K-Electric Quarterly Distribution Performance Report Quarter July – September 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 • System Average Interruption Frequency Index (SAIFI); 40 35 30 25 20 15 10 5 0 Annual calculation factor **OS-1** 011-12 012.13 01415 010-11 013-14 • System Average Interruption Duration Index) (SAIDI); 2500 Annual calculation factor 2000 1500 OS-2 1000 500 2013-14 2014-15 2010-11 2011-12 2012-13 **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 • Number of load shedding instances in each priority group; decreased by 15%% OS-6 • Load (MW) interrupted due to load shedding in each priority group; decreased by 15% **OS-7** • No Employee fatal accidents occurred this guarter only 01 non-fatal accident occurred

Performance Standards Summary with Compliance Status – July to September 2015

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 427 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.

Recently K-Electric secured up to US\$ 250 million financing from US Overseas Private Investment Corporation (OPIC). The OPIC Ioan 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. Further details of TP-1000 are mentioned below.



2. System Enhancements

- **a. Transmission Project (TP-1000):** as cited above, KE has recently signed contracts with internationally reputable companies including M/s Siemens (Germany and Pakistan) and M/s Shanghai Electric (China) for execution of Transmission Project at a cost of USD 400 million for the enhancement of KE's transmission system capacity to meet future demand growth and improve reliability & stability of the transmission through the following:
 - 1. Eight new grid stations comprising 220 kV and 132 kV grid stations.
 - 2. Addition of ten new 220 kV and 132 kV transmission lines.
 - 3. Addition of 31 transformers and more than 400 11 kV feeders to cater growth.

This investment will increase the transmission capacity by another 1,000 MVA and will complete in three years' time and is expected to bring further improvement in SAIFI and SAIDI indices of KE

- **b.** Installation of new Feeders: 9 new feeders under system improvement schemes and 05 new feeders under new connection schemes have been energized at existing grid stations to reduce transient and log duration power supply interruptions during July Sep'15.
- c. Feeder Maintenance Program: A robust feeder rehabilitation program including APM & maintenance of high noise or high fault areas has been executed on identified feeders 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.
- d. Installation of Knife switches and Earth Fault Indicators (EFI): Knife switches and EFIs have been installed in 11 KV network to achieve operational flexibility and quick fault localization
- e. **PMT/Substation Grounding:** Complete grounding provided in PMTs/Substations protecting electrical equipment's from higher short circuit currents and resulting damage.
- **f. Pole Grounding:** HT and LT poles have also been grounded in critical areas to enhance public safety.
- g. 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. This will aid in reduction of power supply interruptions and theft cases.
- **h.** Busbar arrangement in multi-storey buildings: KE initiated LT short and long busbar arrangement in multi-storey buildings on consumer meter to monitor and control electricity theft.
- i. Kunda Conversion into Metered connection: During July September 2015, 5121 Kunda connections converted into metered connections. This will result in loss reduction and enhance system reliability in these areas
- j. 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, 7 IBCs have been certified while 22 more IBCs are in certification process.

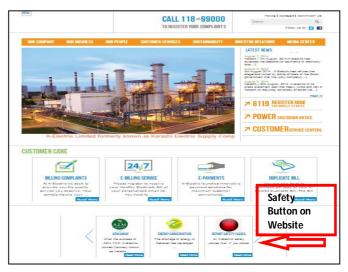


- **k. SAP ISU:** Implementation of SAP IS-U utility industry solution for customer care and billing, covering all consumer facing offices. This is the first implementation of its kind in Pakistan.
- I. KE Mobile and E-Services: KE has developed a full suite of Mobile and E- Services for the convenience 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 July September 2015 while 01 non-fatal employee accident was reported. Apart from that 05 public incident reported this quarter during monsoon rains, however, none of these were attributed to KE network system.
- 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 131 Safe Cards through internet and 13 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 2014-15.

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 10th EFP - 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.



the Year







- 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 Enerav 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).

