Construction Reactor Oversight Process Development

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- **The NRC cROP WG's interaction with the NEI cROP Task Force and other stakeholders has resulted in substantive agreement on the following:**
  - **Issue Screening**
  - **cROP framework, including cornerstone objectives, attributes, and areas to measure**
  - **Two Significance Determination Process Approaches**
    - **Risk Matrix and Flowchart (details still need to be developed)**

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- **Issue Screening**
  - **Inspection Manual Chapter (IMC) 0613 provides issue screening guidance**
  - **cROP WG will recommend to modify the issue screening process by incorporating applicable portions of the IMC 0612 approach for operating reactors**
  - **Recommendations will include the use of the terms 'issue of concern' and 'performance deficiencies' and the use of the traditional enforcement screening tool**

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Draft Significance Determination Process Matrix

Degree of Non-Conformance	Insignificant	Significant	Very Significant
High	White	Yellow	Red
Medium	Green	White	Yellow
Low	Green	Green	White
Minimal	Green	Green	Green

Risk Significance

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Degree of Non-conformance

- Evaluate the finding using the following factors
  - Quality of Construction
  - Extent of Onsite Review Prior to Identification
  - Corrective Actions

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Degree of Non-conformance

Quality of Construction

3 points
- Major repairs, replacement or rework needed to meet AC
- Reanalysis involving reduction of margin to design limits
- Failure on retest or re-inspection due to same failure mode

2 points
- Limited repair, replacement or rework needed to meet AC
- Reanalysis needed to meet AC
- Acceptable on retest or re-inspection

1 point
- No repair, replacement or rework needed to meet AC
- Program or process corrective actions sufficient

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Degree of Non-conformance

Extent of Onsite Review Prior to Identification

3 points
- ITAAC Closure Letter Submitted to NRC
- ITAAC acceptance criteria reviewed and accepted by 1st line QA/QC

2 points
- Turned over for ITAAC testing or pre-op testing
- In process work has been completed to determine AC met

1 point
- Identified during fabrication, installation, or QC phase
- Fabrication/QC test completed successfully

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Degree of Non-conformance

Corrective Actions

3 points

- Recurrence of similar significant problem due to ineffective corrective actions
- Recurrence of SCAQ due to ineffective corrective actions

2 points

- Untimely corrective actions for similar problem
- Recurrence of a similar, less significant problem
- Problem caused by repetitive personnel error

1 point

- Problem not previously identified
- Problem identified by planned tests, inspections, or reviews

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Degree of Non-conformance

Determination of Degree of Non-conformance

Summary of points

High:	9 points
Medium:	7 - 8 points
Low:	5 - 6 Points
Minimal:	4 points or less

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Risk Significance

- Very Significant
  - Finding associated with targeted ITAAC in a risk significant system
- Significant
  - Finding associated with remaining targeted ITAAC
- Insignificant
  - All other applicable findings

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Risk Significant System

- To be determined for each design based on Fussel-Vessely and Risk Achievement Worth Values

- Possible Systems for AP1000
  - PMS (Protection and Safety Monitoring System)
  - DC (DC Power)
  - IRWST (In Containment Refueling Water Storage Tank
  - CMT (Core Makeup Tank)
  - ACC (Accumulators)

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Risk Significance

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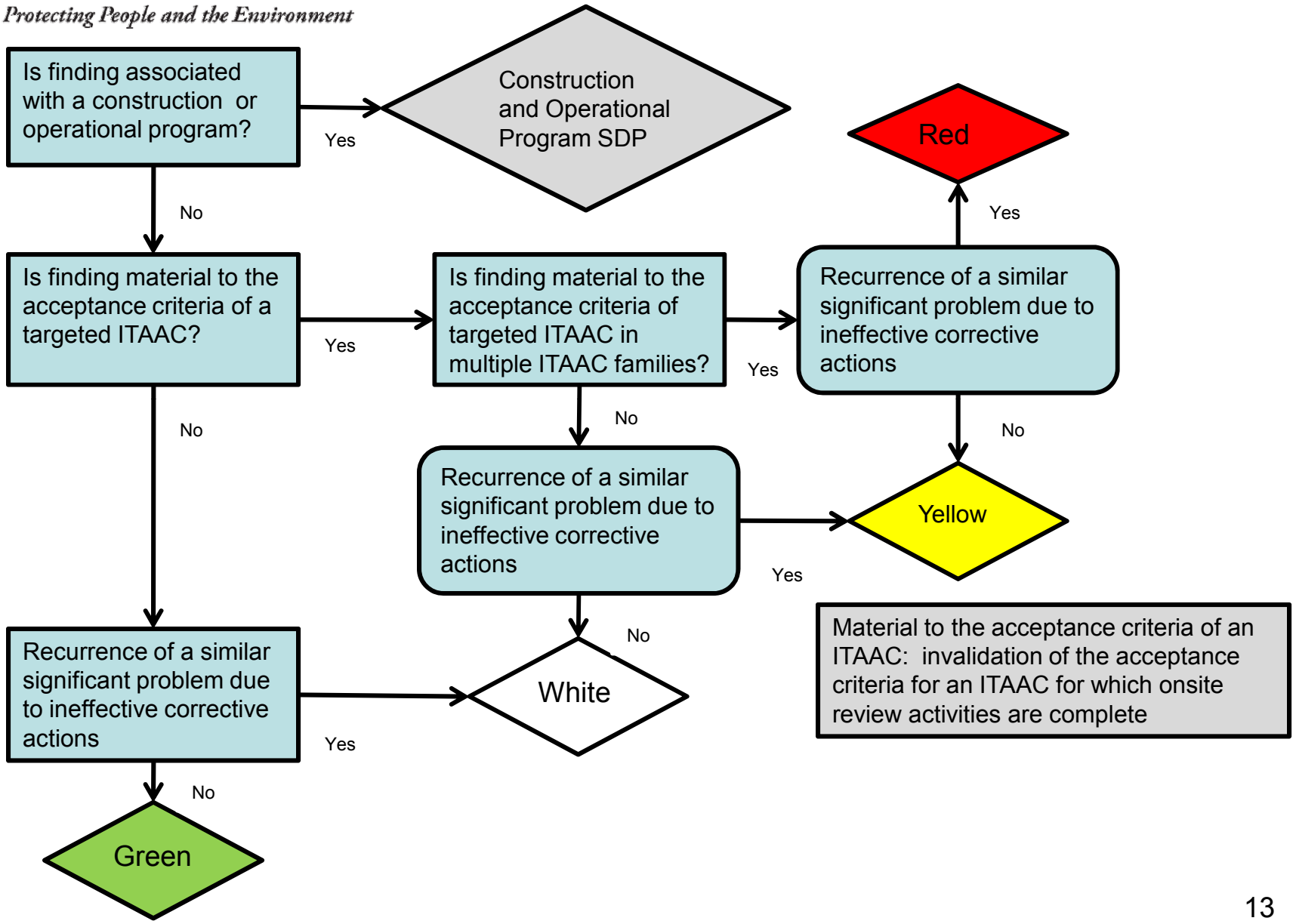
Draft Construction SDP Flow Chart



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- IMC 2505 Provides Construction Assessment Program Guidance including Construction Action Matrix

- cROP Working Group Will Recommend Some Changes to Construction Assessment Program

  - **Continuous assessment of all inspection results, including inspections conducted of applicants**
  - **Implementation of formal, semi-annual assessment program upon issuance of license and initiation of sufficient activities such that a formal assessment would be meaningful**

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- Next Steps
  - Performance Indicator Approach
  - Construction Action Matrix Inputs
  - Safety Culture Approach
  - Assessment Program Evaluation
  - Transition to ROP

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- Federal Register Notice Issued on June 24 Requesting Feedback on cROP Development
- Category II Meeting With NEI cROP Task Force on July 14 and August 5
- Internal White Paper With Working Group Recommendations August 6
- Category III Meeting on August 19
- Notation Vote SECY Paper Issued By October 29
- Commission Meeting December 9