

PAKISTAN REGULATORS & UTILITY EXECUTIVES MEET TO IDENTIFY BEST PRACTICES FOR THE COUNTRY'S ELECTRICITY DISTRIBUTION SYSTEM

EXECUTIVE EXCHANGE WITH CONNECTICUT & MASSACHUSETTS' REGULATORS & UTILITIES

SEPTEMBER 2013 - USA - Supported by the U.S. Agency for International Development (USAID), six regulators from Pakistan's National Electric Power Regulatory Authority (NEPRA) and five executives from four of Pakistan's electricity distribution utilities participated in an executive exchange with their counterparts in Connecticut and Massachusetts to review best practices in distribution utility regulation. The exchange, conducted by the U.S. Energy Association as part of USAID's Power Distribution Program (PDP) in Pakistan, was aimed at identifying best practices in regulatory organizational structure, procedures and policies.

USAID's Power Distribution Program (PDP) is a five-year project conducted jointly with government-owned electric power distribution companies in Pakistan to improve their performance in the areas of loss-reduction, revenue collection and customer services. The Utility Exchange Program (UEP) of the Power Distribution Program aims to share practical information, real-world case studies, and best practices in different electric utility functional areas with Pakistan's electricity distribution companies.



Pakistan utility executives and regulators at the Connecticut Public Utilities Regulatory Authority



Public Utilities Regulatory Authority (PURA) is statutorily charged with regulating the rates and services of Connecticut's investor owned electricity, natural gas, water and telecommunication companies and is the franchising authority for the state's cable television companies. In the industries that are still wholly regulated, PURA balances the public's right to safe, adequate and reliable utility service at reasonable rates with the provider's right to a reasonable return on its investment. PURA also keeps watch over competitive utility services to promote equity among the competitors while customers reap the price and quality benefits of competition and are protected from unfair business practices.



Massachusetts Department of Public Utilities (DPU) is the state body responsible for oversight of investor-owned electric power, natural gas, and water utilities in the Commonwealth of Massachusetts; developing alternatives to traditional regulation; monitoring service quality; regulating safety in the transportation and gas pipeline areas; and for the siting of energy facilities. The mission of the Department is to ensure that utility consumers are provided with the most reliable service at the lowest possible cost; to protect the public safety from transportation and gas pipeline related accidents; to oversee the energy facilities siting process; and to ensure that residential ratepayers' rights are protected.



The United Illuminating Company

United Illuminating Company (UI) is a regional electric distribution company headquartered in New Haven, Connecticut. UI was founded in 1899 and deregulated in 2000, and transmits, distributes and sells electricity to over 325,000 residential, commercial and industrial customers. Covering a service territory of 335 square miles composed of 17 service areas, UI employs 1,066 people.



National Grid is one of the world's largest utilities, operating in the UK and the U.S., focused on delivering energy safely, reliably and efficiently. National Grid in the U.S. delivers electricity to approximately 3.3 million customers in Massachusetts, New Hampshire, New York and Rhode Island.



**Massachusetts
Department of
Public Utilities
Commissioner
Jolette
Westbrook
welcomes the
PDP delegation.**

PRIMARY TOPICS OF THE EXCHANGE

The delegation of eleven executives from Pakistan spent five days visiting the Public Utilities Regulatory Authority and United Illuminating in Connecticut, then the Massachusetts department of Public Utilities and National Grid, reviewing regulation of wholesale and retail energy sales within the U.S. Key topics of the program included:

- Regulatory organizational structures
- Regulatory procedures and operational policies
- Mechanisms to foster independence, transparency and quality policymaking
- Processes between federal and state regulatory bodies and utilities
- Performance standards and incentive programs for efficient and reliable power distribution

BEST PRACTICES INTRODUCED

Over the course of the program, the PDP delegation was exposed to numerous best practices in distribution regulation. The senior executives recognized many similarities in the challenges faced by U.S. distribution companies

and observed firsthand Connecticut and Massachusetts' strategies to deal with these issues. Beyond the key topics of regulatory organizational structures and regulatory procedures and operational policies, the exchange also highlighted issues in customer relations, demand side management and conservation, and distribution dispatch. Through the course of the program, the delegation was exposed to numerous best practices in the following areas:

Regulatory Practices within the Distribution Utility

- Organizational structures and staffing
- Operational best practice policies and procedures
- Rate case process, including data requests, public hearings, testimony, briefs, and appeals
- Tariff setting determination and process

Internal Operations of the Regulator

- Autonomy & independence of commission
- Human resources, including administration, job descriptions & role of staff, internal workflow
- Establishing transparency, including working with the utilities, consumers, legislative branches, and other state and federal government agencies
- Enforcement of standards and compliances
- Case management: streamlining the decision making process for maximum efficiency and improving quality decision making
- Using information technology, including how data and data requests are used in the regulatory process
- Benefits of collaborative rulemaking, including improved compliance, potentially easier implementation, more direct input from affected parties, and can produce superior regulations on technically complex topics

Legislative Mandates – the Regulator's Role & Utility Implementation

- On-bill financing for energy efficiency and renewable energy
- Price caps
- Net metering
- Public benefits fee
- Smart grid



PDP delegates listen to a presentation at United Illuminating from Guy Cattaruzza, Senior Director, Revenue Meter Systems & Standard Field on UI's history and approach to distribution regulation.



(left) National Grid Fouad Dagher demonstrates the company's electric vehicle powering station. (right) PDP delegate listens in on a customer call to National Grid.



Consumer assistance, protection & education

- Public hearings
- Tax benefits
- Customer assistance plans
- Handling complaints
- Consumer outreach

Reliability, safety & service

- Management & operational audits
- Investigations
- Investigating outages
- Summer & storm preparedness & reporting
- Risk management/risk assessment
- Inspection of utility infrastructure
- Resource adequacy
- Safety

Consumer Affairs & Stakeholder Involvement:

- Consumer affairs, including methods to stimulate public support and confidence in the regulatory organization and its processes
- Customer protection programs
- While visiting PURA, the New England States Committee on Electricity (NESCOE) provided the delegation with an overview presentation of their work. NESCOE is a not-for-profit organization representing the collective interests of the six New England States on regional electricity matters. NESCO's mission is to represent the interest of the citizens of the New England region by advancing policies that will provide electricity at the lowest possible price over the long term, consistent with maintaining reliable service and environmental quality.

Commercial & Technical Planning

- Short and long-term KPIs for commercial planning purposes
- A customer-focused approach to all aspects of utility operations

RESULTS

- **Billing:** PDP delegates received copies of sample bills from United Illuminating demonstrating how the company handles supply and transmission charges, surcharges, and decoupling adjustments.
- **Emergency Response Planning (ERP):** National Grid and United Illuminating both provided detailed overviews of how they plan for emergencies, including lessons learned from Hurricane Sandy and recent winter storms. UI shared a copy of their event level classification system, which helps them plan for a major incident and its impact on customer outages, feeder/circuit lockouts, outage and trouble orders, substation problems, and predict estimated restoration time. PURA also shared "PURA Establishment of Performance Standards for Electric and Gas Companies" – a docket released last year as a result of the widespread outages following Hurricane Sandy.
- **System Reliability:** NEPRA has assigned Key Performance Indicators (KPIs) to Pakistan's distribution utilities; however, the majority of them are struggling to meet the standards. During the course of the exchange, the Pakistan executives discussed methods for determining appropriate KPIs, including examining the historical performance of the utility and identifying realistic goals. UI shared their SAIFI (system interruption frequency), SAIDI (system outage duration index) and CAIDI (customer outage duration index) statistics with the delegates and shared their strategies for maintaining high performance. PURA also provided the delegation with a copy of the state's utilities' reliability performance report presented to the General Assembly – an annual requirement.
- **Maintenance Plan for Transmission and Distribution Lines:** UI shared their maintenance processes for their overhead and underground lines, a part of their Reliability Centered Maintenance (RCM) focused on preventative maintenance actions. The plan includes new trimming guidelines for trees – this is a change in UI's operations as a result of the large number of outages from fallen trees in recent storms.
- **Cost Recovery:** UI shared their late fee, disconnection and collection policies aimed at optimal returns.
- **Appeals:** National Grid reviewed their appeals process available in Massachusetts.
- **Tariff setting:** PURA and the DPU both provided detailed tutorials on tariff setting determination. To support, PURA shared a copy of a recent rate case decision paper.
- **Integrating SCADA:** PDP delegates noted the value of integrating SCADA at the distribution level in Pakistan in order to enhance reliability and facilitate system automation.



PDP delegates tour United Illuminating's distribution control center.

- **Utility Regulatory Filing and Response Process:** Utilities should have protocols in place for all filings and regulatory communications to ensure accuracy, thoroughness and timeliness. UI uses Enterprise Connect workflow software – to manage all of their regulatory filings. The software tracks the administrative process and serves as a master dossier for all documentation.
- **Staffing:** UI shared a copy of their organization chart, which outlines staff responsible for all regulatory filings and response, trained on the process and regulatory requirements. Staff are responsible for regulatory & tariffs, supplier relations & load settlement, power contracts, pricing, and other matter. Each division is staffed with the necessary analysts and support staff. Also, PURA shared a copy of their appointment, term, and qualification guidelines for commissions.
- **Revenue decoupling:** The DPU provided the delegation with an overview of revenue decoupling – a tool to eliminate potential barriers to distribution companies' aggressive pursuit of demand resources. This makes the utility indifferent to selling less power and improves the ability of energy efficiency and distributed generation to operate within the utility environment.
- **Planning:** Connecticut has recently published a Comprehensive Energy Strategy, which outlines the state's long-term vision out to 2050 with a plan for all of the energy needs of the state, including buildings, industry, electricity, transportation, and natural gas.
- **Customer Investigations:** UI shared a copy of a sample revenue protection investigation report so that the delegates could gain an understanding of the process the utility undergoes for fraud/theft cases.



Connecticut PURA Chairman Arthur House (left) and Vice Chairman John "Jack" Betkoski welcome the delegation. Chairman House was elected chair 2012 of the three-member commission, a few months after his nomination to PURA. Vice Chairman Betkoski served on Connecticut's utility regulatory authority since 1997.

UTILITY EXCHANGE PROGRAM PARTICIPANTS

1. Yasir Naseem, Manager Finance, Peshawar Electric Supply Company (PESCO)
2. Aftab Ahmad Sethi, Chief Engineer Development, Peshawar Electric Supply Company (PESCO)
3. Asgher Reza Chaudhry, Manager (operations) North Circle, Lahore Electric Supply Company (LESCO)
4. Sh. Muhammad Jahangir, Deputy Manager Planning Transmission & Generation, Faisalabad Electric Supply Company (FESCO)
5. Abdul Karim Memon, Additional Manager, Sukkur Electric Power Company (SEPCO)
6. Hammad Shamimi, Director General, National Electric Power Regulatory Authority (NEPRA)
7. Hussnain Zaigham, Director General, National Electric Power Regulatory Authority (NEPRA)
8. Imtiaz Hussain Baloch, Director, National Electric Power Regulatory Authority (NEPRA)
9. Naweed Illahi Sheikh, Director, National Electric Power Regulatory Authority (NEPRA)
10. Mazhar Iqbal Ranjha, Director (Standards), National Electric Power Regulatory Authority (NEPRA)
11. Ahmed Nadeem, Deputy Director, National Electric Power Regulatory Authority (NEPRA)



PDP delegate Hussnain Zaigham, Director at NEPRA, provides an overview presentation of the energy sector and regulatory structure in Pakistan to the UI team.

For additional information, please contact Sarah Blanford at sblanford@usea.org.