



National Electric Power Regulatory Authority

Islamic Republic of Pakistan

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Registrar

No. NEPRA/DG(M&E)/LAG-02 /12230

July 11, 2019

Chief Executive Officer,
M/s Jamshoro Power Company Ltd. (JPCL),
(GENCO-I), TPS,
Mohra Jabal, Dadu Road,
Jamshoro

Subject: **ORDER IN THE MATTER OF SHOW CAUSE NOTICE ISSUED TO JAMSHORO POWER COMPANY LIMITED (JPCL, GENCO-I), UNDER RULE 4 (8) & (9) OF THE NEPRA (FINE) RULES, 2002**

Enclosed please find order dated 11th July, 2019 (09 Pages) passed by the Authority in the matter of Show Cause Notice issued to GENCO-I, due to non-compliance of Generation License, Grid Code and other applicable documents under Rule 4 (8) & (9) of the NEPRA (Fines) Rules, 2002.

Encl: As above

— sd —
(Syed Safeer Hussain)

No. NEPRA/DG(M&E)/LAG-02 /12231

July 11, 2019

Forwarded for information and further necessary action please.

Registrar 11.07.19

DG (M&E)

Master File [w.r.t. VC/M(M&E) D # 042 dated 08.07.2019]

CC:

1. Chairman
2. Vice Chairman / Member (M&E)
3. Member (Tariff)
4. Member (CA)
5. Member (Licensing)



Registrar

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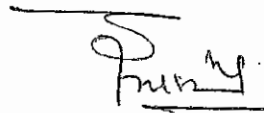
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Encl: As above


11 07 19
(Syed Safeer Hussain)



National Electric Power Regulatory Authority

In the matter of Show Cause Notice issued to M/s Jamshoro Power Company Limited (JPCL, GENCO-I) under Rule 4 (8) of NEPRA (Fines) Rules, 2002

Order

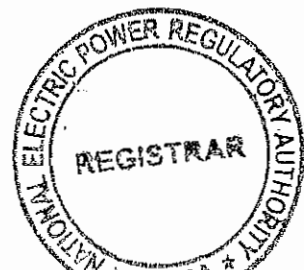
1. Jamshoro Power Company Limited (JPCL, GENCO-I) (hereinafter referred to as the "Licensee") was granted a Generation License (No. GL/01/2002) by the National Electric Power Regulatory Authority (hereinafter referred to as the "NEPRA" or "Authority") on 01.07.2002 under the then Section 15 of the NEPRA Act, 1997 (hereinafter referred to as the "Act") read with Rule 3 of the NEPRA Licensing (Generation) Rules, 2000.
2. Clause 11.2 of Schedule-I of the Generation License issued to the Licensee prescribes limits for auxiliary power consumption in respect of the units of its power generation facilities, i.e. TPS Jamshoro and GTPS Kotri. The same is tabulated as under:

Power Station	Unit #	Auxiliary Consumption (%)
TPS Jamshoro	1	8-9
	2	
	3	
	4	
GTPS Kotri	3	0.4
	4	
	5	1.36
	6	1.25
	7	7.23

3. Clause 1.4.1.2 (a) of Scheduling and Dispatch Code of the Grid Code, 2005 requires a generation facility to maintain, repair and operate its units subject to the terms and conditions of Power Purchase Agreement (hereinafter referred to as the "PPA") with a view to provide power delivery, system support services and contracted capacity.

Background

4. A generation company is required to submit quarterly reports based on key performance indicators under Rule 5 (2) of Performance Standards (Generation) Rules, 2009 (hereinafter referred to as the "Performance Standards Rules"), particularly with respect to Reference Capacity, Planned/Unplanned Outage Hours, Availability Factor, Net Capacity

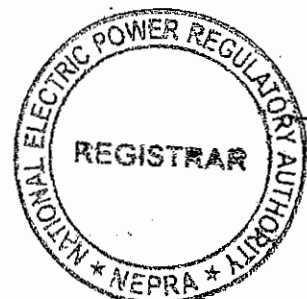
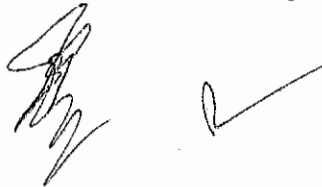


Factor and Net Output Factor. Accordingly, the Licensee submitted the quarterly reports for the FY 2014-15 and 2015-16.

5. Based on data provided by the Licensee, a comprehensive Performance Evaluation Report (PER) was prepared, which mainly comprised of the following observations:
 - i. Units 1 to 4 of Jamshoro Power Station and unit 7 of Kotri Power Station consumed excess auxiliary power during service mode, ranging from 9.18% to 12.97%, than allowed limit of 7.23% to 9% as specified in its Generation License.
 - ii. Units 1 & 4 of Jamshoro Power Station and unit 5 of Kotri Power Station availed higher outage hours, ranging from 2084 to 4795 hours, than allowed limit of 1520 to 2960 hours as worked out from its PPA.
6. In view of above, the Authority observed that the Licensee has prima facie violated the terms and conditions, particularly Clause 11.2 of Schedule-I of its Generation License and Clause 1.4.1.2 (a) of Scheduling and Dispatch Code of the Grid Code, 2005. Therefore, the Authority decided to initiate legal proceedings against the Licensee under NEPRA (Fines) Rules, 2002 (hereinafter referred to as the "Fine Rules").

Explanation

7. Accordingly, an Explanation dated 09.01.2018 was issued to the Licensee under Rule 4 (1) & (2) of the Fine Rules. Salient parts of the Explanation are as under:
 3. *WHEREAS Clause 11.2, Schedule-I of the generation license of the Licensee prescribes limits for auxiliary power consumption in respect of its generation facilities, particularly Jamshoro Power Station and Kotri Power Station; and*
 4. *WHEREAS the data pertaining to the total auxiliary power consumption as submitted by the Licensee in the annual provisional E-Forms for the FY 2014-15 and 2015-16 was analyzed and the Licensee was asked vide letter dated September 05, 2016, to segregate the % of auxiliary load consumed by the units/machines during normal operation mode and standby mode; and*
 5. *WHEREAS the response submitted by the Licensee vide letter dated September 30, 2016 mentions the estimated share of auxiliary consumption during standby mode. Accordingly, the % auxiliary consumption during operation mode has been worked out and it has been observed that the same has exceeded the prescribed limits for units 1 to 4 of Jamshoro Power Station and unit 7 of Kotri Power Station in the following manner;*

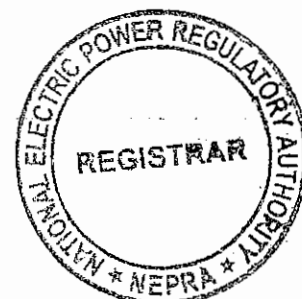


Power Station	Unit #	Limits prescribed under License (%)	Auxiliary Consumption of the Licensee as worked out during Operation Mode (%)	
			FY 2014-15	FY 2015-16
TPS Jamshoro	1	8-9	12.54	10.59
	2	8-9	12.97	9.23
	3	8-9	9.18	9.35
	4	8-9	9.94	9.95
GTPS Kotri	7	7.23	10.45	10.98

6. *AND WHEREAS* exceeded auxiliary power consumption of Jamshoro and Kotri Power Stations have prima facie resulted in reduction of net capacity of this generation facility of the Licensee, thus causing huge financial loss to the national exchequer; and
7. *WHEREAS* in terms of observations given in Para 5 to 6, the Licensee has prima facie violated the terms and conditions, particularly Clause 11.2, Schedule-I of its generation license; and
8. *WHEREAS* pursuant to Clause 1.4.1.2 (a) of the Scheduling and Dispatch Code of the Grid Code, 2005, a generation facility, subject to the terms and conditions of Power Purchase Agreement, is required to maintain, repair and operate its units with a view to provide power delivery, system support services and contracted capacity; and
9. *WHEREAS* in terms of Rule 4 and 5 of the NEPRA Performance Standards (Generation) Rules, 2009 (hereinafter referred to as "PSGR"), the Licensee has submitted data for the FY 2014-15 and 2015-16 in the manner prescribed in Form-I annexed to PSGR, with respect to outage hours which reveal that the total outage hours consumed by units 1 & 4 of Jamshoro Power Station and unit 5 of Kotri Power Station, have exceeded the limits prescribed in the PPA in the following manner;

Power Station	Unit #	FY 2014-15		FY 2015-16	
		Total Outage Hours	Allowed as per PPA	Total Outage Hours	Allowed as per PPA
Jamshoro Power Station	1	-	-	3306	2960
	4	4795	2360	4122	2960
Kotri Power Station	5	-	-	2084	1520

10. *AND WHEREAS* exceeded consumption of total outage hours by aforementioned units indicates that these units were not operated by the Licensee in accordance with the terms and conditions of the PPA, resulting in failure of the Licensee to maintain, repair and operate its units to provide power delivery, hence prima facie is in violation of Clause 1.4.1.2 (a) of the Scheduling and Dispatch Code of the Grid Code, 2005;



8. The Licensee submitted its response to the abovementioned Explanation on 29.01.2018. The Authority considered the same and after detailed deliberations rejected the response to the Explanation giving reasons for such rejection vide order dated 20.08.2018.

Show Cause Notice

9. Accordingly, a Show Cause Notice No. 13276 dated 20.08.2018 was issued to the Licensee under Rule 4 (8) of the Fine Rules, based on violations alleged in the Explanation.
10. The Licensee submitted its response to the abovementioned Show Cause Notice on 19.09.2018. Salient features of reply submitted by the Licensee are given below;

A. Excess Auxiliary Power Consumption:

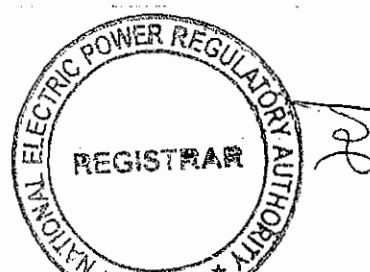
- i. The auxiliary percentage limit defined in Generation License is on 100% load. Whereas, TPS Jamshoro operates throughout the year on variable load as per System Operator (NPCC) requirements. Resultantly, auxiliary percentage limit varies time to time according to the operation of the plant.
- ii. The auxiliary consumption of the units of TPS Jamshoro during service mode for the FY 2014-15 and 2015-16 remained as follows;

Power Station	Unit #	Auxiliary Consumption (%)	
		FY 2014-15	FY 2015-16
TPS Jamshoro	1	12.43	9.73
	2	10.93	9.41
	3	8.25	9.49
	4	8.76	10.15

- iii. In this regard, LPM has been filed to align revised capacity of GENCO-I as per existing tariff and revision in limits for auxiliary power consumption has also been requested due to operation of units on variable load by NPCC Islamabad.
- iv. GTPS Kotri operates on single fuel i.e. gas fuel only whereas SSGC occasionally restored restricted gas supply resulting in frequent startup and shutdown of machines and operation of units on less load caused excess auxiliary consumption of GTPS Kotri units i.e. CCPP Unit 7.

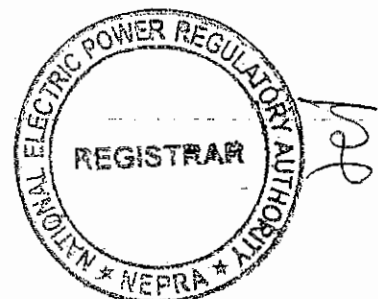
B. Availing Higher Outage Hours:

- i. Unit 4 of TPS Jamshoro remained on forced outage for a total duration of 4795 hours during the FY 2014-15. Out of this, 4365 hours are attributed to forced outage w.e.f 01.07.2014 to 29.12.2014 due to rehabilitation work on Generator Stator, which flashed because of hydrogen leakage. The spares of Generator were not available in the country. After fulfilling all codal formalities, spares procured from China. After the arrival of spares, the maintenance works on Generator was carried out. Unit 4 synchronized with the system on 29.12.2014. This matter was beyond



the control of GENCO-I. In addition to this, the unit remained on miscellaneous forced outages for a total duration of 430 hours against 800 hours allowed as per PPA.

- ii. Similarly, during the FY 2015-16, the said unit remained on outage for a total duration of 4122 hours. Out of this, 2160 hours are attributed to major overhauling w.e.f 01.02.2016 to 01.05.2016. Air Pre-Heater Washing and Condenser Cleaning took 178 hours and 248 hours respectively against 840 hours allowed as per PPA. Moreover, the additional work of installation, testing and commissioning of latest version of Distributed Control System was carried out which took additional 51 days (1219 hours) and the miscellaneous forced outages remained 317 hours against 800 hours allowed as per PPA.
 - iii. Unit 1 of TPS Jamshoro remained on outage for a total duration of 3306 hours during the FY 2015-16. Out of this, 2160 hours are scheduled outage hours which are attributed to 2nd major overhauling of the unit, 446 hours are forced outage hours which are attributed to extension in major overhauling period due to extraordinary running hours between 1st and 2nd major overhauling i.e. 85442 hours, 469 hours are miscellaneous forced outage hours against 800 hours allowed as per PPA and 231 hours are scheduled outage hours which are attributed to Air Pre-Heater washing against 1008 hours allowed as per PPA.
 - iv. Unit 5 of GTPS Kotri remained on outage for a total duration of 2084 hours during the FY 2015-16. Out of this, 1848 hours are attributed to forced outage w.e.f 17.04.2016 to 15.08.2016 due to Generator Rehabilitation Work owing to Generator Stator grounding fault. Repairing of Generator Core and re-insulation/repairing of damaged coils was of very sensitive nature because of 37 years old unit. After arrival of expert from Central Gas Turbine Workshop, Faisalabad up to 15.05.2016 at site; repairing & fitting work of Generator damaged coils was carried out under supervision and unit was put back to bar successfully. The remaining 236 hours are attributed to the combustion inspection against 240 hours allowed in the PPA.
11. The Authority considered the response submitted by the Licensee and decided to allow an opportunity of hearing under Rule 4 (11) of the Fine Rules. Accordingly, hearing in the matter was held on 16.01.2019. During hearing, following submissions were made by representatives of the Licensee;
- A. Excess Auxiliary Power Consumption:**
- i. The limits for auxiliary power consumption as prescribed in Generation License is on full load, whereas, the units of TPS Jamshoro mostly operate throughout the year on variable load as per demand of the system operator (NPCC), resulting in excess auxiliary consumption and violation of the allowed limits.



- ii. In this regard, GENCO-I has also filed a Licensee Proposed Modification (hereinafter referred to as the "LPM"). Therefore, the honorable Authority is requested to kindly consider the same and revise the limits of auxiliary consumption on minimum/average load.

B. Availing Higher Outage Hours:

- i. GENCO-I is allowed to avail 3968 total outage hours in respect of unit 1 and 3800 hours in respect of units 2 to 4 of TPS Jamshoro according to the PPA. Hence, unit 1 of TPS Jamshoro remained within the permissible limits during the FY 2015-16, however, unit 4 remained in violation during the FY 2014-15 and 2015-16 due to delay in fault rectification owing to procurement of spare parts from China and installation of Distributed Control System.
- ii. CPPA-G is already penalizing GENCO-I for availing higher outages than allowed limit as specified in the PPA. Therefore, the honorable Authority is requested to exempt us from double penalty on the same violation.

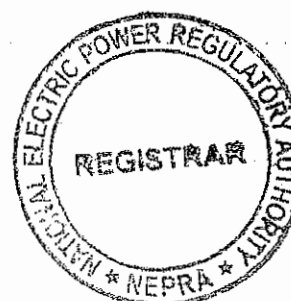
Analysis/Findings of the Authority

A. Excess Auxiliary Power Consumption:

12. With respect to excess auxiliary consumption, the Authority has considered the submissions of the Licensee as given in its reply to the Show Cause Notice and during the aforesaid hearing and observes that the auxiliary consumption of the Licensee ranged from 9.18% to 12.97% against the allowed limit of 7.23% to 9% which constitutes the violation of terms and conditions of its Generation License. The Authority further observes that exceeded auxiliary consumption of the units/machines of the generation facilities of the Licensee resulted in reduction of their net capacity that may cause a huge financial loss to the national exchequer. The same is illustrated as follows;

Power Station	Unit	Net Capacity (MW)					
		FY 2014-15			FY 2015-16		
		Actual	Approved	Reduction	Actual	Approved	Reduction
TPS Jamshoro	1	174.4	182.45	8.05	178.4	182.45	4.05
	2	147.5	154.73	7.23	154	154.73	0.73
	3	154.1	155.36	1.26	153.8	155.36	1.56
	4	152.8	156.48	3.68	152.8	156.48	3.68

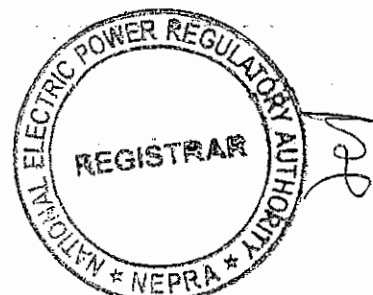
13. The Licensee has submitted that partial load operation by the NPCC was the major reason of excess auxiliary consumption of the units/machines of its generation facilities during the FY 2014-15 and 2015-16. In this regard, the Authority has considered the submission of the Licensee and observes that the Licensee has failed to share the impact of per MW load reduction by the NPCC on the % increase in the auxiliary consumption of its units/machines. Therefore, the argument put forward by the Licensee is unjustified.



14. Moreover, the Licensee has submitted that it has filed an LPM to align the limits for auxiliary consumption as mentioned in its Generation License as per existing tariff. In this regard, the Authority has gone through the submission of the Licensee and observes that the Licensee was obligated to apply for modification in its Generation License to update it with the existing tariff determination issued on 12.09.2014. However, the Licensee failed to do so until the legal proceedings were initiated by NEPRA. Further, the Authority observes that the limit for auxiliary consumption as mentioned in aforesaid tariff determination issued to the Licensee is 8.57% against the limit of 9% as specified in its Generation License, whereas, the actual auxiliary consumption of the Licensee ranged from 9.18% to 12.97% during the FY 2014-15 and 2015-16. This clearly shows that even if the limit for auxiliary consumption as mentioned in the existing tariff determination issued to the Licensee is considered as benchmark, the liability of the Licensee for excess auxiliary consumption is not absolved as the actual auxiliary consumption of the Licensee is beyond the allowed limit in both the cases.
15. As far as the request of the Licensee to revise the limits for auxiliary power consumption due to operation of units on variable load by NPCC is concerned, the Authority has considered the submission of the Licensee and observes that the said request was filed by the Licensee after issuance of Explanation dated 09.01.2018. Therefore, the decision that will be given in aforesaid matter will have no bearing on the instant proceedings which relates to current terms and conditions of the Generation License. Hence, the stance adopted by the Licensee does not merit consideration.
16. Regarding excess auxiliary consumption by GTPS Kotri units, the Licensee has submitted that SSGC occasionally restored restricted gas supply to these units which resulted in frequent startup and shutdown of machines and operation of units on less load caused excess auxiliary consumption. In this regard, the Authority has considered the submission of the Licensee and observes that the Licensee has failed to substantiate its claim with the documentary evidence. The Authority further observes that the Licensee should have taken up this matter with the management of SSGC in light of the provisions of Gas Supply Agreement and shared the details with this office in this regard, however, the Licensee failed to do so. Therefore, the argument put forward by the Licensee is unjustified.
17. In view of foregoing, the Authority observes that the Licensee has violated the terms and conditions, particularly Clause 11.2 of Schedule-I of the Generation License by consuming excess auxiliary power during service mode than allowed limit as specified in its Generation License during the FY 2014-15 and 2015-16.

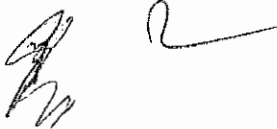
B. Availing Higher Outage Hours:

18. The Licensee has submitted that Unit No. 4 of TPS Jamshoro availed higher outage hours during the FY 2014-15 due to rehabilitation work on generator stator, whereas, Unit No. 5 of GTPS Kotri availed higher outage hours during the FY 2015-16 due to generator stator grounding fault and these matters were beyond the control of the Licensee. In this regard, the Authority has gone through the submission of the Licensee and observes that the Licensee is making claims beyond the settled terms and conditions of PPA. Once the PPA



is signed, the Licensee is bound to follow the mutually agreed terms and conditions as specified in the PPA and to operate its units/machines in accordance with the outages schedule as prescribed in the PPA.

19. Furthermore, the Licensee has submitted that Unit No. 1 of TPS Jamshoro availed higher outage hours during the FY 2015-16 due to extension in major overhauling period by 446 hours, due to extra ordinary running hours between 1st and 2nd major overhaul i.e. 85,442 hours owing to its poor experience of carrying out first major overhaul by M/s Siemens Pakistan. In this regard, the Authority has considered the submission of the Licensee and observes that the Licensee has itself admitted poor management on its part and it appears that contract was awarded to the company which lacked technical expertise for carrying out the major overhauling of its units/machines.
20. In addition to this, the Licensee has submitted that Unit No. 4 of TPS Jamshoro availed higher outage hours during the FY 2015-16 due to installation, testing and commissioning of latest version of Distributed Control System apart from successful completion of major overhauling. In this regard, the Authority has gone through the submission of the Licensee and observes that the Licensee should have planned its maintenance activities in such a way that if major overhauling is performed on any unit/machine in a given year then the said unit/machine should not have been shut down for any other additional activity during the same year. Hence, the justification put forward by the Licensee does not merit consideration.
21. In view of foregoing, the Authority observes that the Licensee has violated Clause 1.4.1.2 (a) of the Scheduling and Dispatch Code of the Grid Code, 2005 by availing higher outage hours than allowed limit as specified in its PPA during the FY 2014-15 and 2015-16.



Decision

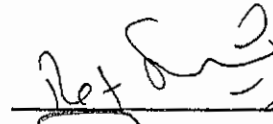
22. Keeping in view the relevant provisions of the NEPRA Act, Generation License, Grid Code, applicable documents, submissions of the Licensee and available record, the Authority decides that;
- The Licensee has violated the terms and conditions, particularly Clause 11.2 of Schedule-I of the Generation License by consuming excess auxiliary power during service mode than allowed limit as specified in its Generation License, during the FY 2014-15 and 2015-16. Therefore, the Authority imposes a fine of Rs. 1,000,000 (One Million) on the Licensee.
 - The Licensee has also violated Clause 1.4.1.2 (a) of the Scheduling and Dispatch Code of the Grid Code by availing higher outage hours than allowed limit as specified in its PPA, during the FY 2014-15 and 2015-16. Therefore, the Authority imposes a fine of Rs. 1,000,000 (One Million) on the Licensee.
23. Accordingly, the Licensee is directed to pay the fine to the tune of **Rs. 2,000,000 (Two Million)** in designated bank of the Authority within a period of 15 days after the date of issuance of this order and forward a copy of the paid instrument to the Registrar Office for information, failing which the Authority shall recover the amount due under section 41 of the Act read with relevant provisions of the Fine Rules as arrears of the land revenue.

Authority

Saif Ullah Chattha
Member (Tariff)


2.7.2019

Rafique Ahmad Sheikh
Member (Licensing)

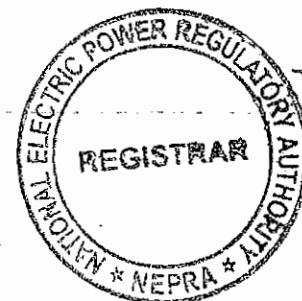

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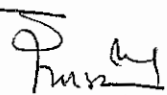
Rehmatullah Baloch
Member (Consumer Affairs)


26/7/19

Announced on 11-07-2019.






11.07.19