Using FLEX Equipment and Risk Informed Decision Making to Maximize Safety

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Mission
Improve SAFETY and efficiency of the nuclear fleet with the use of portable equipment

<table>
<thead>
<tr>
<th>Maximize Areas of Credit</th>
<th>Expand operational and regulatory credit given to mitigating strategies</th>
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<tbody>
<tr>
<td>Maximize FLEXibility</td>
<td>Expand where portable equipment is used in plant operations</td>
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<tr>
<td>FLEX and Beyond</td>
<td>Be inclusive of all portable equipment beyond just FLEX (e.g. B.S.b portable equipment)</td>
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Vision
PORTABLE EQUIPMENT ↔ RISK INSIGHTS
IMPROVED SAFETY & OPERATIONS
### Industry Framework Guidance

<table>
<thead>
<tr>
<th>NEI 16-08</th>
<th>NEI 16-06</th>
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<tr>
<td>Guidance for Optimizing the Use of Portable Equipment</td>
<td>Crediting Mitigating Strategies in Risk Informed Decision Making</td>
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- Improving plant safety and operations using portable equipment
- Evaluating portable equipment in risk-informed decision making

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### Implementing Portable Equipment to Improve Risk

- Evaluate the potential use of equipment
- Determine the benefits of use of the equipment
- Establish a technical basis for use of the equipment
- Is there a need to make changes to training programs?
- Does sufficient staffing exist to implement the equipment?
- Will implementing portable cause any unintended consequences?

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### Addressing Unintended Consequences

**Consider whether implementing portable equipment will ...**

- Cause a Reactor Scram
- Cause the actuation or failure of a plant system
- Impact to plant design bases
- Impact on other plant programs (e.g., FLEX program)
- Impact maintenance Rule implementation
- Impact Physical and Cyber Security
- Need storage of radiologically contaminated equipment
- Impact the site emergency plan
Crediting Portable Equipment in RIDM

Is the Equipment Feasible to Use in the Scenario?
Will the Equipment be Available, Reliable & Deployable?
Is There Adequate Time Margin?
Is there Clear and Effective Command and Control?
Will Environmental Conditions Challenge Implementation?

Potential Applications of NEI 16-06

<table>
<thead>
<tr>
<th>Activity</th>
<th>WFF</th>
<th>WW</th>
<th>SDP NOEDs MSPI</th>
<th>Maintenance Rule</th>
<th>Risk Applications</th>
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<tbody>
<tr>
<td>Qualitative Approach</td>
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<td>Semi Quantitative Streamlined</td>
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<td>PRA Modeling</td>
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Enhancements to PRA Modeling

- Existing data and methods are sufficient for establishing credit for mitigating strategies
- However, enhancements are necessary to establish the appropriate level of credit
- NEI 16-06 provides approaches to address issues until data and methods are refined
- EPRI has started work for the development of failure frequencies and enhancements to HRA methods