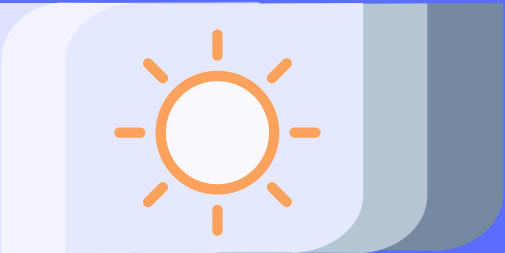


Reactor Oversight Process Enhancement

Radiation Protection



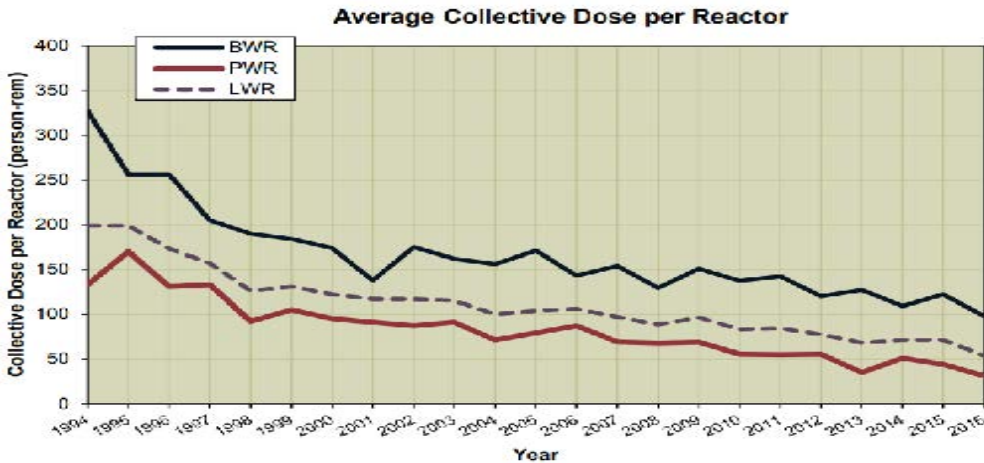
Background

The NRC uses the ROP’s Public and Occupational Radiation Safety Cornerstones to monitor U.S. nuclear power plant radiation safety performance. The ROP enhancement effort is focusing inspection resources on observations of licensee performance and review of key licensee program areas.

Worker Exposure to Radiation Has Declined

U.S. nuclear power plants have reduced their workers’ already low average annual radiation doses for more than 20 years. Some of the reasons for this performance include:

- Better nuclear fuel performance
- Better materials used in certain power plant components
- Better work planning and practices
- Industry focus on decreasing radiation exposure



Changes Recommended in SECY-19-0067

The NRC staff recommended a more efficient use of inspector resources by combining inspections of ALARA (as low as reasonably achievable) programs with other radiation protection inspections. The recommendation would also refocus procedures plant performance outcomes. If approved, the revised approach will focus on three key aspects:



Observation of Radiation Workers



Evaluating How Plants Plan Work With Potentially Significant Radiation Doses



Evaluating How Plants Assess Discrepancies Between Planned And Actual Doses

Other Changes Being Implemented by the Staff



Changing the Frequency of Effluent & Environmental Monitoring Inspections

NRC inspectors will now examine plants’ annual reports on radioactive releases and environmental monitoring every three years (instead of every two). This more efficient approach maintains safety since U.S. nuclear power plants’ reports show the very low-level radioactive releases have either decreased or remained steady across the industry for decades. Environmental monitoring results also show minimal radiological impact on the environment around U.S. plants.



Implementing Radioactive Material Protection Inspections

The staff is establishing a long-term framework, consistent with the rest of nuclear power plant performance oversight, for focused, risk-informed inspection of how plants protect radioactive material other than reactor fuel (which is covered by additional requirements).