Material Expense Reduction Strategies Rapid Conference 5/17/16

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PSEG Nuclear Supplier Relationship Model

- Establish long term relationships for critical areas
 - Suppliers willing to share in the performance of our plants
 - Suppliers willing to work on our behalf even when not their most revenue producing choice in the short term
 - Use of performance based scorecards to measure performance
 - Know the Supplier's Organization, management and staff
 - Open and honest discussions on performance- PSEG and Supplier
 - Encourage innovation, continuous improvement and use of industry experience
 - Compelling reason to change is required
- Help the supplier be successful at our sites and across the industry
- Be fair with our all suppliers and expect the same in return
- No single approach to contracting- use competition and available leverage
- Demand and expect excellent performance



- PSEG Power, as de-regulated power producers, the cost of materials competes with funding for other important initiatives - more efficient use of materials can provide much needed funding for other important projects or initiatives
- Gap to top quartile is significant for our plants (3rd and 4th quartile presently) indicating we have a large opportunity to improve
- Material expense continues to increase well beyond inflationary rates
 - Escalation for some OEM supplied parts >75% in a 5 year period!



Let's get aligned about what we mean

S

• Expense- what is being charged under the accounting category of materials

<u>ls not</u>

- Services
- Inventory Value Growth



Simple Formula

Price x Volume (Consumption)= Expense

 There is opportunity on both sides- Important to address both

Not so simple to fix

• Sustainable improvement can be complex



We all have examples of this- can drive you nuts!!

3/8" Stainless Steel Nuts - \$1,030 each



Price x Volume Considerations- PRICE DRIVERS

| Category | Focus Area | Issue |
|---------------|---|--|
| Price Drivers | Negotiated Price | Are unit prices higher for us than others? |
| | Price Escalation | Is price escalation affecting us more than others? |
| | Over-Specification | Are our material specifications an outlier causing increased unit costs? |
| | Commercial Grade Dedication and Reverse Engineering | Are we missing opportunities for CGD/RE/Alternate Suppliers? |
| | Over-Classification | Are systems and materials classified at overly conservative levels? |



Price x Volume Considerations – CONSUMPTION/Other DRIVERS

| Category | Focus Area | Issue | | | |
|----------------------|--|--|--|--|--|
| Consumption Drivers | Cost Awareness- behaviors | Is there adequate focus on the costs of materials through the planning and maintenance processes | | | |
| | PM/CM Frequency | Are our maintenance practices resulting in more work than others'? | | | |
| | Repair vs. Replace | Are our maintenance behaviors or decision using more high cost materials than others | | | |
| | Use of materials Scrap of materials versus returned to stores Use of Safety Related in Non Safety Applications | Are materials being used cost effectively? | | | |
| Other considerations | Capitalization | How do our capitalization practices affect our rankings? | | | |
| | Other Accounting | How do other accounting differences affect our ranking? | | | |
| | Outage Frequency | Does our 18 month outage frequency affect our ranking? | | | |
| | Brackish Water | What is the impact of salt water 8 | | | |

Material Cost Reduction Activities

Shorter Term Opportunities

- Cost Awareness Reinforcement
 - Incorporated projected and actual material costs into the Work Week Process E-12,9,5 and +1
 - Utilization metric of parts reserved on work orders to influence behaviors related to over ordering – primarily to address inventory growth
- PM Optimization
 - Completion of on-going project to adjust frequencies/demand



• Examples of reduction of reliance on distributors – Sometimes called OEMs

| Description | Distributor Price | MFG Price | Savings | Usage in 2016 | Projected Saving in 2016 |
|-------------------|----------------------|--------------|--------------|------------------|--------------------------------|
| RELAY- 120VAC | \$ 3,900 | \$ 400 | \$ 3,500 | 15 | \$ 52,000 |
| RELAY-125VDC | \$ 3,900 | \$ 400 | \$ 3,500 | 61 | \$ 260,000 |
| RELAY-24VDC | \$ 6,700 | \$ 400 | \$ 4500 | 34 | \$ 190,000 |
| RX Head 'O' Rings | \$ 96,000 | \$ 36,000 | \$ 60,000 | 2 Per Outage | \$ 120K per Outage |



Longer Term Opportunities

- Commercial Grade Dedication Expansion- Goal is to ramp from \$1.1M to \$3.5M in average annual budget savings by end of 2016
 - Conducted an evaluation of frequently used Safety Related parts
 - Pilot underway to address on a proactive approach
 - Daily review of Safety Related and High Dollar demand to:
 - Target for CGD, Reverse Engineering or Alternate Suppliers
 - Reduce Quantities requested
 - Adjust stocking levels
 - Cancel purchase
 - Looking to partner with others to share CGD/RE information/plans
- Member of a pilot with others in the industry for inventory sharing and potentially leveraged buying
- Behavior modification for over ordering by Maintenance and Engineering
- Working with our Suppliers to determine how to develop cost effective approaches to purchasing expensive parts and materials- we need help



- Great opportunity for cost reduction available- even if you are in an upper quartile currently
- Collaboration between utilities makes sense and is starting to happen
 - Delivering the Nuclear Promise- SC-02 is Reduction in Material Expense focused
- Some suppliers seem to get it- we need more
- Devil is in the detail- requires human intervention to make informed decisions at the purchase requisition

