

# JPM / Walkthrough Development

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# ES - 300 Series

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- 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

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- 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

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- 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

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

# JPM GUIDELINES

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	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

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- 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

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- 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

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- 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

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- 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

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## 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

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## 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

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## 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							

ES-401-1(2)

# JPM Development

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## Helpful Hints on Modifications

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

# JPM Development

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## Helpful Hints on Modifications

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

# GRADING JPMs

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- 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

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

**Questions?**