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# Possible Approaches to Address Safety Culture Enhancements

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Region II

Safety Culture Public Meeting  
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# The October 26 Meeting Identified 10 Approaches

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(1) Full Diagnostic

NRC staff inspects safety culture while visiting sites

(2) Training Model

NRC oversees safety culture like oversight of training

(3) Short Survey

NRC oversees safety culture surveys

(4) Revise Individual Inspection Procedures

NRC inspects safety culture like PI&R

(5) Survey by Senior Resident Inspectors (SRIs)

SRIs conduct safety culture surveys



# The October 26 Meeting Identified 10 Approaches

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- (6) ROP Findings  
NRC looks for safety culture aspects while developing ROP findings
- (7) Post Identifying Cross-Cutting Aspects  
NRC inspects safety culture only for substantive cross-cutting issues
- (8) Safety Culture Insights by Walking Around  
Inspectors gain safety culture insights while walking around
- (9) Establish set of Performance Indicators  
New PIs for safety culture, reported and assessed like other PIs
- (10) Safety Culture Topical Report  
NRC audits safety culture-related plant activities



## Several Approaches Appear Inconsistent with Commission Direction

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- (1) Full Diagnostic
- (2) Training Model
- (3) Short Survey
- (5) Survey by Senior Resident Inspectors
- (10) Safety Culture Topical Report

These approaches were not considered further.



# Several Were Retained for Further Consideration

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- (4) Revise Individual Inspection Procedures
- (9) Establish set of Performance Indicators
- (6) ROP Findings (renamed “Cross-Cutting Areas”)
- (7) Post Identifying Cross-Cutting Aspects
- (8) Safety Culture Insights by Walking Around
- (X) Greater-than-Green (proposed after the October public meeting)



# Evaluation Strategy

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1. Identify possible approaches
  - Described in correspondence from stakeholders
  - Mentioned during this public meeting
2. Eliminate those not consistent with Commission Direction
3. Characterize each approach in general detail
4. Discuss pros and cons



# Evaluation Strategy

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## 5. Iterate as necessary

- Characterize each remaining approach in more detail
- Evaluate approaches against more-detailed criteria
- If possible, identify a preferred approach based on the latest iteration
- If not, iterate again

## 6. Develop revisions as needed to implement the approach



# Adopted Conventions to Facilitate Consideration

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- Focus on essential details of the implemented options
- In the first iteration, keep it simple:
  - Avoid implementation considerations
- Refer to “Options” A, B, C, ...
  - Identify pros and cons



# Discussion

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Is this evaluation strategy appropriate?



# Characterization of Options

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- **Information source**
  - *What safety culture-related info would be obtained?*
- **Documentation**
  - *Where would safety culture-related info be documented?*
- **Assessment**
  - *What decisions would be based on safety culture-related info?*
- **Follow-up**
  - *What inspections or actions would result?*



# Safety Culture-related Features Identified in Existing Programs

	<i>Existing</i>
<b>INFORMATION SOURCES</b>	<ul style="list-style-type: none"> <li>• Inspectors complete inspections</li> <li>• Inspectors complete Plant Status activities</li> <li>• Inspectors identify cross-cutting aspects of findings</li> <li>• NRC personnel investigate and/or inspect allegations</li> </ul>
<b>DOCUMENTATION</b>	<ul style="list-style-type: none"> <li>• The NRC issues docketed correspondence</li> </ul>
<b>ASSESSMENT</b>	<p>In accordance with MC 0305, NRC managers:</p> <ul style="list-style-type: none"> <li>• Identify substantive cross-cutting issues</li> <li>• Determine the appropriate response for plant performance</li> </ul>
<b>FOLLOW-UP</b>	<p>In accordance with MC 0305, NRC staff responds in accordance with:</p> <ul style="list-style-type: none"> <li>• The staff's evaluation of substantive cross-cutting issues</li> <li>• The Action Matrix</li> </ul>



# Discussion

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- Already-identified options?
  - Markup handouts
  - Pros and cons
- New options?
  - Structure new options in terms of any or all of the 4 elements; use template if you wish
  - Identify essential features of the implemented option
  - Separately consider implementation details, pros, & cons



# Option A: Revise Individual Inspection Procedures

	<i>Existing</i>	<i>New</i>
<b>INFORMATION SOURCES</b>	<ul style="list-style-type: none"> <li>• Inspections &amp; Plant Status</li> <li>• Allegations</li> </ul>	Also inspect safety culture components during every inspection
<b>DOCUMENTATION</b>	<ul style="list-style-type: none"> <li>• Docketed correspondence</li> </ul>	Also document safety culture observations in inspection reports
<b>ASSESSMENT</b>	<ul style="list-style-type: none"> <li>• MC 0305 assessment</li> </ul>	(Same as existing)
<b>FOLLOW-UP</b>	<ul style="list-style-type: none"> <li>• MC 0305 response</li> </ul>	(Same as existing)



# Option B: Establish Set of Performance Indicators

	<i>Existing</i>	<i>New</i>
<b>INFORMATION SOURCES</b>	<ul style="list-style-type: none"> <li>• Inspections &amp; Plant Status</li> <li>• Allegations</li> </ul>	Also: PIs for Safety Culture and/or PI trending in green band
<b>DOCUMENTATION</b>	<ul style="list-style-type: none"> <li>• Docketed correspondence</li> </ul>	(Same as existing)
<b>ASSESSMENT</b>	<ul style="list-style-type: none"> <li>• MC 0305 assessment</li> </ul>	Also: if a PI trend crosses a >green threshold, plan to inspect safety culture aspects of the trend
<b>FOLLOW-UP</b>	<ul style="list-style-type: none"> <li>• MC 0305 response</li> </ul>	Also complete planned safety culture inspections



# Option C: Cross-Cutting Areas

	<i>Existing</i>	<i>New</i>
<b>INFORMATION SOURCES</b>	<ul style="list-style-type: none"> <li>• Inspections &amp; Plant Status</li> <li>• Allegations</li> </ul>	Also inspect safety culture components associated with non-minor findings
<b>DOCUMENTATION</b>	<ul style="list-style-type: none"> <li>• Docketed correspondence</li> </ul>	Also document safety culture aspects of non-minor findings
<b>ASSESSMENT</b>	<ul style="list-style-type: none"> <li>• MC 0305 assessment</li> </ul>	Also may identify: <ul style="list-style-type: none"> <li>• a substantive cross-cutting issue in one or more safety culture components</li> <li>• a safety culture cross-cutting issue</li> </ul>
<b>FOLLOW-UP</b>	<ul style="list-style-type: none"> <li>• MC 0305 response</li> </ul>	(Same as existing)



# Option D: Post Identifying Cross-Cutting Aspects

	<i>Existing</i>	<i>New</i>
<b>INFORMATION SOURCES</b>	<ul style="list-style-type: none"> <li>• Inspections &amp; Plant Status</li> <li>• Allegations</li> </ul>	(Same as existing)
<b>DOCUMENTATION</b>	<ul style="list-style-type: none"> <li>• Docketed correspondence</li> </ul>	(Same as existing)
<b>ASSESSMENT</b>	<ul style="list-style-type: none"> <li>• MC 0305 assessment</li> </ul>	(Same as existing)
<b>FOLLOW-UP</b>	<ul style="list-style-type: none"> <li>• MC 0305 response</li> </ul>	Also: if a substantive cross-cutting issue is identified, the NRC completes a focused inspection of safety culture



# Option E: Safety Culture Insights by Walking Around

	<i>Existing</i>	<i>New</i>
<b>INFORMATION SOURCES</b>	<ul style="list-style-type: none"> <li>• Inspections &amp; Plant Status</li> <li>• Allegations</li> </ul>	Inspectors also routinely verify safety culture components
<b>DOCUMENTATION</b>	<ul style="list-style-type: none"> <li>• Docketed correspondence</li> </ul>	Also, inspection reports include safety culture-related observations
<b>ASSESSMENT</b>	<ul style="list-style-type: none"> <li>• MC 0305 assessment</li> </ul>	Assessment also considers safety culture-related observations
<b>FOLLOW-UP</b>	<ul style="list-style-type: none"> <li>• MC 0305 response</li> </ul>	(Same as existing)



# Option F: Greater-Than-Green

	<i>Existing</i>	<i>New</i>
<b>INFORMATION SOURCES</b>	<ul style="list-style-type: none"> <li>• PI data, Inspections &amp; Plant Status, &amp; Allegations</li> </ul>	
<b>DOCUMENTATION</b>	<ul style="list-style-type: none"> <li>• PI results &amp; docketed correspondence</li> </ul>	
<b>ASSESSMENT</b>	<ul style="list-style-type: none"> <li>• MC 0305 assessment</li> </ul>	
<b>FOLLOW-UP</b>	<ul style="list-style-type: none"> <li>• MC 0305 response</li> </ul>	<p>Also: If a PI or finding is &gt;green, inspect whether safety culture problems were a contributing factor. If so:</p> <ul style="list-style-type: none"> <li>-The licensee submits a plan to correct the problems.</li> <li>- The NRC confirms the plan via a CAL.</li> <li>- After the licensee completes the plan, the NRC repeats the inspection.</li> </ul>



# Discussion

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Based on previous discussion, most desirable option?



# Next Steps

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- Needed Actions
- Milestones
- Meetings



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# Summary of Highlights of Meeting



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# Closing Remarks