

**K-Electric**

**Quarterly Distribution Performance Report**

**Quarter January – March 2016**

## Performance Standards Summary with Compliance Status – January to March 2016

<b>GS-1</b>	<ul style="list-style-type: none"> <li>Compliant to GS-1 limits Urban &amp; Rural</li> </ul>													
<b>GS-2</b>	<ul style="list-style-type: none"> <li>Compliant to GS-2 limits Urban &amp; Rural</li> </ul>													
<b>GS-3</b>	<ul style="list-style-type: none"> <li>Compliant to GS-3 limits Urban &amp; Rural</li> </ul>													
<b>GS-4</b>	<ul style="list-style-type: none"> <li>Compliant to GS-4 limits Urban &amp; Rural</li> </ul>													
<b>GS-5</b>	<ul style="list-style-type: none"> <li>Compliant to GS-5 limits Urban &amp; Rural</li> </ul>													
<b>GS-6</b>	<ul style="list-style-type: none"> <li>Compliant to GS-6 limits Urban &amp; Rural</li> </ul>													
<b>OS-1</b>	<ul style="list-style-type: none"> <li>System Average Interruption Frequency Index (SAIFI); Annual calculation factor</li> </ul>	<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>33</td> </tr> <tr> <td>2012-13</td> <td>32</td> </tr> <tr> <td>2013-14</td> <td>25</td> </tr> <tr> <td>2014-15</td> <td>21</td> </tr> </tbody> </table>	Year	SAIFI	2010-11	35	2011-12	33	2012-13	32	2013-14	25	2014-15	21
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<b>OS-3</b>	<ul style="list-style-type: none"> <li>Compliant to OS-3 limits, above 95% connections provided within time limit</li> </ul>													
<b>OS-4</b>	<ul style="list-style-type: none"> <li>Compliant to the NEPRA specified limits</li> </ul>													
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<b>OS-6</b>	<ul style="list-style-type: none"> <li>Load (MW) interrupted; Improved by 7%</li> </ul>													
<b>OS-7</b>	<ul style="list-style-type: none"> <li>One Employee fatal accident and 01 non-fatal accidents occurred this quarter</li> </ul>													

## 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 USD 1.4 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.

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:** 29 new feeders have been energized at existing grid stations to reduce long duration power supply interruptions during January - March 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. 142 more feeder planned for preventive maintenance this year for which work has been started. During January - March 2016 preventive maintenance of 110 feeders completed.
- 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 January - March 2016, LT Preventive maintenance on 1430 more PMTs requiring maintenance has been completed. This will reduce un-planned interruptions on feeders.
- d. **Installation of Knife switches and Earth Fault Indicators (EFI):** 330 Knife switches and 441 EFIs have been installed in 11 KV network to achieve operational flexibility and quick fault localization
- e. **New PMTs Energized:** During January - March 2016, 473 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 831 PMTs/Substations protecting electrical equipment's from higher short circuit currents and resulting damage.
- g. **Pole Grounding:** 564 HT poles, PMTs and Substations grounded and 703 LT poles also grounded in critical accident prone areas during January - March 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 January - March 2016 about 107.4 KM existing LT (400 V) Network converted into Aerial Bundle Cable which will result in reduced number of power supply interruptions and theft cases. Apart from that about 0.243 KM HT conductors replaced by HT Aerial Bundle Cable in coastal and high corrosion areas to reduce un-planned power supply interruptions.

- i. **Technical Loss reduction Project:** Under Technical Loss reduction Project in North Nazimabad Cluster 18 feeders have been completed, including addition of **46** new PMTs, PM of **223** PMTs and ABC conversion of **76** PMTs completed. Post Execution analysis of 18 feeders revealed technical loss reduction from 10.75% to 6.85%, while payback period stands at 15.9 months. Improvement of 65% in voltage profile has also been witnessed.
- j. **Busbar arrangement in multi-storey 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 436 buildings 1603 small busbar and 171 large busbar completed with replacement of 19,330 single phase and 3863 three phase meters with digital meters. This will result in reduction of power loss up to 30% in these buildings.
- k. **Installation of AMR Meters:** Another 14 more AMR meters were installed on feeders during January - March 2016 to monitor automated power consumption and interruption.
- l. **ISO-9001 QMS Certification of IBCs:** As a part of its transformation to Customer Focus, KEL is Pakistan's first distribution company to voluntarily embark upon ISO-9001 QMS Certification for its Customer Centers (IBCs). So far, till March 2016, 17 IBCs have been certified while remaining 12 IBCs are under certification process. Apart from that, 04 departments, namely GSM, PID, Real Estate and LDC were also certified for ISO 9001 QMS and other 08 departments are in process of ISO 9001 QMS Certification.
- 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.



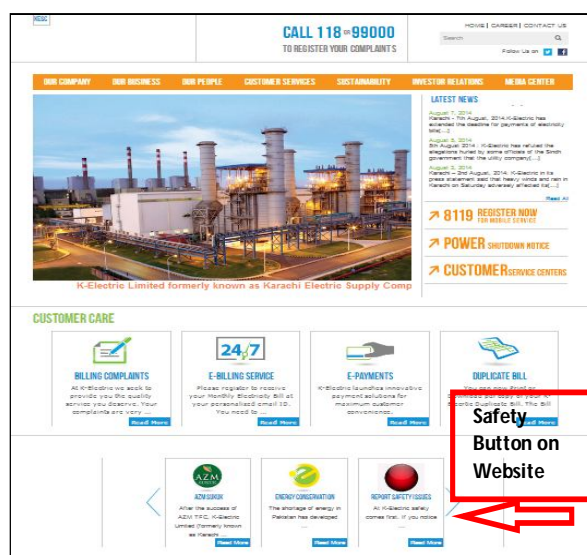
### 3. Safety Performance

In line with KE Corporate “Nobody gets hurt” philosophy, direction was set to provide a safe and injury free work environment to employees and secure power network for consumers. To adapt this philosophy a comprehensive safety management system was formulated and implemented through a multi-pronged approach including policies and procedures development, employees’ involvement through sustained safety and task related trainings, promoting ownership of safety responsibilities and accountabilities at all management levels through linkage with Annual Performance Appraisal (APA), Safety Reward and reprimand system, lessons learnt through formal accident investigations, regular safety audits, emergency response plan, risk management etc. From an initial implementation phase, the safety management system has now entered a consolidation phase where a proactive approach is in place.

**a. Employee Accidents:** 01 Employee fatal accident reported during the quarter January – March 2016 while 01 non-fatal employee accident also reported. No public incident reported this quarter.

**b. Hazard Reporting through Internet (Safe Card):**

KE is the first and only utility in Pakistan to incorporate a Safety Reporting button on its website [www.ke.com.pk](http://www.ke.com.pk) through which Safety Hazard reports can be generated by any consumer. To immediately mitigate the reported hazard, the reported issues are promptly addressed by all levels. Consumers trust in this system is reflected by the fact that, in this quarter, KE received 39 Safe Cards through internet and 9 through intranet identifying safety hazards like, broken conductors, tilted poles, exposed cables, tree branches touching conductors etc. These safety hazards were classified according to risk level and resolved within estimated time on top priority.



**c. Increase in Budget in Employee PPE/SPE:** Considering the safety of employees, KE is continuously increasing its PPE budget to provide standardized personal protective equipment to its employees. KE spent PKR 37 million on PPEs in FY 2014-15 while for FY 2015-16 a budget of PKR 86 million allocated for safety equipment and PPE.

#### 4. 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.
- KE Wins 3rd Corporate Social Responsibility Business Excellence Award:** K-Electric has earned yet another Corporate Social Responsibility Business Excellence Award for the third consecutive year at the 7th International CSR summit. This award marks recognition of organizations that have made outstanding contributions for a sustainable future through CSR initiatives; making continuous strides in incorporating the best environmental, social and governance practices into their corporate culture to preserve and have a positive impact on their surroundings.
- 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 11<sup>th</sup>EFP – OSH&E award-2015 to KE in all categories.
- KE Wins 5<sup>th</sup> 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).

