

# National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/DG(M&E)/LAD-01/18262

November 20, 2018

Chief Executive Officer, M/s K-Electric Limited (KEL) KE House, Punjab Chowrangi 39-B, Sunset Boulevard, Phase-II Defence Housing Authority Karachi.

Subject:

SHOW CAUSE NOTICE UNDER RULE 4 (8) & (9) OF THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (FINES) RULES, 2002

WHEREAS the National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") established under Section 3 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (hereinafter referred to as the "NEPRA Act") is mandated to regulate the provisions of electric power services; and

- 2. **WHEREAS** the Authority granted generation, transmission and distribution licenses bearing Nos. (GL/04/2002), (TL/02/2010) and (09/DL/2003) respectively to M/s K-Electric Limited (hereinafter referred to as "Licensee") to construct, own, operate generation facilities, to provide transmission services in the licensed territory and to construct, own, operate or engage in the distribution of electric power in the licensed territory; and
- 3. WHEREAS the generation license of the Licensee as modified from time to time provides details of generation facilities including Plant III- Korangi Combined Cycle Power Plant (KCCPP) and Plant VIII- Combined Cycle Power Plant Bin Qasim (BQPS-II)in its Schedule I. Fuel details of KCCPP and BQPS-II in the aforementioned Schedule of generation license explicitly envisage High Speed Diesel Oil (HSDO) as the alternate/back up fuel for the both power plants; and
- 4. WHEREAS the Schedule II of the generation license of the Licensee as modified from time to time prescribes net capacity at mean site conditions of the generation facilities of the Licensee, particularly Bin Qasim Power Station-I (BQPS-I) as 1107 MW; and
- 5. WHEREAS pursuant to Section 21 (2) (b) of the NEPRA Act, the Licensee is responsible to provide distribution service and make sales of electric power within its territory on a non-discriminatory basis to all the consumers who meet the eligibility criteria laid down by the Authority; and
- 6. WHEREAS pursuant to Rule 4(f) of the NEPRA Performance (Standards) Distribution Rules, 2005, a distribution company shall prepare schedules of load disconnection which demonstrates the priority order and rotation of load disconnections within the groups of consumers in a non-discriminatory manner keeping in view principle of proportionality so as to avoid excessively burden a particular consumer class; and

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- 7. **WHEREAS** the Authority issued an Explanation to the Licensee under Rule 4(1) & (2) of NEPRA (Fines) Rules 2002 on 18.04.2018. The basis of Explanation to the Licensee included the following:
  - 7. **WHEREAS** the premises of the Licensee (generation, transmission and distribution facilities) of the Licensee were visited by the NEPRA team from April 11 to 13, 2018 to verify the media reports regarding un-scheduled load shedding carried out by K-Electric in past few days, owing to which consumers were suffering badly; and
  - 8. WHEREAS during the visit following, prima facie, violations came to the notice of the Authority regarding compliance with provisions of the NEPRA Act, terms & conditions of the generation & distribution license granted to K-Electric and NEPRA Performance Standards (Distribution) Rules, 2005:
  - Power plants of the Licensee namely; KCCPP and BQPS-II have the provision of dual fuel (natural gas and HSDO) as provided in its generation license. In this regard, infrastructure is already available at the site. However, the Licensee has failed to commission both power plants on alternate fuel as per terms and condition of the generation license in the alleged wake of reduction in gas supply by the Sui Southern Gas Company. Resultantly, the gap between power supply and power demand i.e. the shortfall increased and duration of load shedding extended throughout the city. Therefore, the licensee has, prima facie, failed to discharge its obligations to make available its generation facilities in accordance with the terms and conditions of the generation license.
  - ii. Power generation from BQPS-I power plant of the Licensee remained unsatisfactory during the period under review (March 27, 2018 to April 10, 2018). A comparison of daily generation at BQPS-I vis-à-vis approved net capacity of the said power plant under generation license as shown in the table below reveal that the Licensee underutilized BQPS-I during the period under review:

Date	BQPS-I Daily Generation (MW)	Net Capacity under Generation License (MW)			
27.03.2018	638	1107.6			
28.03.2018	640	1107.6			
29.03.2018	655	1107.6			
30.03.2018	722	1107.6			
31.03.2018	748	1107.6			
01.04.2018	620	1107.6			
02.04.2018	631	1107.6			
03.04.2018	596	1107.6			
04.04.2018	610	1107.6			
05.04.2018	693	1107.6			
06.04.2018	605	1107.6			
07.04.2018	603	1107.6			
08.04.2018	629	1107.6			
Date	BQPS-I Daily Generation (MW)	Net Capacity under Generation License (MW)			
09.04.2018	602	1107.6			
10.04.2018	<i>709</i>	1107.6			
Av. Supply (27.03.2018 to 10.04.2018)	647	1107.6			
% Utilization/Loading	58.4%				



Moreover, during morning time BQPS-I was further underutilized whereas it could have been operated at full capacity to minimize load shedding. In view of foregoing, the Licensee reduced the net capacity of BQPS-I during the period of March 27, 2018 to April 10, 2018, prima facie, in contravention of terms and condition of the generation license.

iii. Data available at grid stations of the Licensee shows a huge variation in the licensee's claimed duration of load shedding and the actual load shed recorded in the grid logs. A comparison of total actual load shed and the licensee's claim of load shedding during the period under review (March 27, 2018 to April 10, 2018) is shown in the following table:

34	Grid Station	Feeder Name	Category	Date	Load Shedding noted at Grids (Hours)	Duration of Interruptions other than Load Shedding (Hours)	Total Actual Outage Duration (Hours)	KE's Claimed Duration (Hours)	Variation (Hours)
	Airport – II	Gulshan-e-Ghazali	ML	29.03.2018	5	3	8	4.5	2.5
		Shamsi Society	ML	09.04.2018	1	7	8	6	2
1		Noor Housing	ML	10.04.2018	6	1	7	5	2
		Baba Willayat Shah	HL	09.04.2018	11	0	11	9	2
		Pir Mehfooz	VHL	28.03.2018	9	2	Il	9.75	1.25
		Ghazi Town	VHL	10.04.2018	0	18	1\$	8.5	9.5
		Jubilee Gate + PIA Society	Ш	29.03.2018	1	9	10	2	0 0
!	Jauher	Pak SS + Karachi MS	ML	28.03.2018	0	8	8	4.5	3.5
2.		Prem Villas + Marora	VHL	28.03.2018	11	Ð	11	9.75	1.25
	Liaquztabad	Nazimabad Pumping +	LL	28.03.2018	6	0	6	0	6
1		Liberty Cinema	ML	28.03.2018	6	0	-6	4.5	1.5
3.		Café Millat	HL	29.03.2018	11	0	11	8.25	2.75
		Govt. School	VHL	29.03.2018	11	0	ll	9.75	1.25
		CI Area	VHL	29.03.2018	11	0	11	9.75	1.25
		Faiza Avenue +	LL	10.04.2018	4	0	4	3	1
	North Karachi	Gold Smith	ML	28.03.2018	6	0	б	4.5	1.5
*		Country Tower +	HL	29.03.2018	8	4	12	8.25	3.75
		Al-Ahmed Avenue	VHL	09.04.2018	11	3	14	10.5	3.5
	Surjani	Global City	肛	29.03.2018	11	0	11	8.25	2.75
		Arsalan Homes	HL	10.04.2018	10	0	10	8	2
17.4		Michael Academy	VHL	09.04.2018	10	10	2,0	10.5	9.5
		Stylish Garden	VHL.	29.03.2018	8	8	16	9.75	6.23
		Abdullah More	VHL	09.04.2018	10	7	17	10.5	7.5

Above table clearly indicates that the Licensee has carried out prolonged hours of unscheduled load shedding during the period from March 27, 2018 to April 10, 2018. Such extended load shedding cannot be attributed to alleged restricted gas supply only. Apparently, it is operational failure of the licensee due to underutilization of BQPS-I and non-utilization of KCCPP and BQPS-II on alternate fuel and also due to weak and fragile distribution system of the Licensee. Such conduct of the Licensee shows that the Licensee has failed to adhere to principles of load shedding as prescribed under Rule 4(f) of the NEPRA Performance (Standards) Distribution Rules, 2005 and prima facie constitutes a failure on part of the Licensee to ensure un-interrupted power supply to its consumers within its service territory and amounts to contravention of section 21(2) (b) of the NEPRA Act.

- 8. **WHEREAS** the response of the "Explanation" was submitted by the Licensee vide its letter dated 04.05.2018, wherein, the Licensee denied allegations made in the Explanation and requested for provision of an opportunity of hearing; and
- 9. **WHEREAS** the Authority decided to provide an opportunity of hearing to the Licensee in terms of Rule 4(5) of the Fine Rules. Accordingly, hearing in the matter was held on 08.08.2018, wherein, the representatives of the Licensee made their submissions with respect to Explanation; and
- 10. WHEREAS the response of the Explanation and oral submission made during the hearing by the Licensee was duly examined and considered by the Authority in terms of Rule 4(7) of the Fine Rules and the Authority observed that the Licensee has not submitted satisfactory explanation to the allegations mentioned at para 7 and 8 of the Explanation, therefore, the Authority rejected it and passed an order on 20.11.2018 (10 Pages) recording reasons for such rejection;
- 11. **AND WHEREAS** the Authority is constrained to believe that the violation mentioned at Para 7 above have in fact occurred for which a penalty up to maximum of Rs. 100,000,000/- (One Hundred Million) plus a further penalty up to Rs. 500,000/- (Five Hundred Thousands) for each day of default could be imposed.
- 12. **NOW THEREFORE** the Licensee is hereby called upon to show cause within fifteen (15) days of receipt of this notice as to why a penalty up to maximum of Rs. 100,000,000/- (One Hundred Million) plus a further penalty up to Rs. 500,000/- (Five Hundred Thousands) for each day of default should not be imposed upon the Licensee.
- 13. Please note that in case your reply is not received in this office within fifteen (15) days of the receipt of this Show Cause Notice, it shall be presumed that the Licensee has nothing to say in its defense and the matter shall be placed before the Authority on the basis of available record.

Enclosure:-

1) Order dated 20.11.2018 (10 Pages)

Registrar

(Syed Safeer Hussain)



### National Electric Power Regulatory Authority

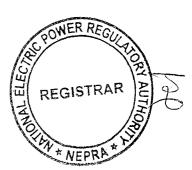
# In the matter of Explanation dated 18.04.2018 issued to K-Electric Limited under Rule 4 (1) & (2) of NEPRA (Fines) Rules 2002.

#### Order

- 1. K-Electric Limited (the "Licensee") was granted a generation license (No. GL/04/2002) and distribution license (No. 09/DL/2003) by the National Electric Power Regulatory Authority (NEPRA) on 21.07.2003 pursuant to Sections 20 read with 21 and 25 of the NEPRA Act, 1997 ("Act").
- 2. The amended generation license up to February, 2018 provides details of generation facilities. Among these generation facilities include Plant III- Korangi Combined Cycle Power Plant (KCCPP) and Plant VIII- Combined Cycle Power Plant Bin Qasim (BQPS-II) as envisaged in Schedule I of generation license. Fuel details of KCCPP and BQPS-II in the aforementioned Schedule of generation license explicitly mentions Natural Gas as primary fuel and High Speed Diesel Oil (HSDO) as the alternate/back up fuel for the both power plants.
- 3. As per latest modification in generation license of the Licensee, the net capacity at mean site conditions of Bin Qasim Power Station-I (BQPS- I) is 1107 MW as provided in Schedule-II of the generation license.
- 4. Rule 4 (f) of Performance Standards Rules prescribes Priorities and Principles of Load Shedding. It states that:
  - (i) A distribution company shall have plans and schedules available to shed up to 30% of its connected load at any time upon instruction from NTDC. This 30% load must be made up from separate blocks of switchable load, which can be disconnected in turn at the instruction from NTDC. A distribution company shall provide copies of these plans to NTDC.
  - (ii) Wherever possible NTDC shall give distribution companies advance warning of impending need for load shedding to maintain system voltage and/or frequency in accordance with the Grid Code.
  - (iii) As per the provisions of the Grid Code, NTDC shall maintain an overview and as required instruct each distribution company the quantum of load to be disconnected and the time of such disconnection. This instruction shall be given in clear, unambiguous terms and related to prepared plans.



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- (a) Supply to consumers in rural areas; and residential consumers in urban areas where separate feeders exist.
- (b) Supply to consumers, other than industrial, in urban areas.
- (c) Supply to agriculture consumers where there is a dedicated power supply.
- (d) Supply to industrial consumers.
- (e) Supply to schools and hospitals.
- (f) Supply to defense and strategic installations.
- (v) A distribution company shall prepare schedules of load disconnection, which demonstrate this priority order and which rotate load disconnections within the above groups in a non-discriminatory manner. The principle of proportionality shall be kept in mind so as not to excessively burden a particular consumer class.

# Background:

- 5. According to media reports, different areas of Karachi plunged into darkness since 27.03.2018 due to unscheduled load shedding in Karachi. The Authority took serious notice of such situation and directed the Licensee on 02.04.2018 to provide a detailed report in this regard. In response, the Licensee through its letter dated 04.04.2018 submitted that it has been forced to resort to load management even in exempted areas due to curtailment of gas by SSGC to a level of 90MMCFD only against a minimum requirement of 190 MMCFD to run all gas based generation plants, which has resulted in loss in power generation of around 500MW. In order to investigate the matter, the Authority constituted a Committee who visited Licensee's premises and inspected main power generation plants and grid stations. The committee also examined the log books and relevant record maintained at power plants and grid stations and following were observed.
  - i) KCCPP and BQPS-II have the provision of dual fuel (natural gas and HSDO) as provided in the generation license. In this regard, infrastructure is already available at the site. However, the Licensee has failed to commission both power plants on alternate fuel as per terms and condition of the generation license.
  - ii) Power generation from BQPS-I power plant of the Licensec remained unsatisfactory during the period under review (March 27, 2018 to April 10, 2018). Moreover, during morning time BQPS-I was further underutilized.
  - Data available at grid stations of the Licensee showed a huge variation in the licensee's claimed duration of load shedding and the actual load shed recorded in the grid logs.
- 6. In view of above, the Authority observed that the Licensee has, prima facie, failed to comply with the following:



- i) To discharge its obligations to make available its generation facilities both on primary and alternate fuel in accordance with the terms and conditions of the generation license.
- ii) To operate its generation facilities at the capacities prescribed under the terms and conditions of the generation license.
- iii) Load Shedding in terms of Rule 4 (f) of Performance Standards Rules.
- 7. In view of the foregoing, the Authority decided to initiate legal proceedings against the Licensee under NEPRA Fines (Rules) 2002 ("the Fine Rules").
- 8. Accordingly, an Explanation dated 18.04.2018 was issued to the Licensee under Rule 4 (1) and (2) of the Fine Rules. Salient parts of the Explanation are as under:
  - 7. **WHEREAS** the premises of the Licensee (generation, transmission and distribution facilities) of the Licensee were visited by the NEPRA team from April 11 to 13, 2018 to verify the media reports regarding un-scheduled load shedding carried out by K-Electric in past few days, owing to which consumers were suffering badly; and
  - 8. WHEREAS during the visit following, prima facie, violations came to the notice of the Authority regarding compliance with provisions of the NEPRA Act, terms & conditions of the generation & distribution license granted to K-Electric and NEPRA Performance Standards (Distribution) Rules, 2005:
    - i. Power plants of the Licensee namely; KCCPP and BQPS-II have the provision of dual fuel (natural gas and HSDO) as provided in its generation license. In this regard, infrastructure is already available at the site. However, the Licensee has failed to commission both power plants on alternate fuel as per terms and condition of the generation license in the alleged wake of reduction in gas supply by the Sui Southern Gas Company. Resultantly, the gap between power supply and power demand i.e. the shortfall increased and duration of load shedding extended throughout the city. Therefore, the licensee has, prima facie, failed to discharge its obligations to make available its generation facilities in accordance with the terms and conditions of the generation license.
    - ii. Power generation from BQPS-I power plant of the Licensee remained unsatisfactory during the period under review (March 27, 2018 to April 10, 2018). A comparison of daily generation at BQPS-I vis-à-vis approved net capacity of the said power plant under generation license as shown in the table below reveal that the Licensee underutilized BQPS-I during the period under review:





Date	BQPS-I	Net Capacity		
	Daily	under Generation		
	Generation	License		
27.03.2018	638	1107.6		
28.03.2018	640	1107.6		
29.03.2018	655	1107.6		
30.03.2018	722	1107.6		
31.03.2018	748	1107.6		
01.04.2018	620	1107.6		
02.04.2018	631	1107.6		
03.04.2018	596	1107.6		
04.04.2018	610	1107.6		
05.04.2018	693	1107.6		
06.04.2018	605	1107.6		
07.04.2018	603	1107.6		
08.04.2018	629	1107.6		
09.04.2018	602	1107.6		
10.04.2018	709	1107.6		
Av. Supply	647	1107.6		
(27.03.2018 to				
10.04.2018				
%	58.4%			
Utilization/Loading				

Moreover, during morning time BQPS-I was further underutilized whereas it could have been operated at full capacity to minimize load shedding. In view of foregoing, the Licensee reduced the net capacity of BQPS-I during the period of March 27, 2018 to April 10, 2018, prima facie, in contravention of terms and condition of the generation license.

iii. Data available at grid stations of the Licensee shows a huge variation in the licensee's claimed duration of load shedding and the actual load shed recorded in the grid logs. A comparison of total actual load shed and the licensee's claim of load shedding during the period under review (March 27, 2018 to April 10, 2018) is shown in the following table:





Sr.	Grid Station	Feeder Name	Category	Date	Load Shedding noted at Grids (Hours)	Duration of Interruptions other than Load Shedding (Hours)	Total Actual Outage Duration (Hours)	KE'z Claimed Duration (Hours)	Variation (Hours)
		Gulahan-e-Ghazali	ML	29.03.2018	5	2	8	4.5	2.5
	Airport – II	Shamsi Society	MT	09.04.2013	!	7	8	6	2
1.		Noor Housing	MI	10.04.2018	5	1	7	5	2
		Baba Willayat Shah	HIL	09.04.2018	11	Û	11	ĝ	2
		Fir Mehfocz	VHL	28.03.2018	g		11	9,75	1.25
		Ghazi Town	VHL	10.04.2018	Û	15	13	\$.5	9.5
		Jubiles Gats + PIA Society	LL	29.03.2018	Į.	Q.	10	2	S }
	Janhar	Pak SS + Karachi MS	VΠ	28.03.2018	Û	8	8	4.5	3.5
		Prem Villas + Marora	VHL	28.03.2018	11	Ũ	11	9.75	1.25
		Nazimabad Pumping +	LL	23.03.2013	- 5	Ű	5	Û	5
	Liaquatabad	Liberty Cinema	ML	28.03.2018	6	0	6	4.5	1.5
3.		Café Millat	HL	29.03.2018	11	0	ll	8.25	2.75
		Govt, Scheol	VHL	29.03.2018	11	Ü	11	9.75	1.25
		CI Azea	VHL	29.03.2018	11	0	11	9,75	1.25
		Faiza Avenue +	LL	10.04.2018	4	Û	4	3	
±.	North Karachi	Gold Smith	MI	28.03.2018	6	Q.	6	4.5	1.5
		Country Tower +	HL	29.03.2018	S	4	12	3.25	3.75
!		Al-Ahmed Avenue	VHL	09.04,2013	11	3,	14	10.5	3.5
-		Global City	HL	29.03.2018	11	0	11	8.25	2.75
	Surjani	Arsalan Homes	H.	10.04.2018	10	Ĵ.	10	S	2
÷		Michael Academy	VHL	09.04,2018	10	10	20	10.5	9.5
İ		Stylish Garden	VHL	29.03,2018	8	S	16	9,75	6.25
		Abdullah More	VHL	09.04.2018	10	7	17	10.5	7.5

Above table clearly indicates that the Licensee has carried out prolonged hours of unscheduled load shedding during the period from March 27, 2018 to April 10, 2018. Such extended load shedding cannot be attributed to alleged restricted gas supply only. Apparently, it is operational failure of the licensee due to underutilization of BQPS-I and non-utilization of KCCPP and BQPS-II on alternate fuel and also due to weak and fragile distribution system of the Licensee. Such conduct of the Licensee shows that the Licensee has failed to adhere to principles of load shedding as prescribed under Rule 4(f) of the NEPRA Performance (Standards) Distribution Rules, 2005 and prima facie constitutes a failure on part of the Licensee to ensure un-interrupted power supply to its consumers within its service territory and amounts to contravention of section 21(2) (b) of the NEPRA Act.

#### Submissions of the Licensee:

- 9. The Licensee vide its letter dated 04.05.2018 submitted its response to the above mentioned Explanation, which is summarized as under:
  - a. It is submitted that the option to commission KCCPP and BQPS-II on High Speed Diesel (HSD) was not exercised earlier due to commitment given by SSGC for supply of at least 276 MMCFD natural gas to KE in line with Economic Coordination

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Committee (ECC) decision. Additionally, this ECC commitment for provision of 276 MMCFD gas to KE was reiterated by SSGC to NEPRA during the proceedings of LPM-IV for addition of KE's new gas based plants, based on which LPM-IV was processed and issued on 22.08.2013. Additionally, no such directions for commissioning on HSD were given by NEPRA earlier nor were the heat rates/O&M Cost/tariff was determined by NEPRA for operation of these plants on HSD. Hence, it was not possible for KE to operate plants on HSD and same cannot be attributed as irresponsible behavior of KE.

Without prejudice to the foregoing, in view of directions of Cabinet Committee on Energy (CCOE) made in its meeting held on April 23, 2018 to increase gas supply to KE under an arrangement of 130 MMCFD of natural gas & 60 MMCFD of RLNG and subsequent increase in gas supply together with initiation of RLNG supply, KE has started operating its plants on RLNG with effect from the date of CCOE's directives to bridge the demand supply gap and to provide immediate relief to its consumers. Additionally, KE is also evaluating the option of commissioning KCCPP & BQPS-II on HSD as an optional/back up fuel. In this respect, KE is engaged with General Electric (OEM) for due diligence of operating these plants on HSD and detailed technical & commercial analysis will be prepared and shared with NEPRA along with any required revisions in tariff and approved investment plans by end of June, 2018.

- b. We would like to place on record that the net capacity of 1107 MW as mentioned in KE's generation license does not account for any outages and reduction in dispatch due to technical considerations. Further, during the affected period, the available operating capacity of BQPS-I was further reduced to an average of around 717MW due to forced outages/maintenance of some of its units. However, even during the affected period, BQPS-I was operated at around 90% capacity contrary to 58% as mentioned in the said letter. Detailed calculations are entailed in Annexure B. It is pertinent to mention here that the outage/maintenance of these units would not have impacted the load management as KE had sufficient gas based capacity which remained idle due to unprecedented and abrupt reduction in supply of gas by SSGC.
- c. It is submitted that the outage duration mentioned in the said letter is based on grid logs obtained during their visit, which do not represent hourly load shed but rather record the load in amperes at specific point in time and therefore cannot be treated as outage for the whole hour. Additionally, an outage on a feeder does not represent an outage for an area, as owing to deployment of radial infrastructure, KE immediately back feeds the area wherever possible. Further this log is only used to asses loading position of feeder and accordingly all feeders having a load below 10 Amp at that specific point in time are recorded as "0". An intermittent reading cannot be extrapolated or attributed to the entire duration for the purposes of determining outages.

Here it is also pertinent to mention that few of the feeders mentioned as "low loss" and "high loss" in the said letter fall within the category of "medium loss" and "very high loss" as per KE's policy. Additionally, data for five feeders reported by NEPRA in the said letter do not corroborate with their actual readings mentioned in the grid logs. For



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the sake of clarity, the actual duration of outage after accounting for the load management carried out due to material events is tabulated as Annex C.

As evident from annexed table, on 21 out of 23 feeders, either outages were in line or of reduced duration than the reported load management plan (11 instances) and ten instances were observed of minimum outage of less than an hour duration, which were adequately back fed / normalized. Further, only two instances were observed on data of 14 days of six selected grids which comprise of total 182 feeders, where outage duration ranged between 4 to 5 hours in excess of reported load management. These outages were due to technical reasons as these areas are highly kunda infested and KE teams face difficult operating environment which create difficulty in maintaining operational continuity.

d. In light of aforesaid, it is prayed that the aforementioned KE's response to the said letter dated April 18, 2018 should be withdrawn by NEPRA. However, if NEPRA wishes to proceed further in the matter, we would like to avail the opportunity of personal hearing in this matter as permitted under Fine Rules to fully elaborate our point of view supported by valid and cogent evidence to clarify its grounds of objection and defense to the said letter.

#### Hearing

- 10. The Authority considered the response of the Licensee and accepted the request to provide an opportunity of hearing under Rule 4(5) of the Fine Rules. Accordingly, hearing in the matter was held on 08.08.2018. During the hearing, following submissions were made by the representatives of the Licensee:
  - a. KE did not commission alternate fuel due to written commitments of SSGC, ECC approved allocation, Cabinet Committee minutes wherein SSGC was asked to ensure supply, LPM IV proceedings where SSGC reiterated its commitment to NEPRA, Court Order asking SSGC to ensure supply.
  - b. Moreover, Korangi Power Complex was commissioned in 2009 and at that time 276 MMCFD gas was available for KE. Therefore, KE never foresee for using their plants on HSD as it was so expensive, almost 6 times than gas.
  - c. In addition to above, NEPRA had never directed/mandated KE to commission plants on HSD or determined heat rate/O&M/tariff; and plant commissioning, heat rate tests and tariff were always gas based.
  - d. Available capacity of the plant was reduced to 717 MW due to forced outages/maintenance of some of its units and KE utilized 90% of that available capacity. Moreover, maintenance of unit 6 of BQPS-I was deferred because of supply constraints, which led to reduction in its dispatch.

REGISTRAR



e. Due to shortage of gas, KE was forced to resort to load management which was carried out in rotated load shed across all category of consumers. KE has separate outage management system, while NEPRA has calculated load shed hours based on grid logs which do not represent outages as they do not represent feeder load for an hour rather representing the loading position at specific point in time and they do not take back feed into account.

### Analysis/Findings of the Authority:

### Operation of Plants on Alternate/Back-up Fuel:

11. The Licensee has submitted that due to commitment given by SSGC for supply of at least 276 MMCFD natural gas to K-Electric in line with Economic Coordination Committee (ECC) decision, alternate option of HSD was not worked out. Moreover, such direction was not given by NEPRA earlier. The Licensee has further submitted that heat rates/O&M Cost have not been determined in its tariff determination for operation of the KCCPP & BQPS-II plants on HSD. The Authority has considered the submissions of the Licensee and observes that NEPRA team visited the gas based combined cycle power plants i.e. KCCPP (240MW) and BQPS-II (560MW) and noted that infrastructure for HSD operations at both the power plants is available. Being a prudent utility, the Licensee should have complied with the terms of its license and commissioned its dual fuel options in order to cope up an emergency situation, which the Licensee failed to do. Resultantly, the gap between power supply and power demand increased and duration of load shedding extended throughout the city. As far as NEPRA direction is concerned for operation on alternate fuel, it is clarified that the terms and conditions of generation license issued to the Licensee are binding on the Licensee which clearly provide for the primary and alternate/back up fuels and in this regard no further direction from NEPRA was required. Regarding the argument of non-determination of tariff by NEPRA on HSD, it is observed that it was the primary responsibility of the Licensee under the law to approach NEPRA for determination of tariff components for operation of its generation facilities on alternate fuel to ensure the continuity of supply, which it has failed to discharge. Hence, the Authority is of the considered opinion that the Licensee, prima facie, failed to discharge its obligations to make available its generation facilities on primary/alternate fuel in accordance with the terms and conditions of the generation license particularly with respect to Section 3 - Fuel details and Section B - Fuel Details of Schedule-I of License No. 04/GL/2002, modified on March 17, 2009 and August 22, 2013 respectively.

# **Underutilization of BQPS-I:**

12. The Licensee in its response against Explanation submitted that net capacity of 1107 MW as mentioned in KE's generation license does not account for any outages and reduction in dispatch due to technical considerations. Further, in course of hearing, the Licensee submitted that during the affected period, the available operating capacity of BQPS-I was further reduced to an average of around 717MW due to forced outage/maintenance of some of its units. The Authority has considered the submissions of the Licensee and observes that the Licensee is bound to ensure the net capacity that it has committed in generation license. It is further observed that capacity payments are being made to the Licensee at



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at all the time. The Authority also observes that it is very impractical approach of the Licensee to argue that deliverable capacity excluding units under outages should be considered as the net capacity of the Licensee for the period under review. The Licensee should have taken preventive measures to avoid such forced outages rather making them as justified ground for underutilization. Hence, the assessment of utilization of BQPS-I was carried out as per the net capacity and found that it was underutilized during the period of 27.03.2018 to 10.04.2018. In view of foregoing, the Authority is constrained to believe that the Licensee reduced the net capacity of BQPS-I, *prima facie*, in contravention of the terms and conditions of the generation license particularly with respect to Schedule-II of Generation License No. 04/GL/2002 as modified on February 28, 2018.

# Unannounced Load Shedding:

- 13. With respect to unannounced load shedding, the Licensee in its response against Explanation submitted that the outages duration mentioned in the Explanation is based on grid logs obtained during the visit, which do not represent hourly load shed but rather record the load in amperes at specific point in time and therefore cannot be treated as outage for the whole hour. The Licensee has further submitted that an outage on a feeder does not represent an outage for an area owing to deployment of radial infrastructure, K-Electric immediately back feeds the area wherever possible.
- 14. The Licensee also submitted that few of the feeders mentioned as "Low Loss" and "High Loss" in the Explanation letter actually fall within the category of "Medium Loss" and Very High Loss" as per KE's policy.
- 15. The Authority has considered the submissions of the Licensee and observes that grid logs are the main source to assess the load shedding duration on any feeder. Moreover, if the tripping on any feeder records for less than an hour, then it must be clearly mentioned in the grid log. However, it is not the case here, no such entry in the grid log was made. Furthermore, the Licensee's claim that most of the time it back fed the supply and accordingly actual duration of load shedding was less than the mentioned in the Explanation, the Authority observes that the Licensee has not substantiated the claim of back feeding through any cogent evidence/data. The Licensee should have submitted the figures pertaining to earlier load running on back feeding feeders, capacity of carrying additional load and tripping occurred (if any) due to overloading. Moreover, it is not clarified by the Licensee that whether 100% consumers were restored by back feeding or otherwise.
- 16. Regarding the argument of the Licensee that some of feeders have been switched from Low Loss to Medium Loss and from Medium Loss to High Loss, due to which criteria of load shedding has also been changed on those feeders. If this was the case, the Licensee should have updated the same in record maintained at grid stations. This shows that the Licensee is trying to justify the increased load shedding by changing status of different categories of feeders.

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17. Such conduct of the Licensee shows that the Licensee has failed to adhere load shedding principles as prescribed under law to ensure un-interrupted power supply to its consumers. Therefore, the Licensee *prima facie* is in violation of Rule 4 (f) of Performance Standards Rules and section 21(2) (b) of the NEPRA Act.

#### Decision

- 18. Considering the submissions of the Licensee in light of the Generation License, Performance Standards Rules and other applicable documents, the Authority is of the considered opinion that the Licensee has failed to provide any satisfactory reply to the following allegations levelled against it in the Explanation:
  - a) Failure to discharge its obligations to make available its generation facilities both on primary and alternate fuel in accordance with the terms and conditions of the generation license particularly with respect to section 3 Fuel details and Section B Fuel Details of Schedule-I of License No. 04/GL/2002 as modified on March 17, 2009 and August 22, 2013 respectively.
  - b) Failure to operate its generation facilities at the capacities prescribed under the terms and conditions of the generation license particularly with respect to Schedule-II of Generation License No. 04/GL/2002 as modified on February 28, 2018.
  - Failure to adhere the obligation of uninterrupted power supply under section 21 (2)
     (b) of NEPRA Act and principles of load shedding in terms of Rule 4 (f) of Performance Standards Rules.
- 19. Therefore, the Authority decides to issue a Show Cause Notice to the Licensee in terms of Rule 4 (8) of the NEPRA (Fine) Rules 2002.

#### **AUTHORITY**

Saif Ullah Chattha Member (M&E/Tariff)

Rehmatullah Baloch VC/Member (Licensing/CA)

Brig (R) Tariq Saddozai Chairman

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Dated 20th November 2018.

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