Data Analytics: What You Don’t Know Can Help You
Technology Overview

- CIS
  - ATS
- OMS
  - dataVoice International
- GIS Mapping
  - Schneider Electric
- EA
  - MILSOFT Utility Solutions
- AMI/MDM
  - Sensus
- Staking/Map Viewer
  - PARTNER Software
- SCADA
  - CG Automation
TALQUIN ELECTRIC COOPERATIVE, INC.

- 52,110 Active Electric Accounts
  - 48,382 Residential
  - 2,501 Commercial
  - 227 Large Power
- 26 Substations
- Over 4,400 Miles of Energized Line
  - 11.9 Services Per Mile
# Data Analytics – AMI Background

<table>
<thead>
<tr>
<th>Before AMI</th>
<th>Post AMI</th>
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<tbody>
<tr>
<td>• Member Read System</td>
<td>• SENSUS AMI System</td>
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<tr>
<td>– No Meter Readers or Read Routes</td>
<td>– Automated Meter Reads</td>
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<tr>
<td>– Budget Type Billing</td>
<td>– Accurate Billing Data</td>
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<td>– Lost Revenue</td>
<td>– Influx of Extra Data</td>
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<tr>
<td>– Lack of Data</td>
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Data Analytics - AMI

Using SNR and Read Rates to Improve AMI Coverage

Orange/Red = Good Coverage
SNR > 13

Blue/White = Poor Coverage
SNR < 13
Data Analytics – AMI

What is important?

• Daily Reporting
  – Alarms
    • Meter Tamper
    • Hot Socket
    • Reverse Power Flow
    • High/Low Voltage
## Data Analytics - AMI

### Reporting and Data Quality

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Data Analytics - AMI

What does all of this information mean?
Data Analytics – Lost/Stolen Meters

- Tracking Meters
- Notifications
- Follow Up
- Pinpoint
Data Analytics – Beyond AMI

Transformer Loading and Utilization
Data Analytics – Beyond AMI

Making Data Work
- Combining Data
- Increasing Information
- Building Results
Problems and Moving Forward

- Data integrity
- Understand the information available
- Think critically
- Find solutions
What’s Next?

• Improving Reliability
• Outage Management and Restoration Improvements
• Fault Location
• Power Diversion Detection
Questions?

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