PTT Benchmarking
Learning from Others

September 2012

Benchmarking Lessons

- **We are effectively leveraging technology compared to peer companies.**

- **There are ways to better leverage technology to improve productivity.**

- **Change Management is key to a successful implementation**

Technology Briefing: February 16

- **Reviewed technology implementations at five peer utilities**
- **Key learning points:**
  - **Centralized, integrated work and asset management systems can save money while improving crew and design productivity**
  - **Analytics improve access to information and can support effective risk-informed maintenance decisions while reducing number of repeat trips, asset lifecycle costs, materials and goods/services costs.**

Productivity through Technology

IBM Technology Briefing: February 22

CenterPoint Energy

DTE Energy

SDGE
A Sempra Energy utility

- ■ **Reviewed technology implementations at three peer utilities**

- ■ **Key learning points:**

  - ■ **Utilizing GIS as the centralized and source for asset information drove improvements in productivity.**

  - ■ **One, centralized work and asset management system can lead to productivity improvements and focused change management helps to support the improvements**

  - ■ **Expanding the use of mobility – specifically MDTs – can also improve productivity.**

Productivity through Technology

Technology Briefing: April 11

- **Reviewed three technology solutions for utilities**
- **Key learning points:**
  - **Fleet Management tools improve compliance, reporting, driver safety and productivity while saving fuel and reducing environmental impact**
    - **Knowing where, when, and how vehicles are used enables field service teams to better serve their customers**
  - **More user-friendly interfaces can be added on top of enterprise applications (like SAP) to create a more simple, easy to understand application**
  - **Focus on improving Planning, Scheduling, Design and Standards can reduce downstream costs.**

Productivity through Technology

conEdison Site Visit: May 17

- **Key learning points:**

    - **Heavy focus on initial and on-going training; have dedicated change management organization**

    - **Initiative include funding for change management and expectation for productivity dip following implementation**

    - **Focused on organization and process before identifying solutions**

    - **Realized productivity gains primarily though scheduling process (+70 minutes per day per crew)**

    - **Eliminated need to physically staff every substation**

Productivity through Technology

Site Visit: June 6

- **Key learning points:**
  - **In process with 15 year OpEx2020 program that includes six major initiatives: Maintenance & Inspection, Construction, GIS, Condition Based Maintenance & Asset Investment Support, Outage and Distribution Management Systems, and Customer Care**
  - **Have learned that more O&M is needed following implementation to support learning & ensure productivity gains; also that front-line supervisors should be engaged as early as possible**
  - **Condition based monitoring is in use; data is analyzed to determine if work is required, then work order is created**
  - **Projects are implemented with cross-functional teams, not silos**

Site Visit: July 13

- **Key learning points:**
  - **Building own networks to ensure connectivity, as needed**
  - **4D scheduling tool is used to construct project virtually to identify & eliminate potential construction conflicts (3D plus a time variable)**
  - **Implemented GPS controls for equipment**
  - **Focused on well-defined process & standards in order to reduce data entry**
  - **Accountability encouraged by daily group status meetings to monitor progress**

PGE site visit: September 12 - 13

What we did:

- **Change workshop facilitated by Accenture**
- **Portland General Electric site visit**

- **Implementing common systems and processes**
- **Transforming the culture to transform the business**

What we learned:

- **Executive sponsorship is _KEY_ for success**
- **Change management activities are 20% of project costs**
- **Change must be managed daily and consistently**
- **Changing culture is difficult, requires tenacity and unwavering support**

Productivity through Technology