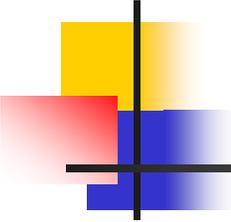




# Quality Assurance and Reliability Assurance

Office of Nuclear Reactor Regulation  
Quality and Vendor Branch  
Lead Branch



# Quality Assurance and Reliability Assurance

---

- Section 17.4, “Reliability Assurance Program”
  - Site-specific phase.
  - Continuation of the process of inclusion of SSCs into the D-RAP process by use of probabilistic, deterministic, and other methods.
  - Plant’s site-specific SSCs are added to the D-RAP process.

(Continued next slide)

# Quality Assurance and Reliability Assurance

- Section 17.4, “Reliability Assurance Program”  
(Continued)
  - D-RAP is modified or appended based on considerations specific to the site.
  - The COL applicant establishes the PRA importance measures, the expert panel process, and other deterministic methods to determine and maintain the site specific list of SSCs under the scope of RAP.

# Quality Assurance and Reliability Assurance

- Section 17.4, “Reliability Assurance Program”
  - PRA staff: reviews the process used by the applicant for identifying site-specific risk significant SSCs.
  - QA staff: reviews and inspects the quality controls (e.g., corrective actions, design control) for developing and implementing the D-RAP.

# Quality Assurance and Reliability Assurance

- Section 17.4, "Reliability Assurance Program"
- COL application should include:
  - Same type of information included in the DCD application, except the focus is on site-specific SSCs.
  - Description of how O-RAP is integrated into existing programs (e.g., maintenance, surveillance, ISI, IST).
  - Administrative processes and procedures for providing corrective actions for design and operational errors.

(continued next slide)

# Quality Assurance and Reliability Assurance

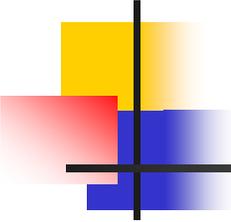
- Section 17.4, "Reliability Assurance Program"
- COL application should include: (con't)
  - Any maintenance practices or recommendations for risk-significant SSCs to enhance reliability.
  - A licensing condition stating that the O-RAP will be fully implemented prior to loading fuel.

# Quality Assurance and Reliability Assurance

- SRP 17.5, QAPD – New License Applicants
  - No “carry-over” from the design certification phase (i.e., referenced DC has a QAPD, COL must have its own QAPD).
  - COL applicant is responsible for establishing and executing a QA program applicable to activities during application, licensing, design, construction, pre-op testing, and operation of the plant.
  - COL applicant should ensure that the proposed QAPD is consistent with the guidance in SRP 17.5.

# Quality Assurance and Reliability Assurance

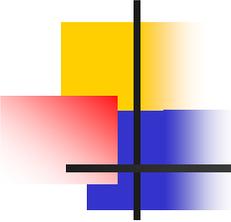
- SRP 17.5, QAPD – New License Applicants
  - The program description is submitted in accordance with the provisions of 10 CFR 50.34 (referenced from 10 CFR 52.79).
  - The program must meet the requirements of Appendix B to 10 CFR Part 50.
  - The submittal must describe a comprehensive QA program applicable to design, construction, and operation.



# Quality Assurance and Reliability Assurance

---

- SRP 17.5 – Public Comments
  - Currently, the staff is in the process of resolving public comments.
  - The staff will clarify that existing QA programs can be used – with some modification.



# Quality Assurance and Reliability Assurance

---

- SRP 17.5 – Public Comments
- The staff will clarify the differences between a design and construction, and operations QA program.
  - However, the staff has not identified significant differences.
- The staff will add guidance on NVLAP.
- The staff is evaluating incorporation of 50.54(a) changes approved by the NRC.