



# Construction Reactor Oversight Process Framework Comments

Greg Gibson  
Vice President, Regulatory Affairs  
UniStar Nuclear Energy

# Principles

- cROP should leverage existing ROP for consistency and Public acceptance/communication
- ROP Framework
  - Cornerstones
  - Action Matrix
  - Significance Determination Process

# Cornerstones

## Use of cornerstones flow from NRC mission

ROP	cROP
<b>Reactor Safety</b>	<b>Construction Reactor Safety</b>
<ul style="list-style-type: none"> <li>• Initiating Events</li> <li>• Mitigating Systems</li> <li>• Barrier Integrity</li> <li>• Emergency Preparedness</li> </ul>	<ul style="list-style-type: none"> <li>• Design/Engineering</li> <li>• Procurement/Fabrication</li> <li>• Construction/Installation</li> <li>• Inspection/Testing</li> </ul>
<b>Radiation Safety</b>	<b>Operational Readiness</b>
<ul style="list-style-type: none"> <li>• Public Radiation Safety</li> <li>• Occupational Radiation Safety</li> </ul>	<ul style="list-style-type: none"> <li>• Operational Programs (incl Radiation Prot)</li> </ul>
<b>Safeguards</b>	<b>Safeguards Programs</b>
<ul style="list-style-type: none"> <li>• Physical Protection</li> </ul>	<ul style="list-style-type: none"> <li>• Security Programs for Construction Inspection and Operations</li> </ul>

## Action Matrix

- Predictable and scrutable process for increasing levels of NRC oversight and engagement with Licensee
- Use of Action Matrix consistent with ROP
- Distinguishing between violations in different cornerstones provides targeted focus for additional inspection

# Significance Determination Process (SDP)

- Predictable and scrutable process for evaluating violations
- Use of SDP consistent with ROP

# Significance Determination Process (continued)

Two Options (Flowchart versus Matrix):

We prefer Matrix

- Risk Informed (via risk axis importance)
- Flowchart could work, but is difficult to understand/use, and requires more specificity on definitions
- More work needed...

# Significance Determination Process (continued)

Exception to SECY 10-140 (Quality of Construction) – “**Substantial Construction Quality Concerns**” and “**Significant Construction Quality Concerns**”.

Replace with - Major **repairs, replacement or rework** needed to meet Acceptance Criteria or Reanalysis involving **reduction of margin to design limits** (etc.)

# Conclusions

- Concur with almost all recommendations in SECY 10-140
- Ready to work with NRC, as was done with development of ROP, in open, transparent forum