Mr. Syed Safeer Hussain,

Registrar,

NEPRA Tower, Attaturk Avenue (East),

Sector G-5/1,

NEPRA

Islamabad

SA (TRUh)

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May 04, 2018

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Without Prejudice

SUBJECT: EXPLANATION UNDER RULE 4 (1) & (2) OF THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (FINES) RULES, 2002

Dear Sir,

This is with reference to NEPRA letter # NEPRA/SA (Tech)/LAD-01/6381 ('the Said Letter') dated April 18, 2018 received in this office on April 19, 2018. In this regard, please find below our response to the Said Letter as follows:

A. Preliminary Objections to the Maintainability

The Said Letter has been issued without consideration of facts and prevailing circumstances and hence suffers from legal infirmities. Further, without prejudice to our rights we hereby put forward following preliminary objections with respect to the maintainability of the Said Letter for due consideration of NEPRA.

- (i) That KE was unable to fully utilize its gas based generation plants due to non-availability of Natural Gas and KE was forced to carry out load management to manage the demand supply situation. It is pertinent to mention that reduction of natural gas supply to KE is a unilateral action by SSGC and is beyond the control of KE as well as in violation of the decision of Economic Cabinet Committee (ECC) and commitment of SSGC. The aforementioned fact has been acknowledged and recognized by NEPRA in its advisory sent to GoP (MoE).
- (ii) That KE from the start of month of March has been raising the issue of reduced gas supply with SSGC management as well as other key stakeholders and has written letters to both the Honorable Governor and Chief Minister for their intervention in the matter as well as wrote letter dated March 07, 2018 to SSGC and urged SSGC to increase the gas supply. (Copies of letters are enclosed herewith as Annexure A).
- (iii) That KCCPP and BQPS II were not commissioned on HSD earlier due to commitment given by SSGC for supply of at least 276 MMCFD Natural Gas to KE in line with

Dy. No. 18-18-18
Dated 08-18-18

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Economic Coordination Committee (ECC) decision. Moreover, during the proceedings of LPM - IV for addition of KE's new gas based plants, SSGC reiterated its commitment to NEPRA for provision of 276 MMCFD gas to KE based on which LPM IV was processed and issued on 22nd August 2013 after a full public hearing. Additionally, no such directions for commissioning on HSD were given by NEPRA earlier in this regard and neither have the heat rate/O&M cost/tariff been determined for HSD.

- (iv) That NEPRA has considered the licensed capacity of BQPS I (1107 MW), which does not account for any outages and reduction in dispatch due to technical constraints. KE's utilization of BQPS I was at 90% (please refer to Annexure B for details) of its available capacity after accounting for the forced and maintenance outages during the period from March 27, 2018 to April 10, 2018 (hereinafter referred to as 'the Affected period'). Hence, the allegations that KE deliberately under-utilized its BQPS I plant is denied being baseless and without facts.
- (v) That NEPRA has based its findings placing reliance on the data extracted from the grid logs, which do not represent feeder outage for the hour rather reflect the loading position of feeders at a specific point in time, which cannot be treated as a whole hour. For example if a feeder trips at 10:55 a.m. and is restored at 11:05 a.m., the grid log will show "0" at 11:00 a.m., however, the same cannot be assumed as an outage for full hour. Further, if an area is back fed, the same is also not reflected in the grid logs. Additionally, NEPRA needs to consider the fact that the grid logs in KE are not designed for outage management and KE uses Network Status Information System (NSIS) for logging and monitoring outages on feeder level. Therefore, NEPRA's primary reliance on grid logs for outage analysis is misplaced and NEPRA should consider the actual outage information as reported in Annexure C.
- (vi) That NEPRA's contention regarding weak and fragile distribution system of KE is unfounded, based on arbitrary observations and is not backed up with any evidence. Moreover, it disregards the improvements in KE's performance indicators (SAIFI and SAIDI) which are substantive evidence of post investment improvement in KE system as shown below:

¥	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	Cumulative improvement from FY 12 (%)
SAIFI	32.49	31.27	24.72	22.21	20.53	19.61	40 %
SAIDI	1858.2	1790.4	1495.3	1330.3	1210.2	1142.8	38 %
Dist. Losses (%)	28.63	26.91	24.31	22.60	21.20	20.50	8 %

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Having said that, please find below our detailed response to the allegations levelled in the Said Letter.

B. Parawise response to the Allegations

Notwithstanding our preliminary objections and submissions, we wish to place on record that KE denies all allegations levied in the Said Letter as not maintainable as a matter of law. Without prejudice to the rights vested under the law, please find below our response to the violations alleged in Paras 8 and 9 of the Said Letter, as follows:

- (I) In response to Para 8 of the Said Letter, please find below our point wise reply to the allegations mentioned at serial i to iii of the subject Para:
 - (i) In response to Point (i) of the Para 8 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 Committee (ECC) decision. Please also note that this is strengthened with the existing stay orders in CP No. 1088 of 2011 (KE vs. Federation of Pakistan and others) in which SSGC and OGRA are co-respondents and in terms of which two earlier orders dated April 19, 2011 and May 31, 2011 which were further relied upon by KE when it obtained its latest order dated April 17, 2018 in which SSGC in particular was directed to immediately make compliance with the earlier orders and to stop the unilateral reduction of supply to KE to avoid severe load shedding in the entire city of Karachi. Copy orders in the said CP are enclosed as Annexure D for ease of reference.

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 22nd August 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 the same cannot be attributed as irresponsible behavior of KE.

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Without prejudice to the foregoing, in view of directions of Cabinet Committee on Energy (CCOE) made in its meeting held on April 23, 2018 ("CCoE Directives") 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. Accordingly, KE has filed its License Modification Application with NEPRA through letter # KE/BPR/NEPRA/2018/176 dated April 23, 2018 requesting for addition of RLNG as an alternate fuel source for KE's power plants mentioned in Schedule II of KE's Generation License, which has been accepted by NEPRA for consideration. Please note that the option to commission plants on RLNG was the only practical option to provide immediate relief to consumers through full utilization of gas based plants, hence the same is opted for in the current scenario. Additionally, KE is also evaluating the option of commissioning KCCPP and BQPS II on HSD as an optional/backup 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. It is pertinent to mention that the IPPs with whom CPPA (G) / NTDC has Power Purchase Agreements (GOP IPPs) and which are dual fuel with HSD as alternate / backup fuel have been switched to RLNG instead of HSD due to higher efficiency and lower cost of operation.

On the basis of above mentioned arguments, the allegation that KE has prima facie failed to discharge its obligations under its license is denied in its entirety.

(ii) In response to Point (ii) of Para 8, 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 717 MW 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 for your kind perusal. It is pertinent to mention here that the

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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.

(iii) In response Point (iii) of Para 8, 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. For example, if a feeder trips at 10:55 am and is restored at 11:05 am, the grid log will show "0" at 11 am, however, the same cannot be assumed as outage for full one 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 assess 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.

Therefore, the instantaneous grid log reading cannot be extrapolated or relied to assess outage duration and any such exercise will result in notional assumptions and not factual position. Moreover, the distribution network of KE is radial in nature and hence interruption of a feeder does not necessarily result in interruption of electric power services to the consumers who are provided electric power from alternate feeders. 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 5 feeders reported by NEPRA in the Said Letter do not corroborate with their actual readings mentioned in the grid logs. For the sake of clarity, the actual duration of outage after accounting for the load management carried out due to the material events is tabulated as Annexure C.

As evident from the 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



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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 difficultly in maintaining operational continuity.

Further in compliance to rule 4 (f) of the NEPRA PSDR 2005, KE carried out load management during the **Affected Period** aptly demonstrating the priority order and also rotated load shed in a non-discriminate manner. Further to avoid excessive load shed on residential and commercial consumers of High loss (HL) and Very High Loss (VHL) feeders, load shed was carried out on rotational basis in low loss areas of the city including the industrial segment as well.

In view of above, KE denies that it has failed to adhere to the principles of load shedding as prescribed under Rule 4(f) of NEPRA PSDR 2005 as well as contravened section 21(2)(b) of the NEPRA Act.

(II) In response to Para 9 of the Said Letter, we are unable to understand as to how KE has prima facie violated Schedule I and II of its Generation License as well as Rule 4 (f) of the NEPRA PSDR 2005 read with section 21(2) (b) of the NEPRA Act. In this regard, please note that KCCPP and BQPS II were not commissioned on alternate fuel owing to gas supply commitment given by SSGC and no directions were given by NEPRA to run these plants on High Speed Diesel (HSD). Hence as such these plants only operated on Natural Gas. Furthermore, the issue of gas availability, which affected KE's generation through its gas based plants in winter months has been brought to the knowledge of NEPRA several times during our monthly and quarterly tariff adjustments hearings and which has been duly noted by NEPRA in its tariff determination dated March 14, 2017 for the quarter ended December 2015, relevant excerpt reproduced below for ease of reference:

"...In addition, lack of gas availability as well as low gas pressure has continued to affect utilization of its highly efficient gas based plants...."

In view of above, we are unable to understand as to how KE has violated the terms and conditions of its license by not commissioning its plants on alternate fuel, when KE has never been mandated or directed by NEPRA to commission these plants on HSD nor





any term and condition of KE's Generation License requires KE to keep its plants operational on alternate fuel. Therefore, we deny any liability for any alleged breach.

Further, KE has always complied with Rule 4(f) of NEPRA PSDR 2005 in both letter and spirit. However, owing to significant curtailment of gas supply from SSGC during the **Affected Period**, KE was forced to load shed in order to maintain system stability. Further, to avoid burdening any particular class of consumers, KE also initiated load shed on low loss Residential and Commercial (R&C) feeders and Industrial Zones so as to provide relief to other consumers of KE.

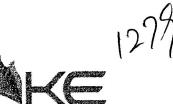
Additionally, we maintain that KE at all times has duly complied with all the relevant requirements of law, NEPRA Act and applicable documents as part of prudent utility practices.

C. Submissions and Prayer

In light of aforesaid preliminary objections, facts, grounds and averments, it is submitted and prayed:

- (i) That any violation as alleged in the Said Letter of any provisions of the applicable license, applicable documents or the rules, regulations and sections relied upon by NEPRA are entirely denied by KE as if the same were specifically set out herein and traversed, to this extent, KE has not violated any provisions of the NEPRA Act nor has violated any applicable NEPRA Rules and Regulations, terms and conditions of its Generation and Distribution license.
- (ii) That KE's generation fleet includes gas fired plants, which were not fully utilized due to significant curtailment of Natural Gas by unilateral action of SSGC which was beyond the reasonable control of KE and not foreseeable. In previous years, KE and SSGC have mutually agreed through payment plans to have additional supplies of natural gas in the hot summer months to cater for the higher electricity consumption during these periods. However, surprisingly this year, SSGC refused to increase gas supply from 90 MMCFD.
- (iii) That had there been no shortage / curtailment of gas supplies by SSGC to the KE, the power supply situation to the city would have remained normal and no-load management would have been carried out.





- (iv) That NEPRA in its advisory to GoP (MoE), acknowledged that gas curtailment is one of the major issues which was required to be addressed on top priority to eliminate the suffering of consumers and recommended immediate restoration of gas supply to 190 MMCFD.
- (v) That the shortage / curtailment of gas supplies by SSGC to the KE power plants has been duly acknowledged by the GOP whereby the Prime Minister of Pakistan had to intervene to restore the supply of gas to KE pursuant to which the electric power services were restored to the levels occurring / existing prior to the unscheduled gas outages caused by SSGC.
- (vi) That the shortage / curtailment of gas supplies by SSGC to the KE power plants is a force majeure event due to its peculiar, exceptional and unusual circumstances and hence KE is exempted in light of Rule 10 (2) of the NEPRA Performance Standard (Distribution) Rules 2005.
- (vii) That two plants of KE namely KCCPP and BQPS II were not commissioned on alternate fuel i.e. HSD as requirement to operate them on HSD never ensued due to commitment of SSGC and ECC allocation for supply of 276 MMCFD natural gas to KE, on the basis of which addition of the aforementioned plants was approved by NEPRA through issuance of LPM IV of KE's generation license.
- (viii) That NEPRA never directed KE to keep KCCPP and BQPS II operational on High Speed Diesel (HSD) or RLNG as an alternate fuel, neither separate heat rates/tariff/O&M costs have been determined by NEPRA.
- (ix) That to avert the crisis and effectively manage the situation at hand, KE carried out load management, which included load shed on low loss as well as industrial feeders so as to avoid discrimination between particular classes of consumers.
- (x) That there is no omission on the part of KE that constitutes violation of the provisions of the NEPRA Act or the applicable documents.
- (xi) That even otherwise the notice of explanation issued by NEPRA is time barred pursuant to Rule 4 (1) of the NEPRA (Fines) Rules 2002 as NEPRA cannot issue any explanation notice after passage of fifteen (15) days of coming to knowledge of any alleged violation.





(xii) That KE denies the occurrence of any violation of the provisions of the NEPRA Act, Rules, Regulations and or applicable documents.

D. Prayer

In light of aforesaid, it is prayed that:

- i. The aforementioned KE's response to the Said Letter dated April 18, 2018 under Rule 4 (1) & (2) of the Fines Rules is accepted.
- The Said Letter 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 the Fines 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.

In addition to aforementioned, KE reserves the right to raise further grounds, facts and circumstances in the future. Further this letter is being issued without prejudice to KE rights at law or equity.

Sincerely,

Muhammad Aamir Ghaziani

Director - Finance and Regulations

Enclosure: Annexures A-D