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Increasing Reliance on Risk Information in Regulatory Decision Making

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– relationship to principles of good regulations

Bolstering the Infrastructure

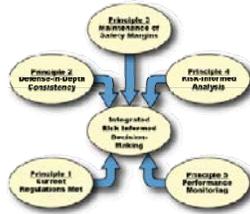
Independence—Openness—Efficiency—Clarity—Reliability

- Converging on a facts and observations (F&O) closure process
- Devising a vetting process
- Crediting FLEX equipment
- Supporting seismic PRA

Updating Guidance

Independence—Openness—**Efficiency**—Clarity—**Reliability**

- Regulatory guide 1.174 “An Approach for Using Probabilistic Risk Assessment in Risk-informed Decisions on Plant Specific Changes to the Licensing Basis”
- Risk-informed generic safety issue (GSI) 191, “Assessment of Debris Accumulation on PWR Sump Performance”
- Risk assessment standardization project (RASP) handbook
- Appendix M, “Technical Basis for the Significance Determination Process (SDP) Using Qualitative Criteria”



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Focusing in Key Areas

Independence—Openness—**Efficiency**—Clarity—**Reliability**

- TSTF-505, “Provide Risk-Informed Extended Completion Times,”
- 50.69 “Risk-informed categorization and treatment of structures, systems and components for nuclear power reactors”
- Support for tornado missile protection analyses

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Improving Realism

Independence—Openness—**Efficiency**—Clarity—**Reliability**

- Fire PRA
 - very early warning fire detection systems (NUREG-2180)
 - heat release rates for electrical cabinets (NUREG-2178)
- Shutdown seals



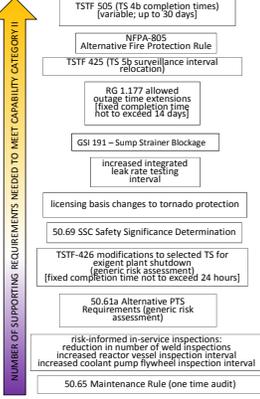
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Reaching Maturity

Independence—Openness—
Efficiency—Clarity—Reliability

- Integrated leak rate tests
- TSTF-425, “Relocate Surveillance Frequencies to Licensee Control”
- Significance determination process (SDP)

“The scope, level of detail, and technical adequacy of the PRA are to be commensurate with the application for which it is intended and the role the PRA results play in the integrated decision process.” RG 1.174



Summary

Infrastructure exists to increase reliance on risk informed decision making

- focused efforts
- staff expertise
- stakeholder interactions

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Acronyms

- F&O - facts and observations
- GSI - generic safety issue
- NFPA - National Fire Protection Association
- NOED - notice of enforcement discretion
- NUREG - NRC technical report designation (Nuclear Regulatory Commission)
- PRA - probabilistic risk assessment
- PTS - pressurized thermal shock
- PWR - pressurized water reactor
- RASP - risk assessment standardization project
- RG - regulatory guide
- SDP - significance determination process
- SSC - structures, systems, and components
- TS - technical specifications
- TSTF – technical specifications task force

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