Technology at City Light

Mission:
• IT provides the hardware/software/networks/security/services to support Utility operations and customers

Resources:
• $20 Million labor/non-labor budget
• Staff: 114

Infrastructure:
• Approx. 2,200 computers, 259 major databases, data/voice/video networks, 501 servers, etc.

Applications:
• 129 key business applications, 445 total; 2,500 customer facing Web pages
City Light Technology Environment
Risks/Challenges

• Complex environment
• Many custom built applications
• Many end-of-life systems
• Changing business processes/regulations require flexible new systems
• Active cyber security threats
• Declining technology budget/resources poses risk to SCL customers
IT Strategy

MODERN * REAL-TIME * MOBILE * SECURE * INTEGRATED

• **Modern:** Consolidate and Modernize IT Systems
• **Real-time:** Enable Real-time Information Across the Utility
• **Mobile:** Drive Enterprise Mobile Business Solutions
• **Secure:** Promote ubiquitous, enterprise-wide IT Security
• **Integrated:** Anticipate & integrate technologies in the ongoing modernization of the electric infrastructure
### Strategic Technology Roadmap

#### Business Capabilities

<table>
<thead>
<tr>
<th>Business Capability</th>
<th>Project</th>
<th>Project Description</th>
<th>Priority</th>
<th>Status</th>
<th>Est Cost Millions</th>
<th>Effect On Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asset Management</strong></td>
<td>Manage assets at the lowest lifecycle cost</td>
<td>Work and Asset Management System</td>
<td>1</td>
<td>Replace</td>
<td>$28</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>Data input at source, more efficient use of workforce</td>
<td>Mobile Workforce System</td>
<td>2</td>
<td>New</td>
<td>$3.3</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Customer Care</strong></td>
<td>Reduce duration of outages and enhance customer communication for outages</td>
<td>Outage Management System</td>
<td>1</td>
<td>Replace</td>
<td>$8</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Fully functional customer care and billing system</td>
<td>Customer Care and Billing System</td>
<td>2</td>
<td>Replace</td>
<td>$40</td>
<td>0.53</td>
</tr>
<tr>
<td><strong>Energy Trade</strong></td>
<td>Automate meter functions</td>
<td>AMI - Meter Data Capt Mgmt System</td>
<td>1</td>
<td>New</td>
<td>$1.5</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Integrate processes, reduce risk of fines and error-prone operations</td>
<td>TRM - Trading and Risk Management</td>
<td>1</td>
<td>New</td>
<td>$1.5</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Energy Delivery</strong></td>
<td>Reliable energy control and monitoring</td>
<td>Energy Management System</td>
<td>0</td>
<td>Replace</td>
<td>$18</td>
<td>0.24</td>
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<tr>
<td></td>
<td>Reliable distribution management</td>
<td>Distribution Management System</td>
<td>2</td>
<td>New</td>
<td>$6</td>
<td>0.08</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td>NERC/FERC compliance tracking and communication</td>
<td>Compliance Tracking System</td>
<td>2</td>
<td>New</td>
<td>$0.5</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>IT Infrastructure</strong></td>
<td>PC replacement</td>
<td>PC Replacement System</td>
<td>1</td>
<td>Replace</td>
<td>$8</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>More Web services and proactive communication with customers</td>
<td>Web Content Management System</td>
<td>2</td>
<td>New</td>
<td>$1.2</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Secure vital critical cyber assets/resources/data</td>
<td>Cyber Security Upgrades</td>
<td>1</td>
<td>New</td>
<td>$0.3</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Total: $116.3
Integration with Other City Light Systems

- Mobile Workforce Management System
- Geographic Information System
- Energy Management System
- Customer Information System
- Distribution Management System
- Outage Management System
- Meter Data Management System
- Work and Asset Management System

Data Integration

- Energy Management System
- Work and Asset Management System
- Outage Management System
- Meter Data Management System

Electrical Power Systems

- Generation
- Transmission / Substations
- Distribution System
- Customer End Systems

IT Systems

- Mobile Workforce Management System
- Geographic Information System
- Distribution Management System
- Outage Management System
- Work and Asset Management System
- Customer Information System
- Meter Data Management System
Summary

• IT Systems integral to success for all three Priorities in the Strategic Plan

• IT must secure sufficient funding to meet challenges of next six years