



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/DG(M&E)/LAG-01/501

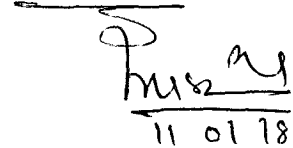
January 11, 2018

Chief Executive Officer
Central Power Generation Company Limited
(GENCO-II)
Guddu Thermal Power Station
Guddu (Kashmore)

Subject: **ORDER OF THE AUTHORITY IN THE MATTER OF SHOW CAUSE
NOTICE ISSUED TO M/S. CENTRAL POWER GENERATION
COMPANY LIMITED (CPGCL) UNDER RULE 4 (8) & (9) OF THE
NEPRA (FINES) RULES, 2002**

Enclosed please find herewith Order dated 11th January, 2018 (06 Pages), passed by the Authority in the matter of Show Cause Notice issued to GENCO-II due to non-compliance of Performance Standards (Generation) Rules 2009, Generation License and other Applicable Documents under Rule 4 (8) & (9) of the NEPRA (Fines) Rules, 2002 for compliance.

Encl: Order of the Authority (06 Pages)



11 01 18

(Syed Safer Hussain)

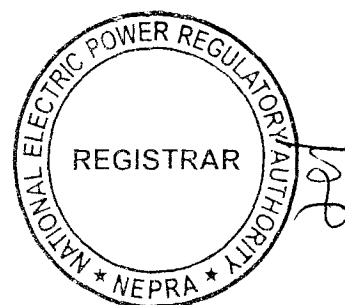


National Electric Power Regulatory Authority

In the matter of Show Cause Notice issued to M/s Central Power Generation Company Limited under Rule 4 (8) & (9) of NEPRA (Fines) Rules 2002.

Order

1. Central Power Generation Company Limited, GENCO-II (the "Licensee") was granted a generation license (No. **GL/02/2002**) by the National Electric Power Regulatory Authority (NEPRA) on 01.07.2002 under Section 15 of the NEPRA Act, 1997 ("Act") read with Rule 3 of the NEPRA Licensing (Generation) Rules 2000.
2. Under Section 7 read with Section 34 of the Act, the Authority is mandated to prescribe performance standards for generation, transmission and distribution companies to encourage safe, efficient and reliable service. Accordingly, the Authority has framed NEPRA Performance Standards (Generation) Rules 2009 (the "Performance Standards Rules") for generation companies which were notified on 17th November, 2009 vide S.R.O. 1005 (I)/2009. Sub-rule (2) of Rule 1 of the Performance Standards Rules states that these Rules shall come into force at once, whereas, sub-rule (3) states that unless specifically exempted, these rules are applicable to all holders of Authority's generation licences who shall provide information to the Authority regarding operation, maintenance and performance of their generation facilities, if required.
3. Rule 4 of the Performance Standards Rules prescribes key indicators of performance for a generation company. The same is reproduced as under:
As part of Generator Performance Data System, the licensee shall calculate the following key indicators and others as indicated in Forms I and II to these rules for its generation facilities and submit, on regular basis, a report to the Authority under sub-rule (2) of rule 5, namely:-
 - (a) *Energy Loss Rate (ELR) – This indicator shall be calculated for determining the potential (probability) that a generating unit will deliver its rated capacity at any particular time.*
 - (b) *Energy Availability Factor (EAF) – EAF shall be calculated to assess performance with respect to both planned and unplanned outages.*
 - (c) *Equivalent Planned Outage Factor (EPOF) – This indicator shall be calculated to indicate the amount of time the generating unit spent in the unavailable state due to planned outages (planned well in advance such as annual maintenance outages).*

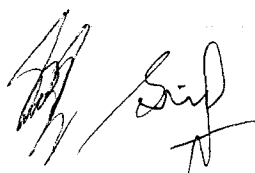
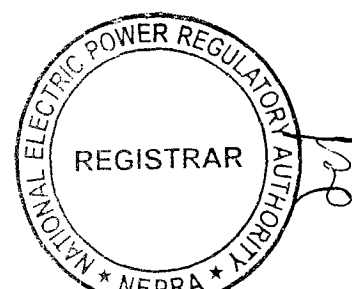


4. A generation company is required to submit report based on above-mentioned key indicators on quarterly basis. Accordingly, the Licensee submitted the quarterly reports for years 2012, 2013 and 2014 containing the data, particularly with respect to reference capacity, planned/unplanned outage hours, availability factor, net capacity factor and net output factor, as prescribed under the Performance Standards Rules.
5. Section-Plant Characteristics of Schedule-I of the Generation License issued to the Licensee specifies % auxiliary power consumption for the units/machines of the Thermal Power Station (TPS) Guddu. The same is tabulated as under:

Power Station	Unit #	Auxiliary Consumption (%)
TPS Guddu	1-2	8
	3	8.5
	4	6
	5-6	3.5
	7-12	1.5
	13	3.5

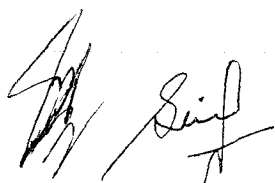
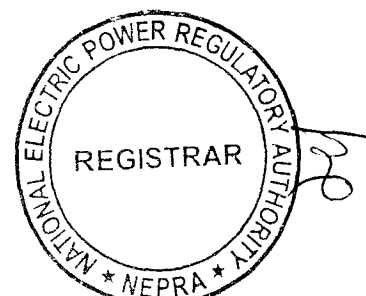
6. A comprehensive Performance Evaluation Report (PER) was prepared by the Standards Department and presented before the Authority, which highlighted that units 1 to 12 of Guddu Power Station consumed excess auxiliary power during service mode, than the allowed limit as specified in its generation license, during the years 2012, 2013 and 2014.
7. In terms of PER, the Authority observed that the Licensee has prima facie violated the terms and conditions, particularly limits prescribed for auxiliary power consumption in Schedule-I of its generation license. In view of foregoing, the Authority decided to initiate proceeding against the Licensee under NEPRA Fine Rules 2002 ("the Fine Rules").
8. Accordingly, an Explanation dated 22.03.2017 was issued to the Licensee under rule 4 (1) & (2) of the Fine Rules. Salient parts of the Explanation are as under:

3. *WHEREAS in terms of Rule 4 and 5 of the NEPRA Performance Standards (Generation) Rules, 2009 (hereinafter referred to as "PSGR"), the Licensee is required to submit data in the manner prescribed in Form-I annexed to PSGR, particularly regarding maximum generating capacity of its all generation facilities based on AIDC (Annual Initial Dependable Capacity) less any station service or auxiliary power requirements utilized for that unit; and*
4. *WHEREAS Section-Plant Characteristics, Schedule-I of the generation license of the Licensee prescribes limits for auxiliary consumption in respect of its generation facilities, particularly Guddu Power Station; and*
5. *WHEREAS the data submitted by the Licensee in terms of para 3 above for the period from 2012 to 2014 mentions that the actual auxiliary consumption of units 1 to 12 of Guddu Power Station has exceeded the limits prescribed in the license in the generation license of the Licensee in the following manner;*

Unit #	Limits prescribed under License (%)	Average Auxiliary Consumption of the Licensee (%)		
		2012	2013	2014
1	8	8.53	8.62	8.68
2	8	8.53	8.62	-
3	8.5	8.53	8.62	8.85
4	6	8.53	8.62	-
5	3.5	-	-	3.78
6	3.5	-	-	3.81
7	1.5	1.58	1.71	-
8	1.5	1.58	1.71	-
9	1.5	1.58	1.71	-
10	1.5	1.58	1.71	-
11	1.5	1.58	1.71	-
12	1.5	1.58	1.71	-

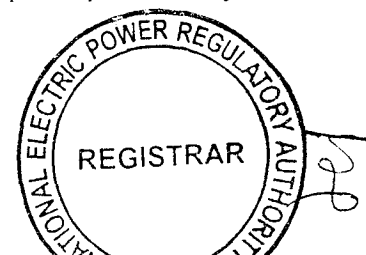
6. *AND WHEREAS exceeded auxiliary power consumption of Guddu Power Station has prima facie resulted in reduction of net capacity of this generation facility of the Licensee, thus causing a huge financial loss to the national exchequer; and*
7. *WHEREAS in terms of observations given in Para 5 to 6, the Licensee has prima facie violated the terms and conditions, particularly Section-Plant Characteristics, Schedule-I of its generation license;*
9. The Licensee submitted the response to the above-mentioned Explanation on 03.04.2017. The Authority considered the same and observed that the Licensee has failed to give any satisfactory response to the Explanation, therefore decided to reject it vide order dated 26.07.2017.
10. Accordingly, a Show Cause Notice was issued to the Licensee on 26.07.2017, in terms of Rule 4(8) & (9) of the Fine Rules.
11. The Licensee submitted the response to the aforesaid Show Cause Notice on 11.08.2017. Salient features of reply submitted by the Licensee are given below;
 - i. The calculations provided by your good office is not accorded with our record. The auxiliary consumption calculated by your good office may not be accurate because it is not practically possible that units 1 to 4 consumed the same percentage of auxiliary consumption as tabulated and same is mentioned for Units 5 to 12. Hence as per our record, % auxiliary consumption of Gas Turbines (GTs) is under allowable limit, while the % auxiliary consumption of Steam Units is slightly increased from the allowable limit.
 - ii. The causes of increased auxiliary consumption of Steam Units are as follows:
 - a. NEPRA's allowed auxiliary consumption is based on maximum loading position of the units. However, due to ageing factor, fuel constraints, partial loading and other wear tear problems the units were operated on partial loading for the said period, which caused increase in % auxiliary consumption.

- b. Sometimes, steam turbine run only with one HRSG, resultantly the steam turbine generation is decreased (half load) and auxiliary consumption is increased.
12. 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 10.10.2017. During hearing, following submissions were made by representatives of the Licensee;
- Previously, Units # 1-4 were operating at de-rated capacities owing to several reasons, such as older life, gas availability and etc. While at present, after major overhauling of Unit # 3, the load has been increased and consequently % auxiliary consumption has been reduced within the allowed range.
 - The block-wise % auxiliary consumption for the block comprising of Units # 5-10 (600 MW) and the block comprising of Units # 11-13 (415 MW), remained within the permissible limits during the period under review i.e. 2012, 2013 and 2014.
 - Currently, all units/machines are operating on maximum load except Unit # 1, 2, 4 and 13. Therefore, CPGCL has also planned to rehabilitate the same in upcoming days.
 - A comparative analysis of actual auxiliary consumption of CPGCL in August, 2017 with the limits prescribed under generation license is given as under;

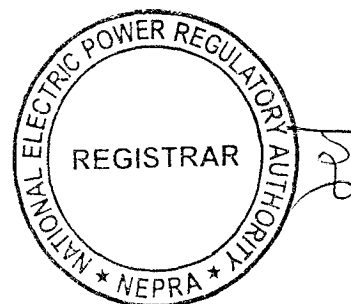
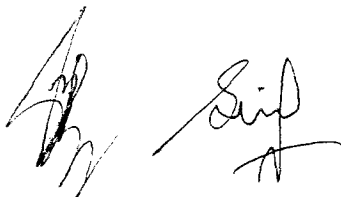
Unit	Limits prescribed under License (%)	Auxiliary Consumption in August, 2017 (%)	Remarks
3	8.5	10.53	Run for only 163 hours, however, auxiliary consumption increased just because of startup auxiliary consumption. While aux consumption remained 7.07 % in 2016-17.
5	3.5	3.65	Block wise Aux Consumption remained 1.76%
6	3.5	3.50	
7	1.5	1.22	
8	1.5	1.25	
9	1.5	1.22	
10	1.5	1.22	
11	1.5	0.60	Within Range
12	1.5	0.28	

13. The Authority has considered the submissions of the Licensee, particularly, that the block-wise % auxiliary consumption for the block comprising of units 5 to 10 and the block comprising of units 11 to 13 of Guddu Power Station, remained within the permissible limits during the period under review (2012 to 2014). In this regard, the Authority observes that the Show Cause Notice issued to the Licensee was specific to unit wise auxiliary consumption as prescribed in its generation license. Therefore, the argument of block wise auxiliary consumption seems irrelevant and appears to be an attempt to camouflage the loss contributed by the individual units due to excess auxiliary consumption. Further, argument of the Licensee that the calculations pertaining to auxiliary consumption provided by



NEPRA are not consistent with their record is baseless. Values of % auxiliary consumption that are given in the Show Cause Notice have been worked out on the basis of information provided by the Licensee itself vide letter dated 02.12.2015.

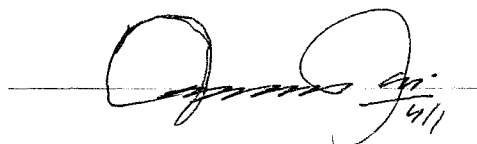
14. The Licensee has tried to justify the allegation of excess auxiliary consumption in respect of units 1 to 4 of Guddu Power Station by attributing it to the partial load operation of these units due to ageing factor, fuel constraints and other wear & tear problems. The Licensee has also submitted the remedial measures adopted by it in this regard, such as major overhauling and subsequently operation of units at full load. The Authority has considered the submissions and observes that the Licensee has adopted the remedial measures after initiation of the legal proceedings by NEPRA. Had the said measures been adopted by the Licensee earlier, the loss incurred by its units/machines during the years 2012, 2013 and 2014, could have been avoided.
15. The Authority has gone through the submissions of the Licensee and observes that the Licensee has failed to provide any satisfactory reason/justification in its defense. The Authority further observes that the trend analysis of the data submitted by the Licensee shows that it has remained non-serious in the matter of excess auxiliary consumption. The operational auxiliary consumption of the units/machines could have been restricted within the permissible limits by the Licensee through effective implementation of preventive maintenance program and timely major overhauling of the units, which the Licensee failed to do and this gave effect to the excess auxiliary power consumption.
16. Keeping in view the relevant provisions of the NEPRA Act, Generation License, other applicable documents and submissions of the Licensee, the Authority is of the opinion that the Licensee has failed to comply with limits prescribed for auxiliary consumption vide Section-Plant Characteristics of Schedule-I of its generation license. Therefore, a fine of PKR 5,000,000 (Five Million) is imposed on the Licensee.
17. Accordingly, the Licensee is directed to pay the fine 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.



**ORDER OF THE AUTHORITY IN THE MATTER OF SHOW CAUSE NOTICE
ISSUED TO GENCO-II DUE TO EXCESS AUXILIARY CONSUMPTION THAN
ALLOWED LIMIT AS SPECIFIED IN GENERATION LICENSE**

Authority

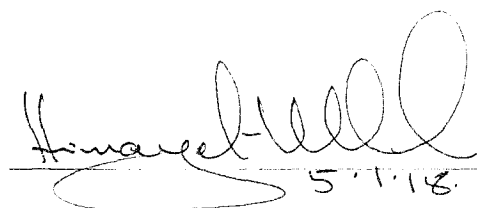
Syed Masood-ul-Hassan Naqvi
Member (CA)



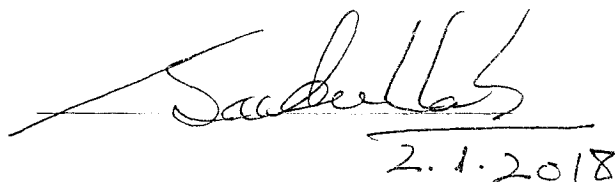
Major (R) Haroon Rashid
Member (Licensing)



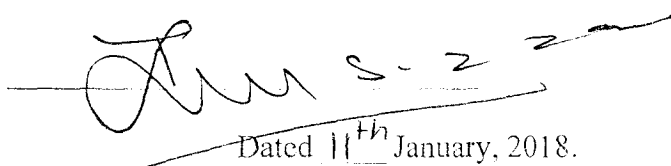
Himayat Ullah Khan
Member (Tariff)



Saif Ullah Chattha
Vice Chairman/Member (M&E)



Brig (R) Tariq Saddozai
Chairman



Dated 11th January, 2018.

