AMI Project Overview

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Fully Integrated System

- AMI + Network
- Energy Delivery Data Acquisition (DSCADA)
- Power Delivery
- Power Quality Database
- Outage Management
- Customer Service
- "Enhanced" CSS
- Marketing
- Security
- Dispatch
- Field Service Orders
- Asset Management
- RNI
- ItronEE
- Customer Portal

GULF POWER
A SOUTHERN COMPANY
Customer Data Privacy

- Customer information is confidential and is used only for the Company’s business purposes (billing, analysis, etc.) or supplied at the customer’s specific request.

- There are a multitude of policies and procedures in place to protect the privacy of company and customer information. It is never sold to third parties or used for anything other than legitimate Gulf Power regulated business purposes.
The Meter and its Transmissions

- Measures energy consumption and monitors the condition of the meter and the electric system.
- The only energy use information transmitted is the total-premise energy consumed. No Personal Identifying Information of the customer is stored at or transmitted by the meter.
- Alerts related to any abnormal (i.e. infrequent) status of the meter or the utility’s electrical system (outages, voltage anomalies, etc.) are transmitted at the time they occur.
Benefits Beyond Meter Readings

- Outage management (response and restoration)
- Major emergency response and recovery
- Transformer loading enhancements
- Primary feeder loading enhancements
- System power quality and load flow diagnostics
- Meter diagnostics
- Discovery of meter tampering/Revenue Protection issues
- Discovery of unauthorized generator interconnections
- Source for future options for customers’ insight, choices and control
Radio Transmissions

- 900 Megahertz licensed spectrum operating under FCC jurisdiction per Title 47 – Code of Federal Regulations
- Total transmission time averages less than 1 second per day.
Typically each meter is transmitting only its own meter data (only exception is an occasional meter operating in “buddy mode”) to a receiver that is always available.

- Most mesh network meters are regularly transmitting for both itself and adjacent meters, though at levels still well within FCC regulated limits.
- Most “drive-by” systems are transmitting frequently in order to reach a receiver that is not regularly available; again, at levels well within FCC regulated limits.
THE NETWORK

- Tower Gateway Base Station (TGB)
- Metro Unit
- Flexnet Remote Portal (FRP)
End of Year Totals:
2009 ~ 7,000 (Pilot)
2010 ~ 40,000
2011 ~ 250,000
2012 ~ 437,000
Deployment Logistics

- Utilized a contractor, Metadigm Services, for our main deployment.
- Placed information on our website and performed an automated out-bound telephone call to each customer the week before we anticipated setting our meter at their location.
- There were some logistical issues with access to meter sockets due to dogs, locked gates, obstructions, etc., but these were resolved by leaving door-hangers which offered appointments for installation.
Deployment Logistics

- Integrity of the customer’s meter socket was an issue at a few locations, largely due to age, salt-air deterioration, etc., but these were resolved by making repairs.
- At time of install, information was gathered such as lat/lon of meter socket, linkage with transformer, picture of old meter/reading, picture of socket, picture of new meter, etc.
- There were some customer concerns largely due to mis-information from internet sites, etc., but these continue to be resolved through additional communication and information. There are approximately 140 customers for whom installation was temporarily postponed while we continue to work towards resolution.
Summary

Gulf Power’s AMI deployment is essentially complete, and it is safely and reliably providing benefits to all our customers, while also fully protecting the confidentiality of all customer-linked data.