PowerLogic®

Case study

NEPCO Manages Shared Energy Transactions

March, 2006

JORDAN

Customer profile

The government of the Hashemite Kingdom of Jordan recently split the state-owned National Electric Power Company (NEPCO) into three distinct organizations, and embarked on the next challenge: building a countrywide energy-information infrastructure to monitor energy transactions and billing between the newly independent power generation, transmission and distribution companies.

As a state-owned utility, NEPCO remains at the center of Jordan's restructured energy sector, responsible for the management, operation and development of the country's high-voltage transmission network. NEPCO maintains ownership of Jordan's transmission assets, but it buys power from generation companies such as CEGCO and sells it to distributors such as EDCO.

Market data

- State-owned utility

Other: Electrical distribution

Customer needs

- Efficiently and accurately communicate and verify energy data
- Parallel metering network
- Monitor, share and verify settlement billing and financial transactions
- Remore access to gathered and processed data

Keywords

- Jordan
- PowerLogic ION EEM
- Data sharing, substation, GPS
- Settlement, billing

Merlin Gerin
Square D
Telemecanique

Schneider Electric
Building a New Electric World

PowerLogic®

Case study

NEPCO Manages Shared Energy Transactions

March, 2006

Benefits

- Data sharing
- Bill verification
- Network synchronization
- Increased security and reliability

The PowerLogic ION7500 meter

Products

- PLS
  - PowerLogic ION EEM Software
  - PowerLogic ION7500 Meters

Schneider Solution

The first priority was to monitor settlement billing between NEPCO's transmission system and the generation assets of CEGCO. To do this, NEPCO installed an ION energy management system. A key requirement was to create a parallel communications structure that could provide each company with independent access to metering data from each shared inter-tie point.

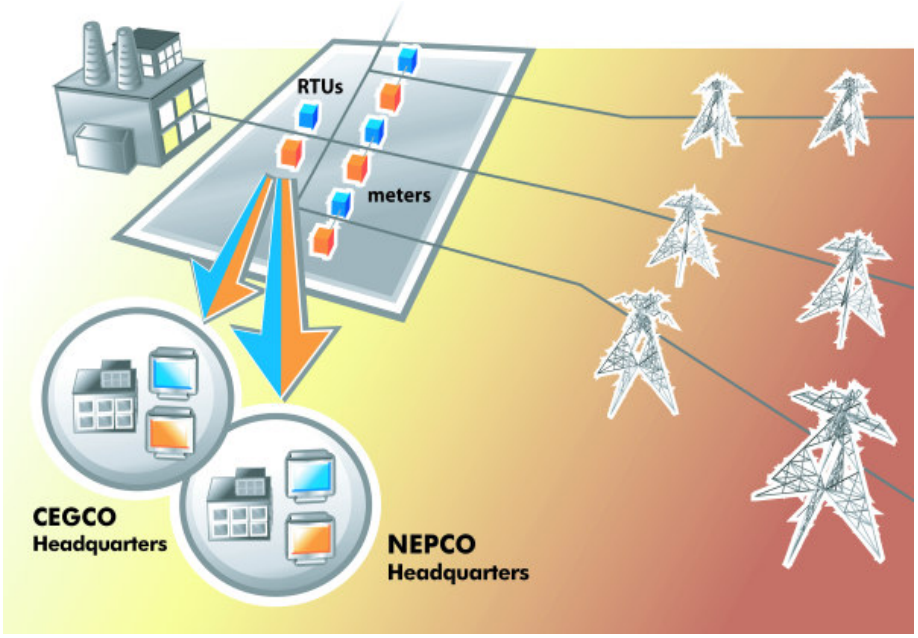
Project procedure

Engineers installed a network of 150 intelligent, GPS time-synchronized meters linked to four software servers, to track and verify all energy transactions. Eight substations were fitted with a pair of revenue-accurate ION® 7500 meters on each feed: one main meter and one check meter. These meters monitor the electricity delivered from CEGCO to NEPCO and send the data up to a pair of ION® RTU data loggers.

Each substation is equipped with two data loggers: a main data logger receives data from all main meters in the station, and a check data logger receives data from all check meters in the station.

A parallel metering network confirms consistency and accuracy of all data and parallel servers, equipped with identical energy management and billing software, sit at each company's headquarters to receive information from all metering points.

Architecture



Schneider Electric Industries SAS

http://www.schneider-electric.com
http://www.powerlogic.com

PLSED105XXXEN

Design: Schneider Electric

03-2006