

Efficiency Opportunity



October 5, 2018

Efficiency Opportunity: 18–EG-01

Standardized Item Equivalency Process (SIEP)

Issue: Standardized processes to perform alternate replacement item evaluations

Summary of Efficiency Opportunity

- Desired end-state— Standard Item Equivalency Process (SIEP) / procedure and mentoring guide that leverages Standard Design Change Process (SDP) where appropriate.
- Value proposition (vision of excellence) — Improve quality and timely disposition of alternate replacement items necessary to address issues such as obsolescence through application of a best practice industry standard, that efficiently evaluates alternate replacement items.
- Why it is important? — A key element of this effort is to streamline the item equivalency evaluation process using a graded approach, and promote standardized training structures.
- Industry Benchmarking values— More utilities are using a standardized approach.
- The measure of effectiveness (METRIC) is assessed by:
 - No consequential events attributed to SIEP
 - Greater use of SIEP versus SDP
 - Graded approach is effectively used and average evaluation time is reduced

Relevant Standards

Performance Objectives and Criteria (INPO)

- **CM.3-10:** Procedures, drawings, training lesson plans, and related documents are updated promptly by the responsible departments following configuration change implementation.
- **CM.3-13:** Equivalency evaluations ensure that part replacements do not adversely affect the design functions of systems, components, and structures. Critical design and operational characteristics, including system response effects, are identified and evaluated. Changes in characteristics are thoroughly analyzed, documented, and validated through testing, when necessary, and are approved before the part is placed in service.
- **INPO 10-005,** Principles for Maintaining an Effective Technical Conscience

Recommended Industry Actions

- Design Oversight Working Group issue a standard item equivalency process procedure as part of the Standard Design Change Process.
- Design Oversight Working Group provide implementation support as needed through industry peer support and provide an open forum to clarify expectations and ask questions.

Change Management Considerations

- See Attachment-A for an example Change Management Template.

Company Actions

- Site/fleet Item Equivalency process owners revise governing processes and procedures consistent with [NISP-EN-02](#) and [IMG-SIEP-001](#). See attached Change Management Plan.
- Promote initiative through corporate and sitewide communication. See attached Change Management Plan.
- Reinforce expectations for a healthy technical conscience, specifically engineers ensure high-quality products.
- Establish metrics for measuring evaluation execution time, throughput into short/long form processes.

Guidetrails

1. SIEPs developed by third parties, such as, Nuclear Safety System Suppliers (NSSS) requires a certification to the utility that the appropriate design review and item equivalency was performed. This certification requires utility review for compliance with specifications. The level of rigor will depend upon potential consequences.
2. Managers must ensure that the individuals (internal and external, as appropriate) are proficient and competent to handle the type of Item Equivalencies allowed per [NISP-EN-02](#).
3. Use of shared Item Equivalency Evaluations from another utility requires careful review of all characteristics and bounding technical requirements for the directed end-use application to ensure that the leveraged information is valid for the new application.

Efficiencies Gained Evaluation

- Leverage all the industry best practices for developing alternate replacement item evaluations into one standardized efficient process.
- Reduce evaluation time through use of new short/long form processes.
- Reduction in SDP design products by allowing the use of simpler item equivalency process.

Industry Contacts

- Industry Champions for this Issue:
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Industry Review:



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Attachment- A SIEP Example Change Management Plan

No.	Description	Group / Org / Utility	Owner	Initiation Date	Due Date	Status	Comment
1	Implement SIEP Procedure						
1.1	Identify process SMEs for SIEP at each utility					Open	
1.2	Identify utility/fleet specific commitments from former IEE procedure that will need to be placed in interfacing procedure					Open	
1.3	Identify impacts to other utility procedures					Open	
1.4	Prepare procedure routing forms and utility/specific CM implementation documents for new SIEP Procedure					Open	
1.5	Route procedure for review according to utility specific process					Open	
1.6	Obtain process owner approval					Open	
1.7	Release approved procedure and new SIEP forms for utility implementation					Open	Performed Concurrently with section 2.5
1.8	Void former IEE procedure and forms					Open	
1.9	Initiate revisions to affected utility procedures					Open	
2	Develop Utility Interface Procedure for SIEP						
2.1	Gap SIEP procedure to support processes of former IEE procedure and bin utility-specific interfaces					Open	
2.2	Develop instructions for blue box processes from SIEP and utility commitments into new interface					Open	

	procedure						
2.3	Submit interface procedure for routing through appropriate stakeholders					Open	
2.4	Obtain process owner approval					Open	
2.5	Release approved procedure for utility implementation					Open	Performed Concurrently with Section 1.6
3	Training / Qualifications						
3.1	Assign SME and utility management sponsor to attend Train the trainer session						
1	Complete Training Needs Analysis					Open	
3.2	Identify utility SMEs for SIEP at each utility					Open	
3.3	Develop utility-specific training on process interfaces					Open	
3.4	Identify and Assign process training CBT (if developed) or work group specific training sessions to affected personnel					Open	
3.5	Gap current qualification requirements to new Industry Mentoring Guide for SIEP (IMG-SIEP-001)					Open	
3.6	Obtain approval from Utility Specific Training committee for new Industry Mentoring Guide IMG-SIEP-001 , as applicable.					Open	
3.7	Update training records to reflect personnel are qualified to new process.					Open	
4	Communications						
4.1	Brief Utility Management on new process and implementation plan					Open	
4.2	Present the implementation status					Open	

	and schedule to site / fleet leadership						
4.3	Provide monthly phone call discussing status and implementation of new process with site / corporate leadership or stakeholder					Open	
4.4	Issue communications periodic newsletters to stakeholders leading up to release of new process					Open	
4.5	Brief process owner on a periodic basis					Open	
5	Utility Specific Process Oversight						
5.1	Develop on-going monitoring plan to verify decision making to appropriate process					Open	
5.2	Establish metrics for measuring evaluation execution time, throughput into short/long form processes.					Open	
6	Effectiveness Review / Monitoring						
6.1	Develop standard assessment objectives to evaluate implementation effectiveness					Open	
6.2	Perform a snapshot self-assessment at utility to evaluate implementation					Open	
6.3	Periodic telecons with Stakeholders/Management to facilitate feedback on the new process.					Open	Includes successes and gaps in implementation, process effectiveness and efficiency gains/losses