

RPI Pilot Plant Experience

Palisades Power Plant

May 19, 2015



Introduction

- **Entergy Interest**
 - Cumulative Impact Initiatives
 - 10 Sites with 12 Reactors
 - PWR and BWR designs
 - GE, CE, West, B&W NSSS designs
- **Palisades Selection**
 - Aging Management
 - Risk Informed Initiatives
 - Emergent Industry Issues

Pilot Application

- **SME Selection**
- **IDP Member Selection**
- **Training**
- **Pilot Schedule**
 - May – Site Lead Trained, Projects Selected
 - June – SME and IDP Members Selected, Process Training
 - July & August – Importance Evaluations
 - September – IDP Importance Review, Aggregation Meetings

Aggregation and Scheduling

Priority Assignment Examples

Issue	Category	Importance Category					NEI Priority	Palisades Priority
		Safety	Emergency Planning	Radiation Protection	Security	Reliability		
Additional High Head Diesel Driven Aux Feedwater Pump	Regulatory	Medium	None	None	Very Low	None	2	1
Incipient Detection for Cable Spreading, electrical equipment room	Regulatory	Medium	None	None	None	None	2	2
Cooling Tower E-30B Replacement due to Aging	Plant Improvement	Very Low	None	None	None	High	2	4
Combine EOPs and SAMGs into one Procedure	Regulatory	Low	Very Low	None	None	None	3	7
Replace Refueling Machine Control Consoles due to Aging	Plant Improvement	None	None	None	None	Low	4	8
Install Permanent Personnel Fall Protection at Rx Cavity Tilt	Plant Improvement	None	None	Medium	None	None	4	11
Reliable Spent Fuel Pool Instrumentation Installation	Regulatory	Very Low	None	None	None	None	4	12
Develop and install an electrical open phase detection and isolation	Regulatory	Very Low	None	None	None	None	5	18
Replace pressurizer heater breakers due to Accelerated Aging from Elevated Ambient Temperatures	Plant Improvement	None	None	None	None	None	5	19

Aggregation and Scheduling

Schedule Completion Dates Assignment Examples

Issue	Plant Condition	Current Schedule	Pilot Scheduled	Comments
Additional Diesel Driven Auxiliary Feedwater Pump (NFPA-805)	Outage	MAY 2017	MAY 2017	First left train outage to support modification implementation is 1R25.
Incipient Detection in Cable Spreading and Electrical Equipment Room (NFPA-805)	On-Line	OCT 2016	JUN 2016	Discuss with fleet projects the ability to move up modification implementation to before Jun 2016.
Cooling Tower E-30B Replacement (Aging)	Outage	MAY 2017	MAY 2017	
Combine Emergency Operating Procedures and Severe Accident Management Guidelines into one Procedure (Fukushima)	On-Line	DEC 2016	JUN 2016	
Replace Refueling Machine Control Consoles (Aging)	Outage	MAY 2017	MAY 2017	
Permanent Personnel Fall Protection Install at Rx Cavity Tilt Pit (Personnel Safety)	Outage	OCT 2015	OCT 2015	Resources available to complete in 1R24 without impacting higher priority projects.
Reliable Spent Fuel Pool Instrumentation Installation (Fukushima)	On-Line	JAN 2015	DEC 2017	Project is currently designed and funded for installation in 2015
Install Electrical Open Phase Detection and Isolation (NRC Bulletin)	Outage	MAY 2017	NOV 2018	Isolation function placed in service after 18 months of monitoring. Consider exemption to not install isolation function.
Replace Pressurizer Heater Breakers (Aging)	On-Line	MAR 2015	JUN 2019	

Summary

- Issue characterization evaluations provided a systematic approach using PRA insights to consistently determine the importance of projects .
- Characterization evaluations completed by SMEs and reviewed by site senior leadership provides valuable input used to make risk informed decisions on project priority.
- The project aggregation through pairwise comparison of project benefits aids in maintaining a risk reduction focus when allocating limited resources.
- IDP meetings provided a venue for station senior leadership to align priorities including key members of the plant health committee.
- The NEI process provides a common platform for the industry and the NRC staff to discuss the risk benefits of individual issues/projects.