



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

1229

No. NEPRA/DG(M&E)/LAD-01/4158

March 14, 2018

Chief Executive Officer
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 pursuant to Sections 21 and 25 of the NEPRA Act, the Authority has granted a Distribution License (No. 09/DL/2003, dated 21/07/2003) to K-Electric Limited (hereinafter referred to as "Licensee") to engage in the distribution of electric power business as stipulated in its Distribution License and make sales of electric power to all the consumers within its service territory on a non-discriminatory basis; and

3. 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

4. WHEREAS pursuant to the Section 21 (2) (f) of the NEPRA Act, the Licensee shall follow the performance standards laid down by the Authority for distribution and transmission of electric power, including safety, health and environmental protection instructions issued by the Authority or any governmental agency; and

5. WHEREAS the Authority issued an Explanation to the Licensee under Rule 4(1) & (2) of NEPRA (Fines) Rules 2002 on 23.06.2017. The basis of Explanation to the Licensee included the following;

4. *WHEREAS, the premises (i.e. generation, transmission & distribution facilities) of licensee were visited by NEPRA team on 01-05th June 2017 to verify the implementation status of directions of the Authority communicated through its decision dated 25.03.2016 which are summarized as under;*

i. To provide electricity to all consumers without any discrimination who meets the consumer eligibility criteria and are neither defaulters nor involved in theft of electricity.

Contd....P/2

- ii. To provide accurate and timely information as required by the Authority from time to time.
- iii. To increase the generation capacity and improve the transmission & distribution system in accordance with the investment plans submitted.
- iv. To complete all indicated investment plans within the timelines and file quarterly reports to the Authority.

In addition, team was also assigned to monitor and verify Load Shedding indifferent areas of Karachi, the complaints of general public, media reports regarding un-announced load shedding, un-due delay in restoration of supply, current generation capacity of KE and its utilization, frequency of tripping of generation plants and transmission/distribution networks and implementation status of investment plans for system improvement.

5. WHEREAS, during the visit following, prima facie, violations came to the notice of the Authority regarding compliance with the directions of the Authority dated 25.03.2016, provisions of NEPRA Act, terms & conditions of distribution license granted to KE and implementation of Performance Standards (Distribution) Rules:

- i. KE meets the gap between demand & supply, ranging from 300 MW – 900 MW by carrying out load shedding in its service area depending on the AT&C losses. The KE's stated policy for load shedding is as follows;

| Period | Feeders | | | | |
|---|----------|---------------|----------------|----------------|------------|
| | Low Loss | Medium Loss | High Loss | Very High Loss | Industrial |
| Normal Load Shed Prior to May 21, 2017 | 0 | 3 hrs | 6 hrs | 7.5 hrs | NIL |
| Load Shed During Affected Period May 21-June 02, 2017 | 2 hrs | 2.5 -3.75 hrs | 6.5 - 6.75 hrs | 8 – 8.25 hrs | 8 hrs |

- ii. During the visit of 132 kV Surjani grid station and 132 kV Johar grid station, KE's available record at grid stations revealed that prolonged hours of load shedding (i.e. 14-16 hours) was being carried out on various feeders. The feeders were for longer hours than KE's stated load shedding policy even before the period when disturbance started and during the abnormal conditions prevailing from May 21, 2017 onwards.
- iii. On some high loss feeders load shedding was ranging from 20 hours to 23 hours whereas, 15 hours load shedding observed on some Medium Loss and Low Loss feeders as well. Furthermore, KE failed to substantiate the claim of back feed on feeders with the evidential record.

1231

iv. The details of outages on various feeders as noted from log sheets at above mentioned grid stations are as follows:

| Grid Station | S.No. | 11 kV Feeder | Type | Interruption | |
|--------------|-------------------------------|----------------------|----------------|------------------|------------------|
| | | | | Date (May, 2017) | Duration (Hours) |
| Surjani Grid | 1 | Deh Taiser | High Loss (HL) | 4 | 20 |
| | | | | 8 | 12 |
| | | | | 9 | 10 |
| | | | | 14 | 13 |
| | | | | 18 | 14 |
| | 27 | 23 | | | |
| | 2 | Deh Taiser-5 | HL | 21 | 12 |
| | 3 | Gulshan-e-Shiraz | HL | 7 | 11 |
| | | | | 9 | 12 |
| | | | | 18 | 13 |
| | 4 | Anarkali+Bright Star | HL | 28 | 15 |
| | | | | 4 | 12 |
| | 5 | Global City | HL | 7 | 10 |
| 18 | | | | 12 | |
| 6 | Ever Green+Saiban | HL | 18 | 11 | |
| 7 | Michael Academy | HL | 9 | 10 | |
| | | | 28 | 11 | |
| 8 | Noble Point+Pole 12/3 | HL | 8 | 11 | |
| 9 | Sultan Plaza + CAP-2 | HL | 9 | 10 | |
| 10 | Al-Watan | HL | 21 | 10 | |
| 11 | Stylish Garden | HL | 21 | 12 | |
| 12 | Sector L-1 RMU+ Saima Arabian | HL | 28 | 12 | |
| 13 | Maryamabad | HL | 28 | 12 | |

| Grid Station | S. No. | 11 kV Feeder | Type | Interruption | |
|--------------|------------------------|--------------------|----------------|------------------|------------------|
| | | | | Date (May, 2017) | Duration (hours) |
| Jauhar Grid | 1 | Marora+Prem Villas | High Loss (HL) | 9 | 11 |
| | | | | 13 | 13 |
| | | | | 16 | 10 |
| | | | | 17 | 10 |
| | | | | 25 | 10 |
| 2 | Afnan Duplex | HL | 20 | 12 | |
| 3 | Dubai Mall+Bhittaiabad | HL | 16 | 12 | |
| | | | 29 | 13 | |
| 4 | Rafi+Rimjhim | Medium Loss (ML) | 25 | 15 | |
| 5 | Safari Phonex | Low Loss (LL) | 22 | 15 | |

- v. Consumer feedback was also obtained from below mentioned areas of Karachi which also asserted extended hours of load shedding other than KE's stated policy.

| S.No. | Area | Loss Category | Avg. Load Shedding (Hours) |
|-------|-----------------------|---------------|----------------------------|
| 1 | Jackson Road, Keamari | High Loss | 16 |
| 2 | Liaquatabad | High Loss | 14 |
| 3 | Nazimabad | High Loss | 14-16 |
| 4 | Orangi Town | High Loss | 15-20 |
| 5 | Surjani Town | High Loss | 14-16 |
| 6 | Malir | High Loss | 14-15 |
| 7 | Korangi | High Loss | 15-20 |
| 8 | North Karachi | Medium Loss | 08-10 |
| 9 | Bahadurabad | Medium Loss | 10-12 |
| 10 | Shah Faisal | Medium Loss | 12 |
| 11 | Gulshan-e-Iqbal | Low Loss | 3-5 |
| 12 | Gulistan-e-Jauhar | Low Loss | 4-6 |

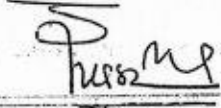
6. WHEREAS, it was also noted by the team that the distribution system of KE was weak and fragile, this caused frequent trippings. These distribution system constraints also added in power supply interruptions to the consumers. Moreover, several complaints about low voltage, fluctuations in voltage, frequent tripping of Pole Mounted Transformers (PMT) and delayed response time on complaints were also reported by consumers during survey in various areas of Karachi.
7. WHEREAS, in view of above stated facts, prima facie, it appears that KE violated directions of the Authority communicated through its decision dated 25.03.2016 regarding provision of electricity to all consumers without any discrimination who meets the consumer eligibility criteria and are neither defaulters nor involved in theft of electricity.
8. WHEREAS, KE has, prima facie, violated Rule 4(f) of the Performance Standards (Distribution) Rules, 2005 which requires that 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. Furthermore, KE has also been found in violation of its own stated load shedding policy for various categories of consumers depending upon AT&C losses.

1233

9. *WHEREAS, KE has also, prima facie, violated Clause SPR 3 'Operational Constraints' of Distribution Code, 2005 which states that Licensee shall develop procedures and guidelines to overcome the operational constraints in the distribution system which includes but not limited to the communication and control system constraints, distribution system replacements and improvements.*
10. *WHEREAS in the opinion of the Authority, KE's failure, as detailed above, to comply with the directions of the Authority issued vide Order dated 25.03.2016, Performance Standards (Distribution) Rules 2005, Distribution Code 2005, terms and conditions of the license and provisions of NEPRA Act constitute violation of the provisions of the "Applicable Documents" as defined in the Rule 2(b) of NEPRA (Fines) Rules, 2002 and therefore the Authority has directed the undersigned to seek an explanation to this effect.*
6. **WHEREAS** the response of the "Explanation" was submitted by the Licensee vide its letter dated 28.07.2017, wherein, the Licensee contended to the points as mentioned in the abovementioned Explanation and requested for provision of an opportunity of hearing; and
7. **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 26.10.2017, wherein, the representatives of the Licensee made their submissions against the subject Explanation; and
8. **WHEREAS** the response of the Explanation as submitted 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 the satisfactory response to the Explanation, therefore, rejected the same vide an order dated 14th March, 2018, recording the reasons of such rejection.
9. **AND WHEREAS** the Authority is constrained to believe that the violation mentioned at Para 5 above have infact 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.
10. **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.
11. 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:-

Order dated 14th March, 2018 (14 Pages)


14 03 18
(Syed Safer Hussain)
Registrar



National Electric Power Regulatory Authority

In the matter of Explanation 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 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. Rule 4(f) of Performance Standards Rules prescribes principles and priorities of load shedding for any distribution company. 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.*
 - (iv) *When instructed by NTDC, the distribution companies shall shed the load in the following order, namely:-*
 - (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.*



1235

- (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.

3. Clause SPR 3 of Distribution Code 2005 prescribes guidelines to overcome the operational constraints for any distribution company. It states that:

The Licensee shall develop procedures and guide lines to overcome the operational constraints in the distribution system which includes but not limited to; the communication and control system constraints, distribution system replacements and improvements and following guidelines:-

- (a) Pre-arranged shut down for maintenance of lines and grid stations should be avoided during the months of May to August as far as possible and to co-ordinate with other utility (telephone, cable, gas) officials.
- (b) Pre-arranged shut down must not be allowed during the peak load hours.
- (c) Communication between the system operator and grid station staff (especially carrier system) must be maintained and kept in working order all the times.
- (d) Availability of transport in working order all the time with adequate maintenance and operation staff along with necessary tools and service equipment.
- (e) Availability of material and proper T & P with the maintenance and operation staff to attend emergency.
- (f) To properly schedule preventive maintenance of the lines and grid stations.
- (g) Availability of telephone attendant in complaint offices with the telephone in working order all the times.
- (h) To provide mobile telephones or wireless set to the complaints attendant and maintenance staff.
- (i) Establishing the training centers in the field to train the line staff in operation, maintenance and construction of distribution system.

4. Background

KE system experienced frequent breakdowns and extended load-shedding, which were reported during the month of May, 2017. The media also reported that prolonged hours of load shedding continued in Karachi during the holy month of Ramadan also. The Authority took notice of the abovementioned events in KE and sent letters to KI: for report in the matter.

[Handwritten signatures]



5. Further, High Court of Sindh at Karachi in its decision dated 29.05.2017 in CP-D-3891/2016 directed NEPRA as follows:

- i. *The NEPRA Authorities, being regulator of the K-Electric, are directed to make sure that the instructions issued by it vide order dated 25.03.2016 are being complied with by the K-Electric Authorities in its letter and spirit.*
- ii. *Needless to state that in case of non-compliance by the K-Electric Authorities, the NEPRA Authorities would be at liberty to take appropriate action in accordance with law against the K-Electric Authorities.*

6. The Authority communicated following directions to the Licensee through its decision dated 25.03.2016:

- i. *To provide electricity to all consumers without any discrimination who meets the consumer eligibility criteria and are neither defaulters nor involved in theft of electricity.*
- ii. *To provide accurate and timely information as required by the Authority from time to time.*
- iii. *To increase the generation capacity and improve the transmission & distribution system in accordance with the investment plans submitted.*
- iv. *To complete all indicated investment plans within the timelines and file quarterly reports to the Authority.*

7. In compliance to the aforesaid decision of the High Court of Sindh and considering the complaints of general public and media reports, the Authority decided to verify the implementation status of directions of the Authority communicated through its abovementioned decision dated 25.03.2016. For this purpose, NEPRA team visited the generation, transmission and distribution facilities of K-Electric from June 01, 2017 to June 05, 2017, in order to monitor and verify load Shedding in different areas of Karachi, current generation capacity of K-Electric and its utilization, number of interruptions/faults and implementation of investment plans.

8. During the site visit, KE claimed that it has divided its service territory into following five (05) categories with respect to load shedding;

| Period | Category | | | | |
|---|----------|---------------|----------------|----------------|------------|
| | Low Loss | Medium Loss | High Loss | Very High Loss | Industrial |
| Normal Load Shed Prior to May 21, 2017 | 0 | 3 hrs | 6 hrs | 7.5 hrs | NIL |
| Load Shed During Affected Period May 21-June 02, 2017 | 2 hrs | 3.5 -3.75 hrs | 6.5 - 6.75 hrs | 8-8.25 hrs | 8 hrs |



KE's claims in this respect were verified from the record of KE's grid stations. The team however, noted that KE's record does not support its claims about load management in all areas. The team noted that the feeders were out longer than KE's claimed duration and as such consumers in those areas were facing longer duration of power cuts. These feeders include but not limited to Deh Tasir, Gulshan-e-Shiraz, Maryamabad and Afnan Duplex. KE's claims, that consumer on such feeders were provided electricity through alternative sources/feeders was not established.

9. In view of above, the Authority observed that the Licensee has, prima facie, failed to comply with the followings:

- a. Directions of the Authority issued vide order dated 25.03.2016 regarding provision of electricity to all consumers without any discrimination who meet the consumer eligibility criteria and are neither defaulters nor involved in theft of electricity.
- b. Rule 4(f) of the Performance Standards Rules.
- c. Clause SPR 3 'Operational Constraints' of the Distribution Code, 2005.

10. Explanation

In view of the foregoing, the Authority decided to initiate legal proceedings against the Licensee under NEPRA Fines (Rules) 2002 ("the Fine Rules").

11. Accordingly, an Explanation dated 23.06.2017 was issued to the Licensee under Rule 4(1) and (2) of the Fine Rules. Salient parts of the Explanation are as under:

5. *WHEREAS, during the visit following, prima facie, violations came to the notice of the Authority regarding compliance with the directions of the Authority dated 25.03.2016, provisions of NEPRA Act, terms & conditions of distribution license granted to KE and implementation of Performance Standards (Distribution) Rules:*

i. *KE meets the gap between demand & supply, ranging from 300 MW 900 MW by carrying out load shedding in its service area depending on the AT&C losses. The KE's stated policy for load shedding is as follows:*

| Period | Feeders | | | | |
|---|----------|---------------|----------------|----------------|------------|
| | Low Loss | Medium Loss | High Loss | Very High Loss | Industrial |
| Normal Load Shed Prior to May 21, 2017 | 0 | 3 hrs | 6 hrs | 7.5 hrs | NIL |
| Load Shed During Affected Period May 21-June 02, 2017 | 2 hrs | 3.5 -3.75 hrs | 6.5 - 6.75 hrs | 8-8.25 hrs | 8 hrs |

ii. *During the visit of 132 kV Surjani grid station and 132 kV Johar grid station, KE's available record at grid stations revealed that prolonged hours of load shedding (i.e. 14-16 hours) was being carried out on various feeders. The feeders were for longer hours than*

[Handwritten signatures]



KE's stated load shedding policy even before the period when disturbance started and during the abnormal conditions prevailing from May 21, 2017 onwards.

- iii. On some high loss feeders load shedding was ranging from 20 hours to 23 hours whereas, 15 hours load shedding observed on some Medium Loss and Low Loss feeders as well. Furthermore, KE failed to substantiate the claim of back feed on feeders with the evidential record.
- iv. The details of outages on various feeders as noted from log sheets at above mentioned grid stations are as follows;

| Grid Station | S.No. | 11 kV Feeder | Type | Interruption | |
|--------------|-------------------------------|----------------------|----------------|------------------|------------------|
| | | | | Date (May, 2017) | Duration (Hours) |
| Surjani Grid | 1 | Deh Taiser | High Loss (HL) | 4 | 20 |
| | | | | 8 | 12 |
| | | | | 9 | 10 |
| | | | | 1-1 | 13 |
| | | | | 18 | 14 |
| | | | | 27 | 23 |
| | 2 | Deh Taiser-5 | HL | 21 | 12 |
| | 3 | Gulshan-e-Shiraz | HL | 7 | 11 |
| | | | | 9 | 12 |
| | | | | 18 | 13 |
| | | | | 28 | 15 |
| | 4 | Anarkali+Bright Star | HL | 4 | 12 |
| | | | | 7 | 10 |
| 5 | Global City | HL | 18 | 12 | |
| 6 | Ever Green+Saiban | HL | 18 | 11 | |
| 7 | Michael Academy | HL | 9 | 10 | |
| | | | 28 | 11 | |
| 8 | Noble Point+Pole 12/3 | HL | 8 | 11 | |
| 9 | Sultan Plaza + CAP-2 | HL | 9 | 10 | |
| 10 | Al-Watan | HL | 21 | 10 | |
| 11 | Stylish Garden | HL | 21 | 12 | |
| 12 | Sector L-1 RMU+ Saima Arabian | HL | 28 | 12 | |
| 13 | Maryamabad | HL | 28 | 12 | |



1239

| Grid Station | S.No. | 11 kV Feeder | Type | Interruption | |
|--------------|-------|---------------------------|------------------|---------------------|---------------------|
| | | | | Date (May, 2017) | Duration (hours) |
| Jauhar Grid | 1 | Marora+Prem Villas | High Loss (HL) | 9 | 11 |
| | | | | 13 | 13 |
| | | | | 16 | 10 |
| | | | | 17 | 10 |
| | | | | 25 | 10 |
| | 2 | Afnan Duplex | HL | 20 | 12 |
| | 3 | Dubai Mall+Bhittaiabad | HL | 16 | 12 |
| | | | | 29 | 13 |
| | 4 | Raft+Rinjhim | Medium Loss (ML) | 25 | 15 |
| | 5 | Safari Phonex | Low Loss (L.L.) | 22 | 15 |

v. Consumer feedback was also obtained from below mentioned areas of Karachi which also asserted extended hours of load shedding other than KE's stated policy:

| S.No. | Area | Loss Category | Avg. Load Shedding (hours) |
|-------|-----------------------|---------------|-------------------------------|
| 1 | Jackson Road, Keamari | High Loss | 16 |
| 2 | Liaquatabad | High Loss | 14 |
| 3 | Nazimabad | High Loss | 14-16 |
| 4 | Orangi Town | High Loss | 15-20 |
| 5 | Surjani Town | High Loss | 14-16 |
| 6 | Malir | High Loss | 14-15 |
| 7 | Korangi | High Loss | 15-20 |
| 8 | North Karachi | Medium Loss | 08-10 |
| 9 | Bahadurabad | Medium Loss | 10-12 |
| 10 | Shah Faisal | Medium Loss | 12 |
| 11 | Gulshan-e-Iqbal | Low Loss | 3-5 |
| 12 | Gulistan-e-Jauhar | Low Loss | 4-6 |

6. WHEREAS, it was also noted by the team that the distribution system of KE was weak and fragile, this caused frequent trippings. These distribution system constraints also added in power supply interruptions to the consumers. Moreover, several complaints about low voltage, fluctuations in voltage, frequent tripping of Pole Mounted Transformers (PMT) and delayed response time on complaints were also reported by consumers during survey in various areas of Karachi.

7. WHEREAS, in view of above stated facts, prima facie, it appears that KE violated directions of the Authority communicated through its decision dated 25.03.2016 regarding provision of electricity to all consumers without any discrimination who meets the consumer eligibility criteria and are neither defaulters nor involved in theft of electricity.

8. WHEREAS, KE has, prima facie, violated Rule-1(f) of the Performance Standards (Distribution) Rules, 2005 which requires that 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

[Handwritten signature]



particular consumer class. Furthermore, KE has also been found in violation of its own stated load shedding policy for various categories of consumers depending upon AT&C losses.

9. *WHEREAS*, KE has also, *prima facie*, violated Clause SPR 3 'Operational Constraints' of Distribution Code, 2005 which states that Licensee shall develop procedures and guidelines to overcome the operational constraints in the distribution system which includes but not limited to the communication and control system constraints, distribution system replacements and improvements.

10. *WHEREAS* in the opinion of the Authority, KE's failure, as detailed above, to comply with the directions of the Authority issued vide Order dated 25.03.2016, Performance Standards (Distribution) Rules 2005, Distribution Code 2005, terms and conditions of the license and provisions of NEPRA Act constitute violation of the provisions of the "Applicable Documents" as defined in the Rule 2(b) of NEPRA (Fines) Rules, 2002 and therefore the Authority has directed the undersigned to seek an explanation to this effect.

12. Submission of the Licensee

The Licensee vide its letter dated 05.07.2017 requested for extension of one month time to submit the response of Explanation and the same was granted by the Authority vide letter dated 20.07.2017. Accordingly, the Licensee submitted its response to the abovementioned explanation on 28.07.2017, which is summarized as under:

- a. Force majeure situation prevailed in the system during the period 21.05.2017 to 02.06.2017 and the same has not been considered by NEPRA.
- b. The intermittent load shed carried out by KE from 09.05.2017 to 11.05.2017, owing to tripping of 2 units of BQPS 1 and curtailed gas quota of 160 mmcf/d as against 220 mmcf/d from SSGC. In order to effectively manage the system and to avoid excess load shed on residential and commercial areas (high loss and very high loss) during the material events, load shedding was carried out in industrial and low loss areas also.
- c. The outage duration mentioned by NEPRA is based on grid logs, 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 actual duration of outage based on AMR data is attached. Moreover, the feeders mentioned as 'High Loss' by NEPRA fall within the purview of 'Very High Loss' category as per KE's policy.



- d. Most of the outages occurred at "Deh Tasir" feeder, which is highly Kunda infested and is feeding into an area that has multiple mafias operating including installation of illegal PMTs.
- e. Grids in question i.e. Surjani and Jauhar are currently operating near peak load due to an unprecedented demand growth in these areas. However, KIE has already initiated investments in this regard. Moreover, findings of NEPRA in respect of few feeders cannot be assumed to replicate over the remaining feeders.
- f. NEPRA's observation regarding load shedding as per consumers' feedback does not specify any contravention or invocation of any specific infringement of the applicable regulatory documents and the same is not substantiated with the evidential record.
- g. The details of feeders shared by NEPRA makes up less than 1% of the total feeders of KE in terms of number and less than 0.5% in terms of consumer base of KIE. Therefore, an opinion cannot be formed on the performance of distribution operations of KE, based on these feeders.
- h. The System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) for the KIE has improved over the years.
- i. The average outage duration during the month of May excluding the force majeure event occurring from 21.05.2017, is in line with the stated load shed policy of KIE.
- j. The allegation that KE distribution system is weak and fragile is denied as the same is based on outages occurring due to abnormal conditions and isolated readings at a particular point of time which cannot be reflective of the actual state of affairs.
- k. Pursuant to the NEPRA's rules and regulations, uninterrupted supply of electricity is not required to be ensured in case of theft, defaults in payment and where eligibility criteria is not met. Government of Pakistan has also formalized load shed through Pakistan Power Policy, 2013 which has been duly ratified by the Council of Common Interest (CCI) in its meeting held on 31.07.2013. Accordingly, KIE's load shedding policy is in line with both NEPRA's rules and regulations and Pakistan Power Policy, 2013.
- l. KIE is at a loss to understand as how KE violated its own load shed policy. KIE has prepared load management schedules in line with the rule 4(f) of the NEPRA PSDR 2005 and shared the same with NEPRA team during the visit. Moreover, intermittent load shed was carried out in low loss and industrial areas as well, in order to ensure that the residential and commercial consumers of high loss and very high loss areas are not excessively overburdened.

[Handwritten signature]



- m. KE has well established procedures and guidelines to overcome the operational constraints in the distribution system and such policies are available for NEPRA team to review.
- n. KE has fully complied with the directions of the Authority entailed in its decision dated 25.03.2016 and accordingly, all allegations of violations of Distribution Code 2005 and directions of the Authority are denied being baseless and unsubstantiated.
- o. KE has not only completed the investment plan as indicated in NEPRA's decision dated 25.03.2016 but has rather exceeded the investment targets.
- p. NEPRA has failed to take a holistic approach and obtain data consistently for a period of at least one month or more based on normal conditions before reaching any conclusions. Therefore, KE firmly believes that the notice under reference issued to KE has been issued under a mistaken apprehension of the facts and the relevant provisions.
- q. The NEPRA Authority is therefore requested to accept the explanations as given by the KE herein and order the matter to be closed. However, if NEPRA for any reason wishes to proceed further into the matter, then KE would like to avail the opportunity of a personal hearing in the matter to fully elaborate its point of view supported by valid and cogent evidence and clarify its ground of objection to the said notice.

13. Hearing

The Authority considered the response of the Licensee and decided to allow an opportunity of hearing under Rule 4(5) of the Fine Rules. Accordingly, hearing in the matter was held on 26.10.2017. During the hearing, following submissions were made by the representatives of the Licensee:

- a. Force majeure situation prevailing in the system during the period May 21st, 2017 to June 2nd, 2017 as communicated by KE vide letter Ref // DGM (RA)/NEPRA/2017/91, (RA)/NEPRA/2017/1764, (RA)/NEPRA/2017/1917, KE/BPR/NEPRA/2017/100 and KE/BPR/NEPRA/2017/106 dated 15th, 22nd, 26th 30th & 7th June 2017.
- b. These events were caused by:

Curtailed Gas Quota from 9th to 11th May'17:

There was curtailed gas quota of 160 mmcfd as against 220 mmcfd from SSGC from the period 9th to 11th May 2017 and effecting capacity generation of units of



1243

BQPS I. To effectively manage the load, intermittent load shed was carried on rotation basis in low loss areas of the city which included the industrial segment. (Communicated to NEPRA vide letter ref # DGM (RA)/NEPRA/2017/91 dated May 15, 2017)

Tower collapse causing outage of 500kV circuits b/w Guddu and Dadu on 15th & 21st May'17:

On 21st May'17 @ 1842 Hrs, 500kV Guddu/Dadu circuit tripped due to collapse of towers. The 500kV Dadu/Shikarpur circuit was already tripped since 15th May'17 due to same reason. The tripping of this circuit de-synchronized the Southern region of NTDC along with KE from the National Grid.

This de-synchronization created unstable power condition in the southern island comprising of HUBCO, Jamshoro, Dadu & KE and restricted Import from NTDC with severe frequency variation.

Pickaxed cable of 132kV Queens Road / Old town circuit on 21st May'17 to 26th May'17:

132kV Underground Queens Road / Old town circuit was pickaxed by KWSB during their work near MachiMiani Road on 21st May'17 due to which extra load shedding was done at associated grids to avoid overloading of back feeding circuits. After completion of repair work, circuit normalized on 27th May'17.

Tripping in NTDC-KE Southern island:

Events of 28th & 29th May' 17 were on account of Generation and Transmission constraints resulting in loss of capacity as NTDC & HUBCO Lines / units tripped.

KE went into Island Mode as Under Frequency Relays (UFRs) were operated. However, on these occasions, KE managed to isolate its system and restored its power to the grids through subsequent operations. For system to operate in constraint, load management was carried out.

- c. KE is carrying out load shedding on the basis of losses and recovery and the same has been acknowledged by NEPRA vide its decision in respect of KE's review motion. Therefore, the point of discrimination in the Explanation notice served upon KE does not seem appropriate.
- d. KE had to cope up with a number of challenges such as managing 800-900 MW shortfall, ensuring continuity of supply to the residential and commercial connections of Karachi during Sehr/Iftar timings in the holy month of Ramadan and maintaining the system stability keeping in view its paramount importance. All this necessitated the load management in KE network.



- e. The outage duration mentioned by NEPRA is based on grid logs, 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.
- f. Most of the outages occurred at "Deh Tasir" feeder, which is highly Kunda infested and is feeding into an area that has multiple mafias operating including installation of illegal PMTs. It is pertinent to mention that KE can't even lodge an FIR against such illegal practices in these areas.

Analysis/Findings of the Authority

14. The Licensee has submitted in its response to the Explanation and in the subsequent hearing that the situation prevailed in the system during the period May 21 to June 02, 2017 may be considered as Force Majeure. In this regard, the Authority observes that the Licensee requested the same separately vide letter dated 22.05.2017 and the Authority has rejected the request of the Licensee for its force majeure claim under the Performance Standards Rules. The decision of the Authority has already been communicated to the Licensee on 01.08.2017.
15. The Licensee has also made reference to tripping of 500kV Guddu/Dadu circuit on 21.05.2017 which de-synchronized the Southern region of NTDC along with KE from the National Grid and created unstable power condition in the southern island restricting import from NTDC. In this regard, the Authority observes that the same submission was made by the Licensee vide letter dated 22.05.2017 to claim force majeure under Performance Standards Rules and the Authority has rejected the same vide letter dated 01.08.2017. Moreover, the Authority observes that the Licensee has drawn averagely 517 MW of power from NTDC during the period from 20.05.2017 to 29.05.2017, which clearly reveals that the Licensee was getting considerable supply from NTDC even during the affected period. Therefore, such claim of de-synchronization and restriction of import of power from NTDC is not justified.
16. The Licensee has submitted that 132kV Underground Queens Road/Old town circuit was pickaxed by Karachi Water & Sewerage Board (KWSB) during their work near MachiMiani Road on 21.05.2017 due to which extra load shedding was done at associated grids to avoid overloading of back feeding circuits. The Authority observes that the reason behind this incident was the lack of coordination between Licensee and KWSB. The Licensee should have taken necessary preventive measures in this regard instead of punishing the good paying consumers of Karachi by increasing the duration of load shedding due to its own failure and deficiencies.
17. The Licensee has further argued that the point of discrimination in the Explanation served by NEPRA does not seem appropriate as KE is carrying out load shedding on the basis of losses and recovery and the same has been acknowledged by NEPRA vide its decision



1245

dated 09.10.2017 against KE's review motion. In this regard, the Authority observes that NEPRA has only acknowledged that it would be unfair with the Licensee to set a target of zero load shedding for those areas where its recoveries are low. This does not mean that the Licensee has been allowed to carry out *unscheduled prolonged hours of load shedding* in such areas. Being a distribution licensee, the Licensee should have followed the requirements of Rule 4(f) of the Performance Standards Rules and should have prepared schedules of load shedding, which demonstrate the priority order and rotate load shedding within those groups in a non-discriminatory manner. The Licensee should have also kept the principle of proportionality in mind so as not to excessively burden a particular consumer class. Whereas, in the subject case, it has been observed that the Licensee not only violated the abovementioned Rule but deviated even from its own designed criteria, resultantly, load shedding extended from 14 to 16 hours in Karachi during the month of May, 2017.

18. The Licensee has stated that the outage duration mentioned by NEPRA is based on grid logs, which do not represent hourly load shed rather record the load in Amperes at specific point in time and therefore cannot be treated as outage for the whole hour. In this regard, the Authority observes that grid logs are the main source of assessing the duration of load shedding on any feeder and if the tripping on any feeder records for less than an hour, it must be clearly mentioned in the grid log and noted accordingly. In view of foregoing, it can be said that the Licensee has not prepared log sheets properly.
19. Further, with respect to submission of the Licensee that most of the outages occurred at "Deh Tasir" feeder, which is highly Kunda infested and has multiple mafias operating including illegal installation of PMTs. The Authority observes that submissions of the Licensee are illogical and meaningless and go beyond its own criteria of load shedding on 'Very High Loss' feeders. The Licensee is already carrying out load shedding for 7.5 hours/day in such areas of Karachi. Therefore, there is no justification to carry out further load shedding on 'Deh Tasir' feeder on the basis of grounds such as operation of multiple mafias, installation of illegal PMTs, and others.
20. The Licensee has further submitted that average outage duration during the month of May, 2017 excluding the force majeure event occurring from 21.05.2017 is in line with its stated load shed criteria. Such submission of the Licensee is not based upon ground facts as NEPRA team physically verified the record of outages which revealed that even before 21.05.2017, the duration of outages ranged between 10 to 20 hours/day on different feeders.
21. The Authority would like to address the objection raised by the Licensee that NEPRA's findings in respect of few feeders cannot be assumed to replicate over the remaining feeders. It is pertinent to highlight that most of the hue and cry was reported from the consumers of high loss and very high loss areas, therefore, the sample of feeders selected by NEPRA was enough to gage the gravity of problem faced by the people of Karachi due to prolonged hours of load shedding and to verify the voice of public in such areas.



22. Likewise, the Licensee claimed that observation of NEPRA about load shedding based on consumers' feedback is not substantiated with evidential record. It is reiterated that the Authority observations given regarding load shedding are based on physical inspection by NEPRA professionals to verify the facts. In this regard, a complete survey of ten different localities of Karachi was carried out which include Keamari, Liaquatabad, Malir, Korangi, Surjani Town, Orangi Town, Gulistan-e-Jauhar, Nazimabad, Shah Faisal Colony and Bahadurabad.
23. In addition to above, the Licensee has stated that it has not only completed the investment plan as indicated in NEPRA's decision dated 25.03.2016 but has rather exceeded the same. In this regard, the Authority observes that the investments carried out by the Licensee in the distribution segment are not substantiated by the impact in terms of improvement in the performance of distribution system such as reduction in number of tripping, transformation of high loss and very high loss feeders into medium loss/low loss and etc. Therefore, theoretical compliance is of no importance till the time ground realities substantiate the same.
24. The Authority has gone through submissions of the Licensee that through effective management, sufficient electric power generation and upgradation of weak & fragile power distribution network, the Licensee could have sustained any variation in supply of power from NTDC and could have successfully managed the crises situation, if any. However, it failed to do so and instead, the Licensee punished the good paying consumers of Karachi during the holy month of Ramadan by increasing the duration of load shedding throughout the city in a discriminatory manner.



1247

25. Decision

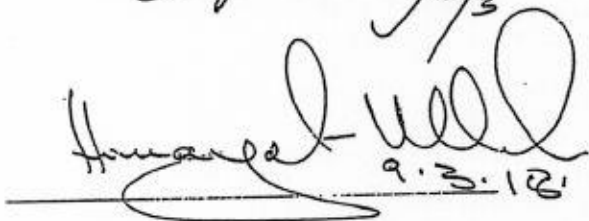
Considering the submissions of the Licensee in light of the Performance Standards Rules and the Distribution Code, the Authority is of the considered opinion that the Licensee has failed to provide any satisfactory response to the allegation levelled against it in the subject Explanation. Therefore, the Authority decides to issue a Show Cause Notice to the Licensee in terms of Rule 4(8) & 9 of the NEPRA (Fines) Rules, 2002.

AUTHORITY

Syed Masood-ul-Hassan Naqvi
Member (CA)


8/3

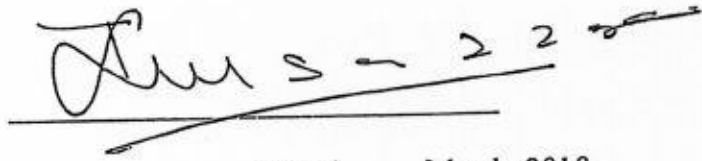
Himayat Ullah Khan
Member (Tariff)


9.3.18

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


6.3.2018

Brig (R) Tariq Saddozai
Chairman


22

Dated ___ March, 2018.



