Inspection Planning
Purpose of Annual Planning

- Focus on risk significant activities
- Integrate activities across cornerstones
- Facilitate management of resources
- Facilitate tracking of inspection activities
Planning Cycles

- Annual Planning
- Mid-Cycle revisions
- Resident planning
What is the Same:

- Planning Meetings every 6 months
- Coordinated plans at the regional level
- Determining if inspection performed by resident or regional inspectors
- Planning each procedure
What is Different:

- 12 - month planning cycle
- More “procedures” (inspectable areas) to plan
- Shared responsibilities (DRP - DRS) in several inspectable areas
- Determining those inspectable areas that are applicable
What is Different: (continued)

- Emphasis is different - more risk-informed
  - Select samples when higher risk work is being performed (don’t inspect just to meet established frequencies)
  - For example:
    - Surveillance testing (supports PIs in measuring procedure quality, human performance, system ability to meet design functions. Samples should be selected for systems and equipment that have a direct effect on maintaining barriers and mitigating accidents.)
    - Human performance (focus for inspecting operators is on abnormal and accident situations (via simulator))
  - Estimated inspection effort establishes the relative emphasis each inspectable area should receive based on that area’s contribution to overall risk.
What is Different: (continued)

• For the residents:
  – Planning when to do their inspectable areas
  – Coordinating and combining inspectable areas because expected level of effort is small
  – Risk informing inspection samples using:
    • Plant-specific SDP worksheets
    • Site-specific PRA
    • Licensee’s Risk Monitoring tools
    • Inspector Experience
Annual Planning Meeting/Mid-Cycle Review

• Similar to current PPRs - 12 month schedule

• Prior to Meetings
  – Resident Inspectors/Project Engineers provide important information on licensee schedule

• During Meetings
  – Individual branches propose inspection schedules based on licensee’s activity schedule and licensee performance using results from previous inspections and Performance Indicators

• All green - only Baseline
Annual Planning Steps

Region Based Inspections

• Determine the inspectable areas applicable for the period

• For each inspectable area, determine who will do inspection and when

• Schedule inspections over the 12 month period
Annual Planning

When can an Inspectable Area be excluded?

- When no activities are expected to occur during the 12 month period.
  - Example:
    - No refueling or outage is planned for the 12 month period.

- The inspectable are - Refueling and Outage Activities is not scheduled.

- ALARA inspectable area inspection activities

- Less frequent than annually
  - Example
    - Fire Protection (triennial)
Increasing Level of Effort

- Perform inspections at the times of greatest risk.

- Increased effort appropriate if work being done during a month results in additional risk in a particular inspectable area.

  - Example:
    - Emergent work, Non-routine plant evolutions
NOTE: Many inspections required of resident inspectors are based on day-to-day work conditions and dependent upon the licensee’s schedules. Resident inspectors are not required to follow the recommended frequency of inspections exactly. For example, monthly inspections means inspecting approximately 12 times spread over the year and inspecting at the times of greatest risk.

<table>
<thead>
<tr>
<th>Inspectable Area</th>
<th>Required Actions</th>
<th>Notes</th>
<th>Cornerstone</th>
<th>Level of Effort for Multiple Cornerstones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergent Work</td>
<td>Review 2 activities a month for proper risk assessment</td>
<td></td>
<td>I</td>
<td>10 activities/year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>14 activities/year</td>
</tr>
<tr>
<td>Equipment Alignment</td>
<td>Perform 1 partial system walkdown</td>
<td>Also see Semiannual Requirements</td>
<td>I</td>
<td>2 times/year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>8 times/year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>2 time/year</td>
</tr>
<tr>
<td>Fire Protection</td>
<td>Perform 1 area walkdown</td>
<td>Also see Triennial</td>
<td>I</td>
<td>1 time/year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>11 times/year</td>
</tr>
<tr>
<td>Inservice Testing</td>
<td>Review 2 test activities a month</td>
<td></td>
<td>M</td>
<td></td>
</tr>
<tr>
<td>Large Containment</td>
<td>For PWRs verify hours purge valves are open and trends</td>
<td>Also requires LLRT during refuelings</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Isolation Valve</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leak Rate and Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Maintenance Rule</td>
<td>Review categorizations of failures and goal settings on 2 systems a month</td>
<td></td>
<td>I</td>
<td>2 systems/year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>20 systems/year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>2 systems/year</td>
</tr>
</tbody>
</table>

Table A: Approximately Monthly Inspection Guidelines
Table C: Annual and Refueling/Outage Inspection Guidelines

<table>
<thead>
<tr>
<th>Inspectable Area</th>
<th>Required Actions</th>
<th>Notes</th>
<th>Cornerstone</th>
<th>Level of Effort for Multiple Cornerstones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Control (Security)</td>
<td>Observe performance</td>
<td>Annual</td>
<td>SEC</td>
<td></td>
</tr>
<tr>
<td>Access Control to Radiologically Significant Areas</td>
<td>Walkdown areas and review incidents</td>
<td>Annual Note: Although listed as annual, review of incidents should be done as the information becomes available</td>
<td>OE</td>
<td></td>
</tr>
<tr>
<td>ALARA Planning and Controls</td>
<td>Review of significant jobs and observation of activities</td>
<td>Annual Note: Level of effort is less when there is no outage during the year</td>
<td>OE</td>
<td></td>
</tr>
<tr>
<td>Changes to Licensee Condition and Safety Analysis Report</td>
<td>Review 50.59 evaluations</td>
<td>Annual</td>
<td>M</td>
<td>4 items/year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>1 item/year</td>
</tr>
<tr>
<td>Flood Protection</td>
<td>Review licensee preparations and walkdown areas</td>
<td>Annual</td>
<td>I</td>
<td>40 percent</td>
</tr>
<tr>
<td>Heat Sink Performance</td>
<td>Observe periodic testing</td>
<td>Annual Note: Also see Biennial</td>
<td>M</td>
<td></td>
</tr>
</tbody>
</table>
Plan Adjustments - Expected

- Annual Planning Meeting

- Licensee crosses an Action Matrix threshold
  - Single White inspection finding in a cornerstone
  - Single PI crosses threshold
  - Multiple PIs or findings cross thresholds
Plan Adjustments - Optional

- Mid-Cycle Reviews
- Event Response
- Allegation Follow-up