

K-Electric
Quarterly Distribution Performance Report
Quarter April - June 2016

Performance Standards Summary with Compliance Status – April to June 2016

GS-1	<ul style="list-style-type: none"> Compliant to GS-1 limits Urban & Rural 															
GS-2	<ul style="list-style-type: none"> Compliant to GS-2 limits Urban & Rural 															
GS-3	<ul style="list-style-type: none"> Compliant to GS-3 limits Urban & Rural 															
GS-4	<p>The standards limits have been exceeded on account of major investments in rehabilitation and expansion in distribution network as a part of KE's business plan.</p>															
GS-5																
GS-6	<ul style="list-style-type: none"> Compliant to GS-6 limits Urban & Rural 															
OS-1	<ul style="list-style-type: none"> System Average Interruption Frequency Index (SAIFI); Annual calculation factor 	<table border="1"> <caption>SAIFI Data</caption> <thead> <tr> <th>Year</th> <th>SAIFI</th> </tr> </thead> <tbody> <tr> <td>2010-11</td> <td>35</td> </tr> <tr> <td>2011-12</td> <td>32</td> </tr> <tr> <td>2012-13</td> <td>31</td> </tr> <tr> <td>2013-14</td> <td>25</td> </tr> <tr> <td>2014-15</td> <td>23</td> </tr> <tr> <td>2015-16</td> <td>21</td> </tr> </tbody> </table>	Year	SAIFI	2010-11	35	2011-12	32	2012-13	31	2013-14	25	2014-15	23	2015-16	21
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OS-3	<ul style="list-style-type: none"> Compliant to OS-3 limits, above 95% connections provided within time limit 															
OS-4	<ul style="list-style-type: none"> Compliant to the NEPRA specified limits 															
OS-5	<ul style="list-style-type: none"> Compliant to the NEPRA specified limits 															
OS-6	<ul style="list-style-type: none"> Load (MW) interrupted due to load shedding in each priority group; improved by 11.97% in comparison to FY 2014-15 															
OS-7	<ul style="list-style-type: none"> No Employee fatal accident while 01 non-fatal accidents occurred this quarter 															

KE Initiatives to Improve System Performance

Despite all the stated hurdles and challenges, KE management has been taking all steps to transform KE into a viable customer oriented institution based on international best practices. As part of its commitment to restore Karachi back as a “City of Lights” the company has been pursuing relentlessly, its targets for system improvement and customer satisfaction. This can be seen from some of the salient initiatives undertaken to improve the performance as discussed below:-

1. Investment

Since 2008, KE with an investment of over USD 1.2 billion has increased the power generation capacity by over 1037 megawatts along with addition of 12 new grid stations established along with addition of 482 new feeders. Furthermore, Pakistan’s most efficient 560 MW Combined cycle Bin Qasim Power Station-II, has already started generation. This state of the art project is based on a massive \$450 Million Investment, which has been financed through multi-lateral funding partnered through international financial institutions and a syndicate of Pakistani banks.

Recently K-Electric secured up to US\$ 250 million financing from US Overseas Private Investment Corporation (OPIC). The OPIC loan is a part of a US\$ 450 million investment by K-Electric into its transmission and distribution systems, including the installation of new substations, transmission line equipment, grid stations and other transmission enhancements and upgrades over the next 36 months under TP-1000 project. This is the largest ever single financing transaction by OPIC with a Pakistani company in private sector. The project will also help Support KE’s loss-reduction measures and will



include an innovative smart grid initiative to more accurately distribute and utilize existing power. Our partnership with OPIC will play an important role towards the enhancement of our transmission & distribution network and will improve the power supply situation in Karachi.

2. System Enhancements

- a. **Installation of new Feeders:** 20 new feeders have been energized at existing grid stations to reduce long duration power supply interruptions during April – June 2016.
- b. **Feeder Maintenance Program:** A robust feeder rehabilitation program including APM & maintenance of high noise or high fault areas executed on identified 214 feeders, costing an average of PKR 3 million per feeder with complete revamping and maintenance of depleted network that includes maintenance of overhead lines, Substations, PMTs, pin & disk insulators, activating protective devices etc. to reduce interruptions resulting in reduction of transient feeder tripping, wire broken, and other overhead line faults. During April – June 2016 preventive maintenance of 32 feeders was completed out of 142 more feeders planned for preventive maintenance this year.
- c. **LT Preventive maintenance:** LT Preventive maintenance of PMTs and associated LT network also carried out in line with feeder maintenance. In this respect during April – June 2016, LT Preventive maintenance on the remaining 110 PMTs took place out of 1,540 PMTs which were selected for the year. This will reduce un-planned interruptions on feeders
- d. **Installation of Knife switches and Earth Fault Indicators (EFI):** 114 Knife switches and 372 EFIs have been installed in 11 KV network to achieve operational flexibility and quick fault localization
- e. **New PMTs Energized:** During April – June 2016, 290 new PMTs installed covering both domains of System Improvement schemes in overloading areas & new PMTs installed under New Connection scheme.
- f. **PMT/Substation Grounding:** Complete grounding provided in 712 PMTs/Substations protecting electrical equipment's from higher short circuit currents and resulting damage.
- g. **Pole Grounding:** 407 LT poles grounded in critical accident prone areas during April – June 2016 to enhance public safety.
- h. **Replacement of Copper Conductor with Aerial Bundled Cable (ABC):** To eradicate issues like hook connection, snapping of wire, overloading, electrocution and voltages fluctuation, KE launched ABC Project under which low tension bare wires from PMT to consumer meter are being phase wise replaced by Aerial Bundle Cable. In this respect, during April - June 2016 about 292.5 KM existing LT (400 V) Network converted into Aerial Bundle Cable which will result in reduced number of power supply interruptions and theft cases.

i. Special Projects:

Under this project 18 feeders of **North Nazimabad Cluster** have been optimized, including addition of 46 new PMTs, PM of 223 PMTs and ABC of 127 PMTs. Post Execution analysis of 18 feeders revealed technical loss reduction from 7.91% to 5.11%, while payback period stands at 14 months. Improvement of 39% in voltage profile has also been witnessed.

Under this project 22 feeders of **Bahadurabad Cluster** have been optimized. The project included addition of 29 new PMTs, PM on 79 PMTs and ABC on 11 PMTs. Post Execution analysis of 22 feeders revealed technical loss reduction from 6.61% to 5.85%, while payback period stands at 28 months (being a low loss cluster). Improvement of 33% in voltage profile has also been witnessed.

j. Busbar arrangement in multi-story buildings: KE initiated LT short and long busbar arrangement in multi-story buildings on consumer meter to monitor and control electricity theft. In this regard during January - March 2016, in 230 buildings 1,127 small busbar and 124 large busbar completed with replacement of 12,995 single phase and 2,308 three phase meters replaced with digital meters.

k. Installation of AMR Meters: Another 9 AMR meters installed on feeders during April – June 2016 to monitor automated power consumption and interruption

l. SAP ISU: Implementation of SAP IS-U utility industry solution for customer care and billing, covering all consumer facing offices. This is the first implementation of its kind in Pakistan.

m. KE - Mobile and E-Services: KE has developed a full suite of Mobile and E- Services for the convenience of our customers. Customers can now get in touch with us instantly through their mobile and E-mail for any assistance that they may require from KE 8119 KE Mobile Service - Host of features at your finger-tips through SMS. It allows customers to highlight and register any technical complaints or issues, Inform customers of Load shedding timings pertaining to registered customers locality and helps us to send bulk or specific issue related messages to our customers.

3. Awards & Appreciations:

- K-Electric Receives Power Utility of the year award:** K-Electric is pleased to announce that the entity was judged the winner at the 'Asian Power Awards 2015' in the category of 'Power Utility of the Year' for Pakistan. This achievement marks another success for K-Electric by international institutions in appreciating and applauding the services of KE over the past few years.



- Corporate Social Responsibility Award – 2016:** At the eighth International CSR Summit, K-Electric was honored with its fifth 'Corporate Social Responsibility Excellence Awards' for excellence in 'Social Impact' category. This award is an acknowledgement for our ongoing commitment towards the community at large, especially in the areas of community development as well as health and youth engagement.



KE, under its Social Investment Program, empowers welfare institutions by facilitating them through free/subsidized electricity and system enhancement projects impacting **over 3.4 million individuals annually**.

- Health and Safety Risk Assessment & Control Award 2016:** Continuing to demonstrate our commitment to HSEQ, KE has won the "Health and Safety Risk Assessment and Control" award at the International Summit for Environment, Health, Safety and Security 2016. This is our second consecutive year of winning this award. The jury members, from the Fire Protection Association of Pakistan and The Professionals Network, unanimously decided to give this award to KE for our health and safety vision and practices.



- KE wins Employers Federation of Pakistan / ILO Occupational Health, Safety & Environment (OHS&E) Award 2015:** Employers Federation of Pakistan (in collaboration with ILO) has awarded 11th EFP – OSH&E award-2015 to KE in all categories.



- **KE Wins 5th Consecutive National Fire & Safety Award – 2016:**

For the Fifth year in a row, KE has been awarded the National “Fire and Safety Award - 2016” for demonstrating an effective Fire and Safety Management system in line with the Company’s Vision.



- **Annual Environment Excellence Award – 2015:**

KE was awarded “Annual Environment Excellence Award 2015” for the seventh consecutive year. This award is presented by National Forum for Environment and Health (NFEH), jointly supported by Environment Protection Department, Government of Sindh.



- **KE Wins the Global Transformational Business Award for its Exceptional Performance:**

KE (KE) has been honored with the prestigious FT/IFC Transformational Business Award for exceptional achievement in Project Finance – Energy. KE became the only company in the energy sector to have won the international award recognizing KE’s financial achievements in the field.



- **Generation Plants Integrated Management Systems Certification:**

All Generation plants of KE are now certified in all the three management systems i.e. OHSAS:18001 Safety Management System, ISO:14001 EMS & ISO:9001 QMS; reflecting their compliance in the fields of occupational health and safety management systems and for being in conformity with environmental prudence.

- **KE-ECD wins Energy Leader Award-2014:**

The KE Energy Conservation Department has received the prestigious Energy Leaders Award 2014 for Best Practices in Energy Conservation, Energy Efficiency and Implementation of Efficient Practices during 2014 at a national Energy Leaders’ Summit organized by the National Forum for Environment & Health (NFEH), in collaboration with the Government of Sindh, the FPCCI and the Karachi Chamber of Commerce & Industry (KCCI).

