



# BUSINESS INNOVATION PARTNERSHIP POWER INFORMATION TECHNOLOGY COMPANY (PITC), PAKISTAN

Empowering the local workforce to protect critical assets, improve operations, and integrate innovative technology

PITC is a state-owned company responsible for developing, deploying, and providing information technology (IT) support and infrastructure services for power distribution companies (DISCO), the Ministry of Energy, the National Transmission and Dispatch Company, the Central Power Purchase Agency, and other stakeholders throughout Pakistan. Established in 2011, PITC aims to harness the potential of IT and smart grid technologies as components in the development of Pakistan’s power sector.

The typical electric system includes thousands of connected devices that are required for reliable and safe operations. Historically, these were manually operated devices but are now being replaced by “smart” devices that can be remotely operated and can provide real-time system operating data. Information security is critical as distribution companies in Pakistan are utilizing smart meters and grid devices to maintain pace with digitization and automation trends.

PITC serves more than 36 million electricity customers with billing services across Pakistan. These billing services support ten DISCOs with 100,000 utility employees. Each DISCOs uses billing software that was developed in-house by PITC and provided through an in-house data center. PITC will own and maintain all the required IT infrastructure and act as a smart device control center as the power sector transforms to “smart” technology in Pakistan.

PHOTO: Sustainable Energy for Pakistan Project, USAID, N.D.

## **ESTABLISHING A POWER DATA CENTER FACILITY**

PITC's role is pivotal in Pakistan's power sector restructuring and reforms with regard to the introduction of the competitive bilateral trading market to support their wholesale electricity market. As a result, PITC will be responsible for power consumer billing, power generation billing, and energy spot market trading. This necessitates the creation of a centralized state-of-the-art data center facility for all smart grid related operations of PITC. Establishing this Power Data Center Facility will augment PITC's capability and provide a centralized, cybersecure data center for maintaining all IT-related business operations.

## **BUSINESS INNOVATION PARTNERSHIP IMPACT**

The Business Innovation Partnership (BIP) provided support from experienced facilitators, coaches, and utility mentors to two PITC teams; one to streamline business processes and one to strengthen PITC's organization change management capacity. The BIP supported PITC in developing a new cybersecurity framework policy and establishing a standardized incident management response plan.

Using the Lean Six Sigma methodology, a process designed to eliminate problems, remove waste and inefficiency, and improve operations, BIP participants established and implemented the National Institute of Standards and Technology (NIST) and International Organization for Standardization (ISO) cybersecurity management framework to improve responsiveness and minimize the impacts of a cybersecurity breach. The new cybersecurity framework is now also being extended to the IT departments at each of the ten DISCOs.

As a result of the change management process, PITC has increased their training budget by 50 percent and is nominating employees for data center security training. PITC is now prepared to improve and implement other procedures from their cybersecurity policy through their change management teams. The capacity building aspect of the BIP also complemented USAID/Pakistan's (\$1.2 million) Power Sector Improvement activity, which supported PITC with software.

Through PITC's participation in the BIP, the organization has gained new skill sets to effectively and efficiently meet international security standards. Because of PITC's broad connection with utilities and government entities, this project will have a substantial impact on Pakistan's power sector.

### **CONTACT**

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