			APPEN	DIX E -	REGION	IV OPE	RATING	TEST J	OB PERF	ORMAN	CE MEASURE QUALITY REVIEW MATRIX-COMMENT RESOLUTION
JPM#	1. Dyn	2. LOD		3	3. Attribut	es			Content rrors	5. U/E/S	6. Explanation
	(D/S)	(1-5)	IC Focus	Cues	Critical Steps	Scope (N/B)	Over- lap	Job- Link	Minutia		(See below for instructions)
RO-RCS2	S	3								S	
RO-SURV2	S	3								S	
RO-RAD1	S	2								S	
RO- COMM2	S	2								S	
SRO- QUAL1	S	2								S	
SRO- PROC1	S	2								S	
SRO- MNTC1	S	2								S	
CRD03	D	3								S	STEPS 2 -11 ARE CRITICAL
EOP-10	S	3								S	
MFW04	D	3								S	STEP 7 IS NOT CRITICAL - STEP REVISED
AOP-29	D	2								S	STEP 4 IS CRITICAL
QT-001	D	2								S	
EOP-09	S	2								S	STEP 1 IS CRITICAL
ICW-01	D	3								S	STEP 4 WAS REVISED TO BE CONSISTENT WITH PROCEDURE.
CRD-04	S	2								S	STEPS 4 & 5 ARE NOT CRITICAL - STEP REVISED
AOP-07	S	2								S	STEPS 1 & 6 ARE NOT CRITICAL - STEP REVISED
EDO-19	S	3								S	STEP 1 IS CRITICAL

- 1. Determine whether the task is dynamic (D) or static (S). A dynamic task is one that involves continuous monitoring and response to varying parameters. A static task is basically an system reconfiguration or realignment.
- 2. Determine level of difficulty (LOD) using established 1-5 rating scale. Levels 1 and 5 represent inappropriate (low or high) discriminatory level for the license being tested.
- 3. Check the appropriate box when an attribute weakness is identified:
  - The initiating cue is not sufficiently clear to ensure the operator understands the task and how to begin.
  - The JPM does not contain sufficient cues that are objective (not leading).
  - All critical steps (elements) have not been properly identified.
  - Scope of the task is either too narrow (N) or too broad (B).
  - Excessive overlap with other part of operating test or written examination.
- 4. Check the appropriate box when a job content error is identified:
  - Topics not linked to job content (e.g., disguised task, not required in real job).
  - Task is trivial and without safety significance.
- 5. Based on the reviewer's judgment, is the JPM as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- 6. Provide a brief description of problem in the explanation column. Provide conclusion on whether JPM <u>SET</u> criteria satisfied (i.e., number/distribution of safety functions, A.3 and A.4 integrated with parts B/C, Admin topics per section meet ES).

				Α	PPENDIX	( <b>E</b> - REC	SION IV	OPERA	TING TES	T JOB	PERFORMANCE MEASURE QUALITY REVIEW MATRIX
JPM#	1. Dyn	2. LOD				Content	5. U/E/S	6. Explanation			
	(D/S)	(1-5)	IC Focus	Cues	Critical Steps	Scope (N/B)	Over- lap	Job- Link	Minutia		(See below for instructions)
RO-RCS2	S	3								S	
RO-SURV2	S	3								S	
RO-RAD1	S	2								S	
RO- COMM2	S	2								S	
SRO- QUAL1	S	2								S	
SRO- PROC1	S	2								S	
SRO- MNTC1	S	2								S	
CRD03	D	3								S	ARE STEPS 2 -11 ALL CRITICAL?
EOP-10	S	3								S	
MFW04	D	3								S	WHY IS STEP 7 CRITICAL?
AOP-29	D	2								S	IS STEP 4 CRITICAL?
QT-001	D	2								S	
EOP-09	S	2								S	IS STEP 1 CRITICAL?
ICW-01	D	3								S	STEP 4 APPEARS TO BE INCONSISTENT WITH PROCEDURE.
CRD-04	S	2								S	ARE STEPS 4 & 5 CRITICAL?
AOP-07	S	2								S	ARE STEPS 1 & 6 CRITICAL?
EDO-19	S	3								S	IS STEP 1 A CRITICAL STEP?

- 1. Determine whether the task is dynamic (D) or static (S). A dynamic task is one that involves continuous monitoring and response to varying parameters. A static task is basically an system reconfiguration or realignment.
- 2. Determine level of difficulty (LOD) using established 1-5 rating scale. Levels 1 and 5 represent inappropriate (low or high) discriminatory level for the license being tested.
- 3. Check the appropriate box when an attribute weakness is identified:
  - The initiating cue is not sufficiently clear to ensure the operator understands the task and how to begin.
  - The JPM does not contain sufficient cues that are objective (not leading).
  - All critical steps (elements) have not been properly identified.
  - Scope of the task is either too narrow (N) or too broad (B).
  - Excessive overlap with other part of operating test or written examination.
- 4. Check the appropriate box when a job content error is identified:
  - Topics not linked to job content (e.g., disguised task, not required in real job).
  - Task is trivial and without safety significance.
- 5. Based on the reviewer's judgment, is the JPM as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- 6. Provide a brief description of problem in the explanation column. Provide conclusion on whether JPM <u>SET</u> criteria satisfied (i.e., number/distribution of safety functions, A.3 and A.4 integrated with parts B/C, Admin topics per section meet ES).

		APPEN	IDIX F -	REGION	N IV OPI	ERATIN	G TEST	QUEST	ION QU	ALITY F	REVIEW	MATRI	X- COMMENT RESOLUTION
Q#	1.	2. LOD		3. Psyc	hometrio	Errors		4.	Job Con	tent Erre	ors	5.	6.
Q#	LOK (F/H)	(1-5)	Stem Focus	Direct L/U	One Ans	Min Resp	Scope (TS?)	Job- Link	Minu- tia	SRO Only	Back- wards	U/E/S	Explanation (See below for instructions)
RO- A1Q1	F	2										S	
RO- A1- Q2	F	2										S	ANSWER AND REFERENCE PROVIDED IN THE JPM.
SRO- A3- Q1	F	3										S	
SRO- EAL7	Н	3										S	INCLUDE APPLICABLE SECTIONS FROM ATT 1 & 3 OF PROC 1903.010.

		APPEN	IDIX F -	REGION	N IV OP	ERATIN	G TEST	QUEST	ION QU	ALITY F	REVIEW	MATRIX	K- COMMENT RESOLUTION
0#	1.	2.		3. Psyc	hometri	c Errors		4.	Job Con	tent Erro	ors	5.	6.
Q#	LOK (F/H)	LOD (1-5)	Stem Focus	Direct L/U	One Ans	Min Resp	Scope (TS?)	Job- Link	Minu- tia	SRO Only	Back- wards	U/E/S	Explanation (See below for instructions)

- 1. Classify level of knowledge (LOK) as either (F)undamental or (H)igher cognitive level.
- 2. Determine level of difficulty (LOD) using established 1-5 rating scale. Levels 1 and 5 represent inappropriate (low or high) discriminatory level for the license being tested.
- 3. Check the appropriate box when a psychometric error is identified:
  - Stem lacks sufficient focus to solicit only the answers listed (e.g., unclear on intent, answer needed, or unnecessarily negatively phrased)
  - Direct lookup (e.g., desired answer contained in obvious reference),
  - Question does NOT solicit single demonstrably correct answer,
  - Minimum response for passing credit NOT described in key,
  - Scope of question outside guidance of NUREG (e.g., why not how, TS bases not system, emergency not emergency plan),
- 4. Check the appropriate box when a job content error is identified:
  - Topics not linked to job content (e.g., disguised task, not required in real job, invalid K/A).
  - Recall of too specific knowledge,
  - RO test items test at the SRO job level or vice versa,
  - Reverse logic or application compared to job.
- 5. Based on the reviewer's judgment, is the question as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- 6. Provide a brief description of problem in the explanation column.

	APPENDIX F - REGION IV OPERATING TEST QUESTION QUALITY REVIEW MATRIX  1. 2. 3. Psychometric Errors 4. Job Content Errors 5. 6.														
Q#	1. LOK	2.		3. Psyc	hometric	Errors		4.	Job Con	tent Erre	ors	5.	6.		
Q#	(F/H)	LOD (1-5)	Stem Focus	Direct L/U	One Ans	Min Resp	Scope (TS?)	Job- Link	Minu- tia	SRO Only	Back- wards	U/E/S	Explanation (See below for instructions)		
RO- A1Q1	F	2										S			
RO- A1- Q2	F	2										U	NEED ANSWER IN THE JPM. REFERENCE NOT PROVIDED.		
SRO- A3- Q1	F	3										S			
SRO- EAL7	Н	3										S	INCLUDE APPLICABLE SECTIONS FROM ATT 1 & 3 OF PROC 1903.010.		

			Δ	PPEND	<b>IX F</b> - R	EGION	IV OPEF	RATING	TEST Q	UESTIC	ON QUA	LITY RE	VIEW MATRIX
0#	1.	2.		3. Psyc	hometri	c Errors		4.	Job Con	tent Erro	ors	5.	6.
Q#	LOK (F/H)	LOD (1-5)	Stem Focus	Direct L/U	One Ans	Min Resp	Scope (TS?)	Job- Link	Minu- tia	SRO Only	Back- wards	U/E/S	Explanation (See below for instructions)

- 1. Classify level of knowledge (LOK) as either (F)undamental or (H)igher cognitive level.
- 2. Determine level of difficulty (LOD) using established 1-5 rating scale. Levels 1 and 5 represent inappropriate (low or high) discriminatory level for the license being tested.
- 3. Check the appropriate box when a psychometric error is identified:
  - Stem lacks sufficient focus to solicit only the answers listed (e.g., unclear on intent, answer needed, or unnecessarily negatively phrased)
  - Direct lookup (e.g., desired answer contained in obvious reference),
  - Question does NOT solicit single demonstrably correct answer,
  - Minimum response for passing credit NOT described in key,
  - Scope of question outside guidance of NUREG (e.g., why not how, TS bases not system, emergency not emergency plan),
- 4. Check the appropriate box when a job content error is identified:
  - Topics not linked to job content (e.g., disguised task, not required in real job, invalid K/A).
  - Recall of too specific knowledge,
  - RO test items test at the SRO job level or vice versa,
  - Reverse logic or application compared to job.
- 5. Based on the reviewer's judgment, is the question as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- 6. Provide a brief description of problem in the explanation column.

			Α	PPENDI	X N - RE	GION IV	OPERA	TING TE	ST SCE	NARIO REVIEW MATRIX -COMMENT RESOLUTION
Scen Set	1 ES	2 TS	3 Crit	4 IC	5 Pred	6 TL	7 L/C	8 Eff	9 U/E/S	10 Explanation (See below for instructions)
1										TS ACTIONS ADDED, FORM FORMAT CORRECTED, TURNOVER INFO MADE CONSISTENT.
2									S	TS ACTIONS ADDED AND TURNOVER INFO MADE CONSISTENT.
3										TS ACTIONS ADDED, OUTLINE EVENTS 6 & 7 MADE CONSISTENT WITH SCENARIO, AND TURNOVER INFO REVISED.
4									_	TS ACTIONS ADDED, TURNOVER INFO REVISED. ONLY A BACK-UP IF SCENARIO 3 NOT RUN.

- ES: ES-301 checklists 4, 5, & 6 satisfied.
- 2. TS: Set includes SRO TS actions for each SRO, with required actions explicitly detailed.
- 3. Crit: Each manipulation or evolution has explicit success criteria documented in Form ES-D-2.
- 4. IC: Out of service equipment and other initial conditions reasonably consistent between scenarios and not predictive of scenario events and actions.
- Pred: Scenario sequence and other factors avoid predictability issues.
- 6. TL: Time line constructed, including event and process triggered conditions, such that scenario can run without routine examiner cuing.
- 7. L/C: Length and complexity for each scenario in the set is reasonable for the crew mix being examined, such that all applicants have reasonably similar exposure and events are needed for evaluation purposes.
- 8. Eff: Sequence of events is reasonably efficient for examination purposes, especially with respect to long delays or interactions.
- 9. Based on the reviewer's judgment, is the scenario set as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- 10. Provide a brief description of problem in the explanation column

					APP	ENDIX N	l - REGI	IO VI NC	PERATIN	NG TEST SCENARIO REVIEW MATRIX
Scen Set	1 ES	2 TS	3 Crit	4 IC	5 Pred	6 TL	7 L/C	8 Eff	9 U/E/S	10 Explanation (See below for instructions)
1		NO							E	NO TS ACTIONS INCLUDED FOR CRS. FORM FORMAT NEEDS CORRECTION. TURNOVER INFO NOT CONSISTENT.
2		NO								NO TS ACTIONS INCLUDED FOR CRS. INITIAL CONDITIONS/TURNOVER INCONSISTENT.
3		NO								NO TS ACTIONS INCLUDED FOR CRS. OUTLINE EVENTS 6 & 7 INCONSISTENT WITH SCENARIO. TURNOVER ON OUTLINE INCOMPLETE.
4		NO							Е	NO TS ACTIONS INCLUDED FOR CRS. TURNOVER ON OUTLINE INCOMPLETE. TOO SIMILAR TO SCENARIO 3.

- ES: ES-301 checklists 4, 5, & 6 satisfied.
- TS: Set includes SRO TS actions for each SRO, with required actions explicitly detailed.
- 3. Crit: Each manipulation or evolution has explicit success criteria documented in Form ES-D-2.
- 4. IC: Out of service equipment and other initial conditions reasonably consistent between scenarios and not predictive of scenario events and actions.
- Pred: Scenario seguence and other factors avoid predictability issues.
- TL: Time line constructed, including event and process triggered conditions, such that scenario can run without routine examiner cuing.
- 7. L/C: Length and complexity for each scenario in the set is reasonable for the crew mix being examined, such that all applicants have reasonably similar exposure and events are needed for evaluation purposes.
- 8. Eff: Sequence of events is reasonably efficient for examination purposes, especially with respect to long delays or interactions.
- 9. Based on the reviewer's judgment, is the scenario set as written (U)nacceptable (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
- 10. Provide a brief description of problem in the explanation column