Obsolescence – Utility Current Conditions

Jaysen Baker
Southern Nuclear Company

Obsolescence Status

- Centralized program owner managing the coordination, implementation, reporting and improvement.
- Obsolescence program health is trending Proactive. Tier 1 Critical Spares 85-90% Available across the fleet. Implementation of Tier 2 Critical Spares (SPVs) in 2018 with metrics established with 88-96% available across the fleet.
- Proactively resolving obsolescence with consequences that directly results in reactor or turbine trip.

Obsolescence Challenges

- Identification: accuracy of Asset/Inventory database; 60-80% data gaps with missing make/model #s
- Prioritization: current vs forecasted demand; latent workorder planning cause expediting/cycling
- Resolution: Engagement and long timelines with DCPs & RE projects; solutions do not address all applications for a common component nor individual design criteria e.g. safety classes, eq etc.

Obsolescence Initiatives/Focus Areas

- Funding Tier 1 Significant Critical Spares
- Achieve 95% availability of Tier 2 Critical Spares (SPVs)
- Proactive Obsolescence with material demand/forecaster (work orders)
- Improve Asset/Inventory database

Obsolescence Lessons Learned/Benchmarking Needs

- High level of management/cross departmental support and participation is required.
- Enhanced procedural guidance where roles and responsibilities are clearly defined with expectations and goals delivered.
- Accurate Asset/Inventory Management database (Maximo) and proper implementation of POMS prior to program implementation is key to a successful obsolescence program.
- Assign Key Role of obsolescence program coordinator or manager to ensure coordination of program implementation, reporting and improvement.

Obsolescence – Utility Current Conditions

Dan Cunningham
Duke Energy Corporation
Fleet Procurement Engineering

Obsolescence Program

- Owned by Fleet Procurement Engineering with one program owner managing the coordination and implementation
- Focus for obsolescence solutions driven by work order demands (Engineering Holds to Procurement Engineering (PE) for online and outage items)
- PE is currently working/tracking 5 SPV tags related obsolescence solutions across the Fleet

Obsolescence Challenges

- Ensuring PE is meeting the obsolescence needs for each site within the new organization
- Prioritization: Ensuring PE is working on the right items at the right time to support work order demands
- Incorporating and focusing on more Fleet-based solutions
- Dealing with “digital solutions” where analog items are now obsolete

Obsolescence Initiatives/Focus Areas

- New metrics to track Work Order holds to PE associated with obsolescence solutions (equivalencies)

Obsolescence Lessons Learned/Benchmarking Needs

- Continued need for strong engagement and partnership with Supply Chain and Site Engineering

NUOG
Nuclear Utility Obsolescence Group
Winter-2019-Clearwater

Ameren MISSOURI

Obsolescence – Utility Current Conditions

David Eswine

Callaway Energy Center/Ameren Missouri

Obsolescence Status (Current)

- Proactive Obsolescence Program, Obsolescence Program Owner, Top 50 Obsolete Item List, Obsolescence Steering Committee, Site-Wide Obsolescence Procedure, Upload Engineering Evaluations to OIRD, Industry User of RAPID, POMS, OM

Obsolescence Challenges (2019)

- Top 50 Obsolete Item List - Based on OVR Score, Health Issues, Critical Spares, Etc.
- Over 5000 POMS Unknown Critical A & B Components
- Resource Priorities – Obsolescence and Configuration Design Activities

Obsolescence Focus Areas (Results)

- Resolve 90% of the Obsolete Items on the Top 50 Obsolete Item List
- Work down curve to identify the POMS Unknown Critical A & B Components
- Obsolescence Performance Indicators (PIs) with a Status of Green and a Score < 9

Obsolescence Lessons Learned (Success)

- Daily Proactive Plan for Obsolescence Challenges and Focus Areas
- Help Industry Members to Improve their Performance/Program
- Desktop Guide for Obsolescence Activities at Callaway

Obsolescence – Utility Current Conditions

Peter Girgis

Energy Northwest – Columbia Generating Station

Obsolescence Status

- Program Owner – Peter Girgis, Procurement Engineer
- Proactive Program Established
  - Obsolescence Metrics track Single Point Vulnerabilities
  - Top 10 Proactive Obsolete Component List
- Reactive Obsolescence Issues managed
  - Minimal impact to work orders due to obsolescence
- Surplus Market Leveraged Consistently for obsolescence solutions

Obsolescence Challenges

- Lack of Resources Dedicated to Resolving Obsolescence Issues
- Station Alignment
- Prioritization

Obsolescence Initiatives/Focus Areas

- Single Point Vulnerability (SPV) Data Cleanup
- Maintain Acceptable Plans and/or Bridging Strategies for all SPVs with zero stock on hand
- Continue to Leverage Surplus Market

Obsolescence Lessons Learned/Benchmarking Needs

- Approximately 50 short form Item Equivalency Evaluations completed using Standard Item Equivalency Process (SIEP)
  - Standard Process initially cumbersome to work through, but has its benefits
- System Health Reporting Obsolescence Benchmark Needed
- Resources Dedicated to Obsolescence Benchmark Needed
- Sites using SIEP Benchmark Needed

Obsolescence – Utility Current Conditions

Syed Jaffery
Corporate/Exelon Corp.

Obsolescence Status

- Proactive measures are taken at Exelon nuclear fleet to ensure that equipment obsolescence vulnerabilities critical to equipment reliability and plant availability are identified, prioritized and resolved in short term, long term and, and cycle management

Obsolescence Challenges

- Central Procurement and Design Engineering
- IEE/RE/CGD Vs Engineering Equivalent Change
- Work with suppliers – NSSS/OEM and Key Suppliers

Obsolescence Initiatives/Focus Areas

- Innovation, cost and efficiency – Building Enduring Value
- Use in-house enterprise systems/tools for obsolete item identification, prioritization and solutions
- The focus is on parts, materials, components, and system that are likely to be replaced over the lifetime of a plant

Obsolescence Lessons Learned/Benchmarking Needs

- Most of our NSSS and other Key suppliers/OEM are proactively notifying us before they discontinue product line – Special Run
- Fleet critical spares are on-hand with Min/Max stocking level – Status monitored by Supply and obsolescence tri-annual PI
- Actively participate in NUOG efforts and benchmarking other utilities

Obsolescence – Utility Current Conditions

Steve Ostrowski /Paul Hogan

Bruce Power/Rolls-Royce

Obsolescence Status

- Overall Obsolescence Status (BA – 26.3%) and (BB – 26.1%)
- SPV Obsolescence Status (BA – 2.3%) and (BB – 7.8%)

Obsolescence Challenges

- Adjusting Metrics to Better Demonstrate value to the Station
- Realign Prioritization of Work with New Demand Driver
  - Universal Prioritization Scheme (UPM score) Instead of T-Weeks

Obsolescence Initiatives/Focus Areas

- Catalogue Standardization and Consolidation
- MEL Health
- Asset Management and Major Component Alignment

Obsolescence Lessons Learned/Benchmarking Needs

- Sharing PO data to improve Parts statuses
- Quantifying and Measure BOM Health

Obsolescence – Utility Current Conditions

Dan Philipps
FENOC

Obsolescence Status

- Obsolescence issues are being managed effectively with minimal impact on work scheduling, work planning, equipment reliability, and critical spares.
- Significant reductions in on-line and outage PMs has reduced obsolescence resolution work load.

Obsolescence Challenges

- Procurement Engineering minimal staffing.
- Reduced internal support services from BETA lab.
- Reduced strategic focus due to company restructuring and impending plant deactivation dates..

Obsolescence Initiatives/Focus Areas

- Attempts to increase value from OIRD/POMS solutions.
- Attempts to increase value from use of look ahead demand strategy.
- Aggressive sharing of solutions - 15,000 FENOC solutions were loaded out of SAP into POMS.

Obsolescence Lessons Learned/Benchmarking Needs

- Establish alternative services to address loss of BETA support services.
- Continue to participate in NUOG efforts and benchmarking other utilities.
- Continue to increase available industry obsolescence solutions in OIRD and POMS.