCFD RLNG to TPS Jamshoro-I on firm basis. It is worth



mentioning that JPCL has approached System Operator (i.e. NPCC) several times for confirmation regarding load demand schedule but NPCC is insisting to operate the machines on variable load according to Economic Merit Order (EMO), therefore, JPCL cannot sign the 45 MMCFD RLNG Quantity Supply Term Sheet with SSGC on firm basis. MoE vide its letter No. IPPs-10(4)/2018 dated May 14, 2018 has directed JPCL that in case of non-utilization of firm RLNG quantity, the said quantity will be shifted to other GENCOs, but SSGC denied by replying that there is no provision to divert non-utilized RLNG quantity to other GENCOs. Hence, JPCL has offered SSGC to sign the RLNG Supply Term Sheet of 42 MMCFD on "Take and Pay" basis subject to dispatch from NPCC which is being negotiated.

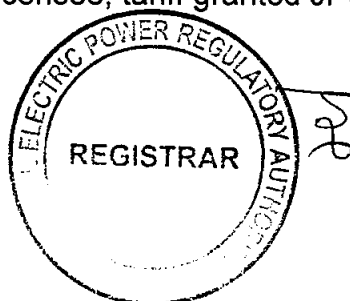
(v). The Authority examined the above submission of JPCL were examined and found the same plausible. In view of the said, the Authority considered it appropriate to proceed further with the communicated LPM as stipulated in the Licensing Regulations and the NEPRA Licensing (Generation) Rules, 2000 (the "Licensing Rules").

(E). New Request of the JPCL

(i). During processing of the application, JPCL submitted a request for adding RLNG as an alternate fuel in its generation licence and requested to club/consider the new request with the already in process LPM regarding revision of Auxiliary Consumption. The Authority considered the matter in RM 18-383 held on July 10, 2018 and did not accede to the request of JPCL. In this regard, the Authority directed JPCL to file a separate LPM for inclusion of RLNG as an alternate fuel in its Generation Licence. JPCL has filed the required LPM for which separate proceedings are in process.

(F). Evaluation/Analysis

(i). The Authority examined the entire case in detail including the already granted Generation Licence, communicated LPM, comments of stakeholders, rejoinders from the Licensee, tariff granted JPCL and relevant rules & regulations.



(ii). In this regard, the Authority has observed that originally it granted a Generation Licence (No. GL/01/2002, dated July 01, 2002 and subsequently modified through Modification-I dated April 16, 2014, Modification-II dated August 11, 2014 and Modification-III dated February 13, 2020) to JPCL for its 2200.00 MW thermal generation facilities located at Jamshoro, in the province of Sindh.

(iii). According to the communicated LPM under consideration, the Licensee/JPCL/GENCO-I intends to change the auxiliary consumptions of the generation facilities. The said modifications have been proposed mainly to make the Generation Licence consistent with the terms and conditions of tariff granted to JPCL and directions of the Authority in the matter. 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). 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.

(v). According to the existing Generation Licence, installed capacity of JPCL is 2200.00 MW, consisting of 880.00 MW TPS Jamshoro-I and 1320.00 MW TPS Jamshoro-II. Considering the de-rated capacities as mentioned in schedule-II of the

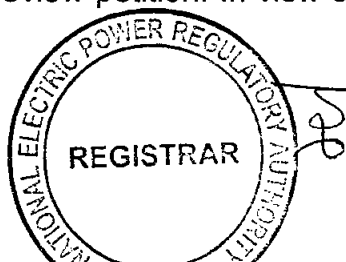


Generation Licence, the unit-wise allocation of auxiliary consumption to different units of JPCL is 9.0% each for the Unit 1-4 (i.e. TPS Jamshoro-I) and 9.09% each for the Unit 5-6 (i.e. TPS Jamshoro-II). The detail of the auxiliary consumption as per existing Generation Licence is given below:

Power Station	Unit Details	Installed Capacity (MW)	De-rated Capacity (MW)	Net Capacity (MW)	Auxiliary Cons. (MW)
TPS Jamshoro-I	Unit-1	250.00	200.00	182.00	18.00MW/9.0%
	Unit-2	210.00	170.00	154.70	15.30MW/9.0%
	Unit-3	210.00	170.00	154.70	15.30MW/9.0%
	Unit-4	210.00	170.00	154.70	15.30MW/9.0%
	<u>Sub-Total-I</u>	<u>880.00</u>	<u>710.00</u>	<u>646.10</u>	<u>63.90MW/9.0%</u>
TPS Jamshoro-II	Unit-5	660.00	660.00	600.00	60.00MW/09.09%
	Unit-6	660.00	660.00	600.00	60.00MW/09.09%
	<u>Sub-Total-II</u>	<u>1320.00</u>	<u>1320.00</u>	<u>1200.00</u>	<u>120.0MW/09.09%</u>
<u>Grand Total</u>		<u>2200.00</u>	<u>2030.00</u>	<u>1846.10</u>	<u>183.90MW/8.073%</u>

(vi). Regarding the existing auxiliary consumption of the units of TPS Jamshoro-I, it is relevant to mention that as per the Generation Licence of the JPCL dated July 01, 2002 and subsequent modifications, these figures are indicative only and based on the information provided by the licensee. The net capacity will be determined through procedure contained in the grid code, applicable documents or the bilateral contracts. Further, the units of TPS Jamshoro-II yet to be commissioned and the actual auxiliary consumption will be determined once the units start operation.

(vii). Through the current modification, JPCL proposed to change/revise the auxiliary consumptions of Unit 1-4 of TPS Jamshoro-I and Unit 3-7 of GTPS Kotri as per latest Tariff Determination of the Authority. In this regard, it is clarified that the Authority through its determination dated February 13, 2020 excluded Units 3-7 of GTPS Kotri from the Generation Licence of JPCL. In this regard, JPCL filed a review petition against the said determination of the Authority. However, the Authority through its Order dated September 04, 2020 decided to retain its earlier decision and rejected the review petition. In view of the said, the Authority considers that Unit 3-7



of GTPS Kotri are no more part of the generation fleet of the JPCL, therefore, request for revision of the auxiliary consumptions of these units does not merit consideration.

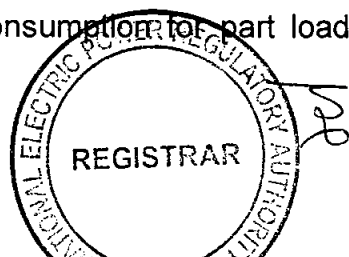
(viii). The installed capacity, de-rated capacity and comparison of existing net capacity of TPS Jamshoro-I and the net capacity proposed by the JPCL has been made in the following table:-

Power Station	Unit No.	Installed Capacity (MW)	De-Rated Cap. (MW)	Exiting Net Cap. (MW)	Proposed Net Cap. (MW)
TPS Jamshoro-I	Unit-1	250.00	200.00	182.00	182.45
	Unit-2	210.00	170.00	154.70	154.73
	Unit-3	210.00	170.00	154.70	155.36
	Unit-4	210.00	170.00	154.70	156.48
	<u>Total</u>	<u>880.00</u>	<u>710.00</u>	<u>646.10</u>	<u>649.02</u>

(ix). Further, the following table shows comparison between auxiliary consumptions of Unit 1-4 of TPS Jamshoro-I as per existing Generation Licence and that proposed by the JPCL in the current LPM:

Power Station	Unit No.	Installed Capacity (MW)	De-Rated Capacity (MW)	Auxiliary Consumptions as %age of De-Rated Capacity	
				Exiting	Proposed
TPS Jamshoro-I	Unit-1	250.00	200.00	18.00MW/ (9.0%)	8.43 ~ 13.40% 16.86 ~ 26.8 MW
	Unit-2	210.00	170.00	15.30MW/ 9.0%	8.98 ~ 14.88% 15.62 ~ 22.78MW
	Unit-3	210.00	170.00	15.30MW/ 9.0%	8.51 ~ 13.73% 14.47 ~ 23.34 MW
	Unit-4	210.00	170.00	15.30MW/ 9.0%	8.32 ~ 13.48% 14.33 ~ 22.92MW
	<u>Total</u>	<u>880.00</u>	<u>710.00</u>	<u>63.90MW/ 9.0%</u>	-

(x). The above comparison shows that according to the submissions of the JPCL, there is a slight improvement (reduction) in the auxiliary consumption of Unit 1-4 of TPS Jamshoro-I resulting in slight increase (i.e. 2.92 MW) in the overall net dependable capacity of the plant. Regarding proposed changes in auxiliary consumption, the Authority has observed that JPCL has proposed revision of auxiliary consumption for part load operation of units as well. However, for the



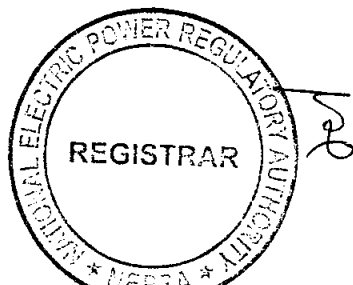
purpose of incorporation in the licence, only auxiliary consumption as a %age of 100% MCR or installed capacity are considered relevant. Accordingly, considering the net dependable capacity proposed by JPCL (based on dependable capacity test), the revised auxiliary consumptions of the units of TPS Jamshoro-I come out to be as following, which are less than the existing auxiliary consumption of the said units.

Power Station	Unit No.	Installed Capacity (MW)	De-Rated Cap. (MW)	Net Dependable Cap. (MW)	Aux. Consumption (in % age & MW)
TPS Jamshoro-I	Unit-1	250.00	200.00	182.45	8.78%/17.55MW
	Unit-2	210.00	170.00	154.73	8.98%/15.27MW
	Unit-3	210.00	170.00	155.36	8.61%/14.64MW
	Unit-4	210.00	170.00	156.48	7.95%/13.52MW
	Sub Total-I	880.00	710.00	649.02	8.59%/60.98MW

(xi). In consideration of the above, the Authority is of the view that LPM will not have any adverse effect on the performance of the licensee of its obligations rather it will help the licensee to operate its generation units in compliance of latest determined tariff/dependable capacity test. Further, 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 the NEPRA Act. The LPM is reasonably necessary for the Licensee to effectively and efficiently perform its obligations under the licence. In view of the said, it is considered that for the continuous, safe and reliable supply of electric power, the communicated LPM is necessary while remaining within the financial and technical viability of the licensee.

(G). Decision of the Authority

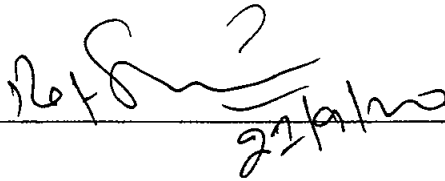
(i). In view of the above, the Authority in terms of Section-26 of the NEPRA Act read with Regulation-10(11) of the Licensing Regulations approves the communicated LPM in the Generation Licence (No. GL/01/2002) of JPCL, to the extent of change/revision of auxiliary consumptions of Unit No. 1-4 of TPS Jamshoro-I. Accordingly, the Generation Licence (No. GL/01/2002) of JPCL/GENCO-I is hereby modified.



(ii). The modifications in the Generation Licence are attached as annexure to this determination. The modification in the Generation Licence 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)


21/9/20


Rehmatullah Baloch
(Member)

Din not Attend

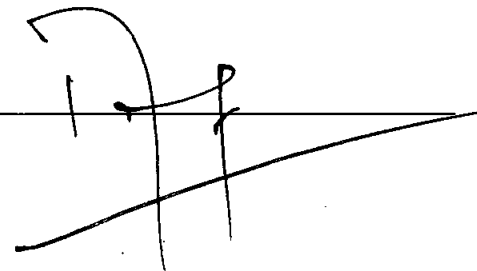
Engr. Bahadur Shah
(Member)

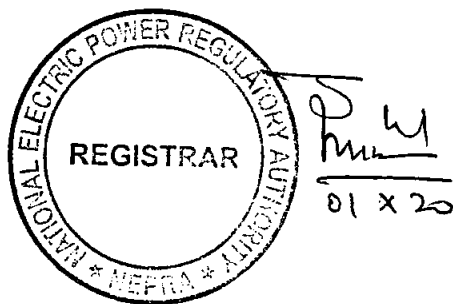
Did not Attend

Saif Ullah Chattha
(Member)


14.9.2020

Tauseef H. Farooqi
(Chairman)





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

GENERATION LICENCE

No. GL/01/2002

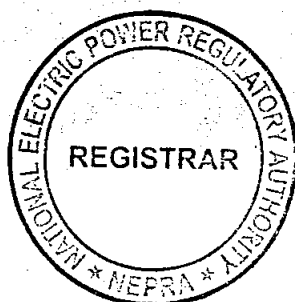
In exercise of the powers conferred under Section-26 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, the Authority hereby modifies the Generation Licence (No. GL/01/2002) granted to Jamshoro Power Company Limited (issued on July 01, 2002, subsequently modified on April 16, 2014, August 11, 2014 and February 13, 2020), to the extent of changes mentioned as here under:-

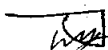
- (a). Changes made in the **Schedule-II** of the Generation Licence regarding Auxiliary Consumptions and Net Capacity are attached as **Annexure-A**.

This **Modification-IV** is given under my hand on this 1st day of ~~September~~ October Two Thousand & Twenty



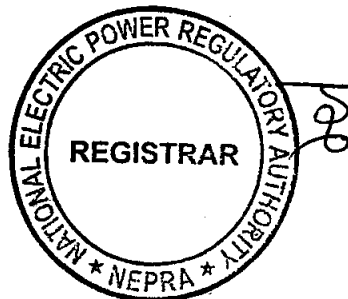
Registrar





Annexure-A

Modification-IV



Changes made in Schedule-II of the Generation Licence

Power Station	Unit Detail	Installed Capacity (MW)	De-Rated Capacity (MW)	Net Capacity (MW)
TPS Jamshoro-I (Plant-I)	Unit-1	250	200	182.45
	Unit-2	210	170	154.73
	Unit-3	210	170	155.36
	Unit-4	210	170	156.48
	<u>Sub-Total-I</u>	<u>880</u>	<u>710</u>	<u>649.02</u>
TPS Jamshoro-II (Plant-II)	Unit-5	660	660	600
	Unit-6	660	660	600
	<u>Sub-Total-II</u>	<u>1,320</u>	<u>1320</u>	<u>1200</u>
	Grand Total	<u>2,200</u>	<u>2030</u>	<u>1849.02</u>



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