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October 11, 2017

INDUSTRY PERSPECTIVE

USE OF SELF-ASSESSMENTS IN ROP BASELINE INSPECTION PROGRAM

TODAY'S AGENDA

- Overall industry perspective on engineering inspection efficiencies
- Acknowledgement of key factors in use of self assessments
- Conceptual design of Licensee Performance Verification (LPV)
- Recognition of LPV efficiencies
- Open items and next steps

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OVERALL INDUSTRY PERSPECTIVE

METHODS TO CAPTURE EFFICIENCIES

ADJUST INSPECTION CYCLE FROM THREE TO FIVE YEARS

ELIMINATE INSPECTIONS WHICH HAVE SERVED THEIR PURPOSE

REDUCE OVERLAP AMONG EXISTING INSPECTIONS

REVIEW LICENSEE PERFORMANCE VERIFICATIONS IN LIEU OF INSPECTION

NRC review of and credit for Licensee Performance Verifications is a tool to explore each of these efficiency options.

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KEY FACTORS

KEY FACTORS

- For Industry
  - Reduce total hours
    - Preparation + Inspection + Response
  - Levelize engagement over the cycle
  - Focus on maintenance of design vs. proving adequacy of original design
  - Focus on risk-significant SSCs

KEY FACTORS

- For NRC
  - Maintain independence
  - Maintain openness
  - Align with Principles of Good Regulation

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INSERT SPEAKER NAMES?

LICENSEE PERFORMANCE VERIFICATIONS

LICENSEE PERFORMANCE VERIFICATION

NEW NAME	PROVEN PROCESS
• Differentiates from INPO-related self assessment process • Establishes a defined, rigorous, and consistent process across the industry	• Same rigor as assessments currently reviewed by inspectors • Similar management oversight • LPV team modeled after current inspection response team

NEI

LPV VISION

- Licensee owns their performance in key regulatory areas
- Builds on foundational ROP concept: the licensee finds and fixes their own problems
- Regulatory value added in overseeing this fundamental behavior vs. direct technical inspection

NEI

LPV GUIDANCE

- NEI guidance document will promote consistency across the industry
  - Will be provided for NRC review
- Key areas
  - Scope/Topic/Team Selection
  - Verification Plan
  - Information Gathering
  - Execution (Template)
  - Report Preparation (Template)

LPV GUIDANCE
SCOPE/TOPIC/TEAM SELECTION

- Station management determines LPV performance window within time frame necessitated by inspection cycle
- LPV team leader is appropriate member of station management
  - Similar to today's inspection response team leader
- Team leader, with subject matter experts, develops initial scope based on:
  - Risk insights
  - CAP themes
  - Dialogue with NRC

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LPV GUIDANCE
SCOPE/TOPIC/TEAM SELECTION

- Considerations when developing scope/topics
  - 50.69
    - Ranks 1 & 2
  - History
    - Operating
    - Modifications
    - Last time reviewed
  - Corrective Actions
  - PRA Risk Ranking
  - Outage Work/Shutdown Risk
  - Low Margin Components
  - Program Changes
  - Operating Experience

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LPV GUIDANCE
SCOPE/TOPIC/TEAM SELECTION

- Scope addresses a subset of attributes, such as
  - Mechanical
  - Electrical
  - I&C
  - Operator interface
  - Risk implications
  - Water or power sources
  - Maintenance and testing
  - Program interface (i.e. GL 89-13, fire protection, etc.)

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LPV GUIDANCE
SCOPE/TOPIC/TEAM SELECTION

- LPV team expertise selected to rigorously evaluate selected attributes
- Team size is scalable to scope
  - Generally, the entire scope should be accomplished within a two-week period
- Expertise selected to fully evaluate attributes
  - Similar to today's inspection response team
- At a minimum, the LPV team includes
  - One independent participant (from another site within a fleet, from a different fleet, or a contract resource)
  - A subject matter expert

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LPV GUIDANCE
SCOPE/TOPIC/TEAM SELECTION

- Team leader receives training on LPV process
  - Problem Identification & Resolution
  - Regulatory intent of the LPV process
- Independent participant(s) receive site-specific system training as necessary

LPV GUIDANCE
VERIFICATION PLAN

- Templated LPV plan would include
  - Samples selected by team to accomplish scope
  - Qualification of team
  - Documents to be collected and reviewed
- Reviewed and approved by station management
- Plan provided to NRC in advance of LPV performance

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LPV GUIDANCE
INFORMATION GATHERING

- LPV team develops an understanding of design and license basis for the selected scope
  - UFSAR
  - Calculations
  - Drawings
  - Operating procedures
  - Maintenance history
  - Modifications
  - 50.59 screenings/evaluations
  - Program interfaces
- Team conducts interviews of appropriate station personnel to gain insights into performance trends

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LPV GUIDANCE EXECUTION

- Templated path to fully evaluate scope
- Driven by a series of questions for each design and operating attribute
- Develops conclusions with disposition to existing programs
  - CAP
  - Operability
  - Reportability
  - Trending
  - Outgoing Operating Experience

LPV GUIDANCE
REPORT PREPARATION

- Templated report with level of detail similar to today's NRC inspection reports
- Full LPV report and detailed condition reports made available for inspection via electronic document portal
- Executive summary, including LPV conclusions and a list of related condition reports, docketed for openness
  - Utilize existing management approval and correspondence processes

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RECOGNITION OF EFFICIENCIES

FOR INDUSTRY

- Reduces combined burden of inspection assessment, preparation, and response
- Enhances learning organization capability
  - Knowledge gained through LPV performance is retained within the organization
- Nimble and responsive to today's issues
  - LPV can focus on current performance trends and CLB maintenance
- Self critical – find and fix our own issues

FOR NRC

- Consistent with agency-wide quest for efficiency and reform
- Allows for broader oversight footprint
  - More regulation of behavior and accountability
- Fulfillment of agency mission with less reliance on contract resources
- Improved scheduling of inspector resources
  - Licensees can adapt LPV schedule to station needs

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OPEN ITEMS & NEXT STEPS

OPEN ITEMS

- Regulatory response to LPV conclusions
- Relationship between NRC inspection procedures and LPV guidance/templates
- Sharing of LPV results within the industry
- NRC engagement during performance of LPV

NEXT STEPS

- Additional meeting(s) to consider other potential efficiency gains
- Align on application(s) for LPV

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