

# Validation and Review

Kathleen O'Donohue, Sr. Operations Engineer



# Validation and Review

- The exam is reviewed to ensure the requirements of ES-401-6, Written Examination Quality Checklist, are met  
ES- 401, D.3.a
- Facility-developed exams must be reviewed by a supervisor or manager **BEFORE** they are transmitted to the NRC  
ES-401, D.3.b



# Validation and Review

- Most facilities perform an exam validation which consists of licensed individual(s) taking the written exam
- The validation effort should include evaluation of the following:
  - j performance time
  - j appropriate level
  - j clarity
  - j psychometric aspects of Appendix B



# Validation and Review

- Facility licensees are responsible for ensuring the contractor-prepared exams meet the NUREG-1021 guidelines ES-401, E.1
- The Facility review of the entire exam outline package shall use ES-201-2, Examination Outline Quality Checklist ES-201, C.f



# Validation and Review

- ES-201-2 references using ES-301-5 for guidance, ES-301-5 is not completed at this time
- ES-201-2 checks for duplication and overlap, this helps prevent double jeopardy



# Validation and Review

- The Facility review of the developed exam material shall also complete :
  - j ES-401-6, Written Examination Quality Checklist
  - j ES-301-4, Simulator Scenario Quality Checklist
  - j ES-301-5, Transient and Event Checklist
  - j ES-301-6, Competencies Checklist



# Validation and Review

- Providing the information listed on ES-401-5 simplifies the review process ES-401-5, ES-201, C.h
- NRC review must be an independant review, based on provided references because the licensee initials is not sufficient bases for our approval



# Validation and Review

- NRC initially reviews at least 30 questions of the 75 questions (RO) and 100 questions (SRO/RO) in detail
- NRC reviews 100% of the 25 questions SRO-only exam



# Validation and Review

- NRC question evaluation results are documented on the 401-9
- The results of that review will be discussed with the facility licensee, NRR and Regional supervision, as appropriate ES-401, E.2.c
- Psychometric quality reviewed for at least 10 new questions and 20 additional questions ES-401, E.2.c



# Validation and Review

- No limit on the number of changes the NRC can direct ES-401, E.2.d
- Remember - enhancements are recommendations, not directed changes
- Example of unacceptable flaws are:
  - j mismatched K/A
  - j inappropriate license level
  - j implausible distractors
  - j lack of operation orientation ES-401, E.2.d



# Validation and Review

- Directed changes will be referenced to NUREG-1021, Appendix B ES-401, E.2.e
- If there are  $< 6$  unacceptable flaws in the first 30 sampled questions, then regional personnel will review the rest of the exam questions ES-401, E.3.b
- If there are  $\geq 6$  unacceptable flaws in the first 30 sampled questions, then the exam **MAY** be returned to the facility without further review by the NRC for correction ES-401, E.3.b



# Validation and Review

Questions

Or

Comments