K-Electric Quarterly Distribution Performance Report April – June 2015

Performance Standards Summary with Compliance Status – April to June 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	Improvement in System Average Interruption Frequency Index (SAIFI); improved by 10.15%
OS-2	Improvement in System Average Interruption Duration Index (SAIDI); improved by 11.03%
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	 Number of consumers affected due to load shedding in each priority group; decreased by 2.89% Load (MW) interrupted due to load shedding in each priority group; decreased by 2.91%
OS-7	 Employee fatal accidents; decreased by 50% Average duration of absence from work; decreased by 5.26%

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 12 new grid stations established and addition of 400 new feeders and 5000 new PMTs. 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.

2. System Enhancements

- **a. Installation of new Feeders:** 19 new feeders under system improvement schemes and 32 new feeders under new connection schemes have been installed at existing grids to reduce transient and log duration power supply interruptions.
- 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.
- c. Installation of New PMTs:106 new PMTs under System Improvement and village electrification schemes installed along with all necessary protective systems have been installed in identified worst performing areas
- d. **Installation of Knife switches and Earth Fault Indicators (EFI):**205 Knife switches and 655 EFIs have been installed in 11 KV network to achieve operational flexibility and quick fault localization
- e. **Installation of HT Capacitors:** 37 more HT capacitors installed at long feeding areas to improve voltage regulation to tail end consumers.
- f. **PMT/Substation Grounding:** Complete grounding provided in 1909 PMTs/Substations protecting electrical equipment's from higher short circuit currents and resulting damage.

- g. **Pole Grounding:** 77 HT and 1090 LT poles have also been grounded in critical areas to enhance public safety.
- h. **ISO-9001 QMS Certification of IBCs:** As a part of its transformation to Customer Focus, KE is Pakistan's first distribution company to voluntarily embark upon ISO-9001 QMS Certification for its customer Centers (IBCs). So far, Six (6) IBCs i.e. SITE, Gulshan, Saddar, KIMZ, Defense, Clifton have been certified while Eleven (11) more IBCs are in process.



- 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.
- j. 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.
- k. **Technical Loss Reduction Project:** Under the newly launched TLR Project, a total of 31 feeders have been optimized including installation of 144 transformers, 799 poles, 12.8KM of HT conductor and 10.3KM of LT conductor. The total cost incurred, as of date, is PKR 215m. Following benefits has been achieved:
 - i. Average technical loss reduction from 10.41% to 6.60%.
 - ii. An average of 37% of loss reduction has been achieved in terms of kW saved
 - iii. An average of 63% improvement in voltage profile.
 - iv. Decrease of HT faults by 27% and LT faults by 78% on these 31 feeders
- I. 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, about 121.47 KM existing LT Network converted into ABC resulting in reduced number of power supply interruptions and theft cases.
- m. **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, 1800 buildings completed reducing 30% loss in these buildings.
- n. **Kunda Removal:** K-Electric had run an extensive Kunda removal drive before monsoon (May June, 2015) and during this drive, 173775 Kunda connections were removed and 5,213 kg Kunda wires were confiscated from all areas.

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 April June 2015 while 02 non-fatal employee accidents reported. Apart from that 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 218Safe Cards through internet and 27 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. Focus on Property, Plant & Equipment: 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 2013-14.

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 - 2014" for demonstrating an effective Fire and Safety Management system in line with the Company's Vision.



Annual Environment Excellence Award – 2014: KE was awarded "Annual Environment Excellence Award 2014" for the sixth 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 received Department has the prestigious Energy Leaders Award 2014 **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).

