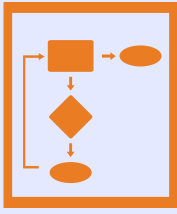


Reactor Oversight Process Enhancement

Significance Determination Process



Background

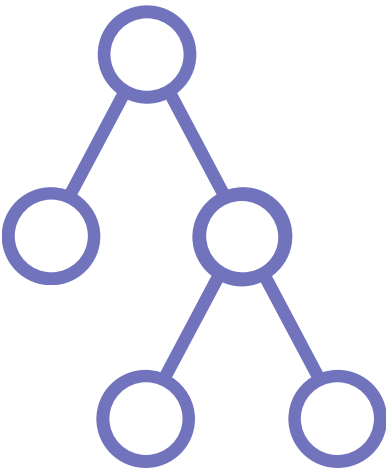
The NRC uses the Significance Determination Process (SDP) in deciding how U.S. nuclear power plant safety or security could be affected by inspection findings. The Reactor Oversight Process (ROP) enhancement effort is considering how the SDP can more effectively use the best available information to provide risk-informed decisions outcomes.

Changes Recommended by Staff



Expanding the Use of Probabilistic Risk and Reliability Tools

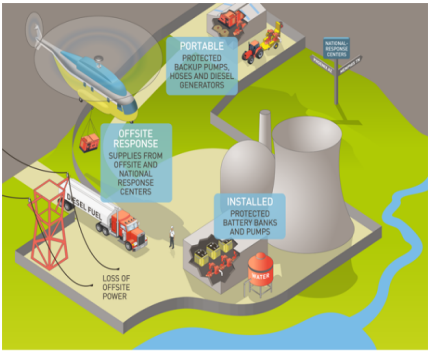
The NRC already provides risk analysis software to its staff; the ROP enhancement effort has recommended additional training on these tools and how they apply to the SDP.



Treatment of Common Cause Failures (CCF)

The ROP enhancement effort seeks to ensure the NRC and U.S. nuclear power plants consistently evaluate component or system failures stemming from a common cause. Over the next year the NRC is piloting three changes to address this challenge:

- Provide licensees the opportunity to submit information on unique plant-specific CCF “defense strategies.”
- The staff will evaluate CCF’s impact when conducting detailed risk evaluations
- The staff will examine how CCF is categorized and leveraged within risk analysis.



Human Reliability Analysis (HRA) Method For Complex Human Actions

The staff is developing a tool that better accounts for human performance in complex situations. This work is based in part on input from a risk analysis workshop that used an early version of the tool on several scenarios. The finalized tool will provide risk analysts with flexibility to model complex human actions.

Inspection Findings



Monitor Inspection Finding Review Board (IFRB) Process

The NRC staff is assessing the new Inspection Finding Review Board process to ensure it appropriately works with nuclear power plants to focus NRC attention on inspection findings of higher significance. The assessment will focus on maintaining process effectiveness and identifying possible enhancements.