Clean-Energy BC's

OPERATIONS WORKSHOP

Thursday June 13 2019

Hyatt Regency, Vancouver
www.cleanenergybc.org
Asset Management & CMMS
Introduction

Link
Asset Management & CMMS Introduction

- With multiple assets statistically you are more likely to suffer catastrophic failure if not managing risk appropriately
Asset Management & CMMS Introduction

Why Bother?

1. Identify the criticality of the batteries reliability
2. Identify the failure modes
3. Create a PM to ensure the modes can be detected

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Asset Management & CMMS Introduction

So what is Asset Management?
## Asset Management & CMMS Introduction

### Competence
- Maintenance strategy & plans align with org strategic goals. Improvements in place. Maintenance is under control.

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### Planning & Scheduling
- Planning & scheduling well established for most work. Compliance is high.
- Inventory turns > 1, Service level > 95%, stock-outs < 5%.

### Full regulatory compliance. PM program features some CBM. Operators help with PM & Equipment condition is good.

### Reliability
- Measures in use, improvement programs monitored, trends being developed.
- Extensive management systems in use for integration for sharing & reuse of important info. CBM & Equipment condition is good.

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### Routine Change Management
- RCM program fully developed using RCM / PMO, improved using RCM. RCM results evident in changes, training, & equip mods.

### Data Gathering
- Data gathering is reliable, & good info is available for improvement efforts. Info gaps are being filled by experienced workers.
Asset Management & CMMS Introduction

Process

- Engaged contractor to audit current state and help create policies
- Develop scoring criteria to choose CMMS software
- Develop asset hierarchy list to upload to CMMS, approx. 2500 assets
- Role out training and process for work order creation prioritization
- Role out training, process and develop PM tasks for assets
- Continuous improvement, auditing and feedback
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Lessons Learned

• A lot more development work needed than estimated. Full-time asset management person required
  • The demos shown by vendors are not what you get!
• Scope changed during CMMS selection process which undermined the process
• Process change takes a lot of continuous effort and buy-in
• Shop around for contractors and look for programmers over maintenance experts

Benefits

• It is a scalable process that can support years of growth and we have common reporting across north America
• Due to admin demands it forces you to focus on priorities as resources is limited
  • The system is more work for operators
• It is forcing us to inspect equipment that could otherwise go unnoticed
• The PM details will shorten the learning curve for new operators
• Having safety and work-orders on one platform is good for tracking priorities
Questions?