K-Electric Quarterly Distribution Performance Report Quarter October – December 2015

Performance Standards Summary with Compliance Status – Oct to Dec 2015

GS-1	Compliant to GS-1 limits Urban & Rural
GS-2	Compliant to GS-2 limits Urban & Rural
GS-3	Compliant to GS-3 limits Urban & Rural
GS-4	Compliant to GS-4 limits Urban & Rural
GS-5	Compliant to GS-5 limits Urban & Rural
GS-6	Compliant to GS-6 limits Urban & Rural
OS-1	• System Average Interruption Frequency Index (SAIFI); Annual calculation factor
OS-2	• System Average Interruption Duration Index) (SAIDI); Annual calculation factor
OS-3	Compliant to OS-3 limits, above 95% connections provided within time limit
OS-4	Compliant to the NEPRA specified limits
OS-5	Compliant to the NEPRA specified limits
OS-6	Load (MW) interrupted in each priority group; Improved by 10%
OS-7	No Employee fatal accidents occurred this quarter only 02 non-fatal accidents occurred

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

During the past five years, with the investment of USD 1.2 billion, the power generation capacity has been increased by over 1037 megawatts along with new grid stations established and addition of 427 new feeders and 5000 new PMTs. Pakistan's most efficient 560 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 will be used by K-Electric for its Transmission Project (TP-1000) to undertake a comprehensive and transformative up gradation of its power grid. The K-Electric grid Strengthening project, known as TP-1000 will significantly improve the reliability, stability and Efficiency of our power network. The project will increase our transmission system capacity by 1000MVA, thereby allowing us to deliver more energy to our customers. 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.

2. System Enhancements

- **a. Installation of new Feeders:** 28 new feeders have been energized at existing grid stations to reduce log duration power supply interruptions during Oct Dec'15.
- 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 October December 2015 preventive maintenance of 44 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 October December 2015, LT Preventive maintenance of 667 PMTs high noise areas has been completed. This will reduce unplanned interruptions on feeders
- d. Installation of Knife switches and Earth Fault Indicators (EFI): 181 Knife switches and 585 EFIs have been installed in 11 KV network to achieve operational flexibility and quick fault localization
- e. New PMTs Energized: During October December 2015, 370 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:** 831 HT poles, PMTs and Substations grounded and 174 LT poles also grounded in critical accident prone areas during Oct Dec'15 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 October December about 118.4 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 3.12 KM HT conductors replaced by HT Aerial Bundle Cable in coastal and high corrosion areas to reduce un-planned power supply interruptions.

- i. 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 Oct-Dec'15, in 331 buildings 1311 small busbar and 247 large busbar completed with replacement of 24,337 single phase and 4,198 three phase meters replaced with digital meters. This will result in reduction of power loss up to 30% in these buildings.
- **j. Installation of AMR Meters:** Another 56 more AMR meters installed on feeders during Oct-Dec'15 to monitor automated power consumption and interruption
- k. 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 December 2015, 17 IBCs have been certified while 12 more IBCs are in certification process. Apart from that, 04 departments GSM, PID, Real Estate and LDC also certified for ISO 9001 QMS.



- I. **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. 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. Accidents Reduction:** No employee fatal accident reported during the quarter October December 2015 while 02 non-fatal employee accidents were 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 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 31 Safe Cards through internet and 12 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.

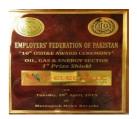


 KE Wins 3rd Corporate Social Responsibility Business Excellence Award: K-Electric has earned yet another Corporate Social Responsibility Business Excellence Award for the third consecutive year at the 7th International CSR summit. This award marks recognition of organizations that have made outstanding 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 2014: Employers Federation of Pakistan (in collaboration with ILO) has awarded 10thEFP – OSH&E award-2014 to KE in the category of Oil, Gas & Energy.



KE Wins 4th Consecutive Fire & Safety Award – 2015: For the
Fourth year in a row, KE has been awarded the National "Fire
and Safety Award - 2015" 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).

