

JPM / Walkthrough Development

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ES - 300 Series

- ES-301 Preparing Initial Operating Tests
- ES-302 Administering Operating Tests To Initial License Applicants
- ES-303 Documenting and Grading Initial Operating Tests

WALK-THROUGH: DESIGN

- 55.45(a) includes admin topics
- SRO totals remain the same with same admin and systems split
- RO total remains the same, however, the split is different
- No more separate Admin category and Systems category; they are combined

ES - 301 ADMIN JPMS

- 4 Subjects: Conduct of Operations
Equipment Control
Radiation Control
Emergency Plan
- SRO continues to have 5 Admin, with 2 JPMs in conduct of operations
- RO will now have 4 Admin, with either 1 or 2 JPMs in conduct of operations

ES-301 Control Room/In-Plant Systems JPMs

- SRO continues to have:
 - < 10 (I)
 - < 5 (U)
- RO now has 11

JPM GUIDELINES

| | RO | SRO-I | SRO-U |
|--------------|----|-------|------------------------|
| Admin | 4 | 5 | 5 [ES-301, D.3.a] |
| Control Room | 8 | 7 | 2 or 3 [ES-301, D.4.a] |
| In-Plant | 3 | 3 | 3 or 2 [ES-301, D.4.a] |
| TOTAL | 15 | 15 | 10 |

JPM Guidelines, continued

- No more than 30% can be repeated from the last NRC exam [ES-301, D.2.a] (30 % cannot be from same area, i.e., Admin)
- Bank JPM limit is 80% of the admin JPMs and 80% of the System JPMs (12 out of 15, or 8 out of 10) [ES-301, D.2.a]
- 0% overlap between JPMs and scenario events [ES-301, D.1.h]
- For the RO: at least 1 admin JPM is in conduct of operations [ES-301, D.3.a]

JPM Guidelines, continued

- For the SRO: 2 admin JPMs are in conduct of operations [ES-301, D.3.a]
- For the SRO-U: the systems JPMs are to be from 5 different safety functions [ES-301, D.4.a]
- For the RO and SRO-I: All control room JPMs must be from different safety functions, and all In-Plant JPMs must be from different safety functions [ES-301, D.4.a]
- For the SRO-U: at least 1 control room JPM must be an engineered safety feature [ES-301, D.4.a]

JPM Guidelines, continued

- At least one JPM related to low power or shutdown
- At least one Plant JPM related to EOP/AOP
- At least one Plant JPM requires entry in to the RCA
- For RO and SRO-I, 4 to 6 of the System JPMs must be alternate path

JPM Guidelines, continued

- For SRO-U, 2 to 3 of the System JPMs must be alternate path
- There is still no limit to the number of Admin JPMs with prescribed errors [ES-301, D.4.b]

JPM Development

New JPMs

- Use Appendix C Job Performance Measures guidelines
- Look for Tasks that have high importance factors (that may not have JPMs developed yet)
- Look in procedures that have operators perform RNO items that are not in the bank yet

JPM Development

New JPMs

- Initial Conditions
- Identify References and Tools required
- Develop Performance Criteria
- Develop Cues (different when performed /simulated)
- Time Standard (Validation Time)
- Use Form ES-C-2 Quality Checklist for quality and sanity check

JPM Development

New JPMs

- Check if Test procedures can be used to cover a particular Safety Function
- Be careful to use the Safety Function on the ES-401 sample plan

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| 000007 (BWE02&E10; CE/E02) Reactor Trip - Stabilization - Recovery /· 1 | | | | | | | |
| 000008 Pressurizer Vapor Space Accident /· 3 | | | | | | | |
| 000009 Small Break LOCA /· 3 | | | | | | | |
| 000011 Large Break LOCA /· 3 | | | | | | | |
| 000015/17 RCP Malfunctions /· 4 | | | | | | | |
| 000022 Loss of Rx Coolant Makeup /· 2 | | | | | | | |
| 000025 Loss of RHR System /· 4 | | | | | | | |
| 000026 Loss of Component Coding Water /· 8 | | | | | | | |

JPM Development

Helpful Hints on Modifications

- Use an existing JPM
- Follow the procedure
- Look for RNO steps, or different paths that are possible

JPM Development

Helpful Hints on Modifications

- Validate results
- Be careful not to duplicate existing bank JPMs

GRADING JPMs

- 80% total score of combined Admin and System JPMs (RO & SRO-I = 12/15, SRO-U = 8/10)
- Additionally, SROs must pass 60% of admin topics (3/5)
- Additionally, ROs must pass 50% of admin topics (2/4)

GRADING JPMs

- Admin-only retakes must get 80% (4/5)
[ES-303, D.2.a]
- Systems-only retakes are not available



Questions?