Lightning arresters
The impossible dream

Define Asset Management without using the words “asset” or “management”

ISO 55000: “The coordinated activity of an organization to realize value from assets”
Who we are

- Part of DOE
- One of four PMAs
- Wholesale electricity provider
- Operate as utility
- 15-state footprint
- 49 offices
- 700+ customers
What we manage

- $4.3 billion in assets
- 177,000 structures
- 17,231 miles of transmission line
- 319 substations
- 297 transformers
- 665 buildings
- 479 communication sites
Utility industry

• U.S. power supply network is the largest, most complex machine ever created

• Engages enterprise involving:
  – 5,000 corporate entities
  – Several forms of ownership and levels of regulatory oversight
  – Some 100 million customers

• Satisfies conflicting economic, social, political and environmental objectives
Current world view

- Asset management
- Field knowledge
- Procurement plan
- Budget
Where we need to be
What does it take?

Tool + Process + Culture change
Vision for Asset Management

Complete integration of all assets to understand necessary investments for just-in-time capital projects
Quick assessment

- Software tool and data on key elements
- Asset Management as an afterthought
- Culture change to create full integration
Culture change

Cultural barriers
- Turf issues
- Resistance to change
- Lack of support
- Stress/burnout
- Blaming and excuses

Initiatives
- New strategy
- Service/quality
- New structure
- Engagement
- New processes

Many in

Lack of:
- Bias for action
- Trust/openness
- Agility/innovation
- Teamwork
- Accountability
- Customer focus

Few out

Lower results
Asset Management at WAPA

- 4-year improvement project
- Where we were vs. where we needed to be
- New organization – 15 people
  - Asset Management
  - Reliability Centered Maintenance Program
  - Computerized Maintenance Management System = MAXIMO
- Data analytics

The Transmission Asset Management Program is aimed at improving and creating a data-driven business that can be integrated into all WAPA programs. In 2016, Asset Management produced its second-year health analysis for circuit breakers, power transformers, and transmission structures. This data provided insight into budgeting, capital programs, prioritization of and financial decisions resulting in more robust and reliable systems.

Building on the asset management platform, the Transmission Asset Management Program will create value and enhance data-driven decisions by combining staff’s extensive field knowledge with insights gained from significant and critical locations, as well as the long-term sustainability funding and implementation management across the organization.

To do this, WAPA’s Asset Management staff will team up with Operations and Maintenance to incorporate insights from our operations into contingency planning and new programs that include high-risk equipment.

WAPA’s analytics include:
- Analysis of transmission line segments to improve condition assessment of the assets
- Identification of additional asset classes such as equipment maintenance, which are data-gathers used by Operators at the various maintenance points of the bulk electric system
- Monitor the condition of additional asset classes to ensure the greatest insight into the system’s reliability

Protecting assets throughout WAPA’s physical security program will continue. Since 2016, staff created 15 new asset categories (with plus subcations), 10 staff are testing another...
Program priorities

• Assess risk to transmission facilities
• Identify areas where reliability is jeopardized
• Maximize value of enterprise assets
2015 transformer risk
Leadership needed

• Managing assets vs. asset management
  – Create long term value for organization
  – Develop competence and capability across workforce
  – Understand and mitigate business risks
Key takeaways

Focus on value and business excellence.
Be aware of industry trends and changes.
Continue delivering on mission.
Contact/follow me

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