

COVER SHEET

-- ADMINISTRATIVE DOCUMENTS -- ALL IN ONE ADAMS DOCUMENT

ROBINSON EXAM 2001-301

MARCH 26 - 30, 2001

- [✓] *pm* ES-201-1 - Exam Preparation Checklist
- [✓] *pm* ES-201-2 - Exam Outline Quality Checklist
- [✓] *pm* ES-201-3 - Exam Security Agreements ~~NEED 2 Professors~~
~~AND ALL SURV.~~
- [✓] *pm* ES-301-3 - Operating Test Quality Checklist
- [✓] *pm* ES-301-4 - Simulator Scenario Quality Checklist
- [✓] *pm* ES-301-5 - Transient & Event Checklist *INITIAL*
FINAL ✓
- [✓] *pm* ES-301-6 - Competencies Checklist *INITIAL*
FINAL ✓
- [✓] *pm* ES-401-7 - Written Exam Quality Checklist *RO ✓*
SRO ✓
- [✓] *pm* ES-401-9 - Written Exam Review Worksheet
- [✓] ES-403-1 - Written Exam Grading Quality Checklist *pm*
- [✓] *✓* ES-501-1 - Post Exam Check Sheet ~~not completed~~
KA selection method/criteria

Facility: <u>Robinson</u>		Date of Examination: <u>03/26-29/01</u>
Examinations Developed by: <u>Facility</u> / NRC (circle one)		
Target Date*	Task Description / Reference	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a & b)	RSB
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	RSB
-120	3. Facility contact briefed on security & other requirements (C.2.c)	RSB
-120	4. Corporate notification letter sent (C.2.d)	RSB
[-90]	[5. Reference material due (C.1.e; C.3.c)]	NA
-75	6. Integrated examination outline(s) due (C.1.e & f; C.3.d)	RSB
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	RSB
-45	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d)	RSB
-30	9. Preliminary license applications due (C.1.i; C.2.g; ES-202)	RSB
-14	10. Final license applications due and assignment sheet prepared (C.1.i; C.2.g; ES-202)	RSB
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	RSB
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	RSB
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	RSB
-7	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	RSB
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	RSB
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	RSB
<p>* Target dates are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.</p> <p>[] Applies only to examinations prepared by the NRC.</p>		

Facility: RNP		Date of Examination: 26-Mar-01		
Item	Task Description	Initials		
		a	b	c
1. W R I T T E N	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	WJS	DM	PSB
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all knowledge and ability categories are appropriately sampled.	WJS	DM	PSB
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	WJS	DM	PSB
	d. Assess whether the repetition from previous examination outlines is excessive.	WJS	DM	PSB
2. S I M	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, and major transients.	WJS	DM	PSB
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity; ensure each applicant can be tested using at least one new scenario and scenarios will not be repeated over successive days.	WJS	DM	PSB
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.	WJS	DM	PSB
3. W / T	a. Verify that: (1) the outline(s) contain(s) the required number of control room and in-plant tasks, (2) no more than 30% of the test material is repeated from the last NRC examination, (3) *no tasks are duplicated from the applicants audit test(s), and (4) no more than 80% of the operating test is taken directly from the licensee's exam bank.	WJS	DM	PSB
	b. Verify that: (1) the tasks are distributed among the safety function groupings as specified in ES-301, (2) one task is conducted in a low-power or shutdown condition, (3) 40% of the tasks require the applicant to implement an alternate path procedure, (4) one in-plant task tests the applicant's response to an emergency or abnormal condition, and (5) the in-plant walk-through requires the applicant to enter the RCA.	WJS	DM	PSB
	c. Verify that the required administrative topics are covered, with emphasis on performance-based activities.	WJS	DM	PSB
	d. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no more than 30% of the items are duplicated on successive days.	WJS	DM	PSB
4. G E N E R A L	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	WJS	DM	PSB
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	WJS	DM	PSB
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	WJS	DM	PSB
	d. Check for duplication and overlap among exam sections.	WJS	DM	PSB
	e. Check the entire exam for balance of coverage.	WJS	DM	PSB
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	WJS	DM	PSB
a. Author	Printed Name / Signature <u>William J. Gross / [Signature]</u>		Date <u>12/12/00</u>	
b. Facility Reviewer(*)	<u>Donald W. McCaskill / [Signature]</u>		<u>12/28/00</u>	
c. Chief Examiner	<u>RICHARD S. BALDWIN / [Signature]</u>		<u>1/19/01</u>	
d. NRC Supervisor	<u>MICHAEL E. ERNSTES / [Signature]</u>		<u>1/19/01</u>	

(*) Not applicable for NRC-developed examinations

Facility: RNP		Date of Examination: 26-Mar-01		
Item	Task Description	Initials		
		a	b	c
1. W R I T T E N	a. Verify that the outline(s) fit(s) the appropriate model per ES-401.	WJS	DM:	LAB
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all knowledge and ability categories are appropriately sampled.	WJS	DM:	LAB
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	WJS	DM:	LAB
	d. Assess whether the repetition from previous examination outlines is excessive.	WJS	DM:	LAB
2. S I M	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, and major transients.	WJS	DM:	LAB
	b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity; ensure each applicant can be tested using at least one new scenario and scenarios will not be repeated over successive days.	WJS	DM:	LAB
	c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D.	WJS	DM:	LAB
3. W / T	a. Verify that: (1) the outline(s) contain(s) the required number of control room and in-plant tasks, (2) no more than 30% of the test material is repeated from the last NRC examination, (3) *no tasks are duplicated from the applicants audit test(s), and (4) no more than 80% of the operating test is taken directly from the licensee's exam bank.	WJS	DM:	LAB
	b. Verify that: (1) the tasks are distributed among the safety function groupings as specified in ES-301, (2) one task is conducted in a low-power or shutdown condition, (3) 40% of the tasks require the applicant to implement an alternate path procedure, (4) one in-plant task tests the applicant's response to an emergency or abnormal condition, and (5) the in-plant walk-through requires the applicant to enter the RCA.	WJS	DM:	LAB
	c. Verify that the required administrative topics are covered, with emphasis on performance-based activities.	WJS	DM:	LAB
	d. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no more than 30% of the items are duplicated on successive days.	WJS	DM:	LAB
4. G E N E R A L	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam section.	WJS	DM:	LAB
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	WJS	DM:	LAB
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	WJS	DM:	LAB
	d. Check for duplication and overlap among exam sections.	WJS	DM:	LAB
	e. Check the entire exam for balance of coverage.	WJS	DM:	LAB
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	WJS	DM:	LAB
a. Author		William J. Gross / <i>William J. Gross</i>		29 Jan 01
b. Facility Reviewer(*)		Donald W. McLeskey / <i>Donald W. McLeskey</i>		2/5/01
c. Chief Examiner		Richard S. Balow / <i>Richard S. Balow</i>		3/16/01
d. NRC Supervisor		Mike Ernest / <i>Mike Ernest</i>		3/19/01
(*) Not applicable for NRC-developed examinations				



Carolina Power & Light Company
Robinson Nuclear Plant
3581 West Entrance Road
Hartsville SC 29550

Serial: RNP-RA/00-0206

DEC 28 2000

Mr. Luis A. Reyes
Regional Administrator
U. S. Nuclear Regulatory Commission - Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street S.W., Suite 23T85
Atlanta, Georgia 30303-8931

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

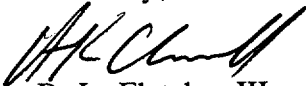
REACTOR OPERATOR INITIAL EXAMINATION OUTLINES

Dear Mr. Reyes:

In response to NRC letter dated November 17, 2000, H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, has submitted initial examination outlines to your staff. The outlines were mailed directly to Mr. R. Baldwin of your staff on December 28, 2000.

If you have any questions concerning this matter, please contact Mr. H. K. Chernoff.

Sincerely,


for B. L. Fletcher III
Manager - Regulatory Affairs

DJS/djs

c: Document Control Desk
NRC Resident Inspector, HBRSEP
R. Subbaratnam, NRC, NRR
H. O. Christensen, NRC, Region II
C. A. Casto, NRC, Region II
M. E. Ernstes, NRC, Region II



Carolina Power & Light Company
Robinson Nuclear Plant
3581 West Entrance Road
Hartsville SC 29550

Serial: RNP-RA/01-0019

FEB 07 2001

Mr. Luis A. Reyes
Regional Administrator
U. S. Nuclear Regulatory Commission - Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street S.W., Suite 23T85
Atlanta, Georgia 30303-8931

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

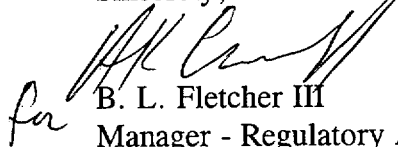
REACTOR OPERATOR INITIAL EXAMINATIONS

Dear Mr. Reyes:

In response to NRC letter dated November 17, 2000, H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, has submitted written examinations, operator tests, and supporting reference materials identified in Attachment 2 of ES-201 to your staff. Per agreement between Mr. R. Baldwin of your staff and Mr. D. McCaskill, Robinson Nuclear Plant Superintendent of Operations Training, the material was delivered directly to Mr. Baldwin on February 7, 2001.

If you have any questions concerning this matter, please contact Mr. H. K. Chernoff.

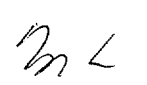
Sincerely,


B. L. Fletcher III

for
Manager - Regulatory Affairs

DJS/djs

c: Document Control Desk
NRC Resident Inspector, HBRSEP
R. Subbaratnam, NRC, NRR
C. A. Casto, NRC, Region II
M. E. Ernestes, NRC, Region II



(SURREY)

Tim Custer Reexam

COPY

ES-201

Examination Security Agreement



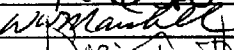
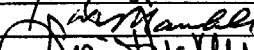
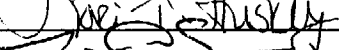
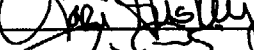


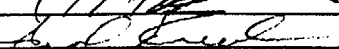
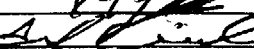
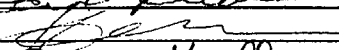
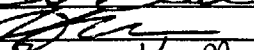
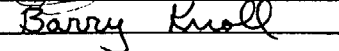
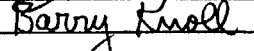
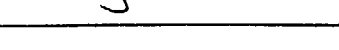
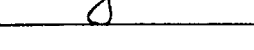
Form ES-201-3

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 4/2/01 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 4/2/01. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. Ken Grover	Sr. Inst / Develop & Validate		2/23/01		4/2/01	
2. WILLIAM MARSHALL	SR INST / DEVELOP & VALIDATE		2/23/01		4/3/01	
3. Lon Husky	Administrative		3-2-01		4-2-01	
4. James C. Early	Sr. Inst.		3-5-01		4-2-01	
5. Carl F. Irwin	Validation		3/14/01		4/3/01	
6. Joseph F. Fisher	Validation		3/15/01		4-3-01	
7. Allison Mackellar	Validation		3/19/01		4-2-01	
8. Barry Knoll	Validation		3/19/01		4-6-01	
9.						
10.						
11.						
12.						
13.						
14.						
15.						

NOTES:

page 1 of 1

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of March 26, 2001 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of March 26, 2001. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE NOTE
1. William J. Gross	Author	<i>William J. Gross</i>	9/30/00	<i>William J. Gross</i>	04/03/01
2. William A. Musselwhite	Reviewer	<i>William A. Musselwhite</i>	12/04/00	<i>William A. Musselwhite</i>	04/03/01
3. Donald W. McCaskill	Reviewer	<i>Donald W. McCaskill</i>	12/05/00	<i>Donald W. McCaskill</i>	04/03/01
4. Saeed A. Khalafay	Developer/Reviewer	<i>Saeed A. Khalafay</i>	12/17/00	<i>Saeed A. Khalafay</i>	4/3/01
5. Dilip V. Suntharalingam	SIMULATOR SUPPORT	<i>Dilip V. Suntharalingam</i>	12/17/00	<i>Dilip V. Suntharalingam</i>	4/3/01
6. James H. Cox	Reviewer	<i>James H. Cox</i>	12/12/00	<i>James H. Cox</i>	4/4/01
7. John W. McDonald	Reviewer	<i>John W. McDonald</i>	1/16/01	<i>John W. McDonald</i>	4/5/01
8. VINCENT V. LEETH	REVIEWER	<i>Vincent V. Leeth</i>	1/17/01	<i>Vincent V. Leeth</i>	04/04/01
9. WORRELL, HOWARD S.	Reviewer (JPM COMB. 2. < only)	<i>Howard S. Worrell</i>	01/24/01	<i>Howard S. Worrell</i>	4/4/01
10. Cole, Walter J.	Validator/Reviewer	<i>Walter J. Cole</i>	1/26/01	<i>Walter J. Cole</i>	4/4/01
11. Allen Joseph B.	Validator/Reviewer	<i>Allen Joseph B.</i>	1/26/01	<i>Allen Joseph B.</i>	4/4/01
12. Harshaw, Kimberly A.	Reviewer / Time Validator	<i>Kimberly A. Harshaw</i>	1/30/01	<i>Kimberly A. Harshaw</i>	4/4/01
13. Carston R. Dick	Reviewer (Time Validator)	<i>Carston R. Dick</i>	1-30-01	<i>Carston R. Dick</i>	4/3/01
14. Kenneth B. Jones	Reviewer	<i>Kenneth B. Jones</i>	2/21/01	<i>Kenneth B. Jones</i>	4/3/01
15. William E. Stover	REVIEWER / WAS	<i>William E. Stover</i>	3/5/01	<i>William E. Stover</i>	4/3/01

NOTES:

NUREG-1021, Revision 8

HBR page 1 of ____

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 26 MAR 01 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 26 MAR 01. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE NOTE
1. <u>KURT KRUGER</u>	<u>Instructor / VALIDATOR</u>	<u>K Kruger</u>	<u>3-10-01</u>	<u>K Kruger</u>	<u>4/3/2001</u>
2. <u>BRYAN E. WALDSMITH</u>	<u>RO / VALIDATOR</u>	<u>Bryan E. Waldsmith</u>	<u>03-12-01</u>	<u>Bryan E. Waldsmith</u>	<u>04-03-2001</u>
3. <u>SCOTT BLAKEN</u>	<u>SRO / Validator</u>	<u>SS Blaken</u>	<u>3/12/01</u>	<u>via e-mail</u>	<u>4-4-01</u>
4. <u>Steve Harvey</u>	<u>SRO / Validation</u>	<u>Steve Harvey</u>	<u>3/12/01</u>	<u>via e-mail</u>	<u>4-4-01</u>
5. <u>Henry Curry</u>	<u>CRS / Validation</u>	<u>H Curry</u>	<u>3/13/01</u>	<u>H Curry</u>	<u>4/4/01</u>
6. <u>D.B. SHAFER</u>	<u>UREN TURNOVER READER (BRIDGE)</u>	<u>D.B. Shafer</u>	<u>3/26/01</u>	<u>D.B. Shafer</u>	<u>4/3/01</u>
7. <u>ANTHONY WILLIAMS</u>	<u>MGR-TRAINING / TRAINING</u>	<u>Anthony Williams</u>	<u>3/26/01</u>	<u>Anthony Williams</u>	<u>4/3/01</u>
8. <u>RICK STEBBINS</u>	<u>SRO / SURrogate / INSTR.</u>	<u>R Stebbins</u>	<u>3/26/01</u>	<u>R Stebbins</u>	<u>4/4/01</u>
9. <u>ESKAPPOULOS</u>	<u>MGR-Operations / Operations</u>	<u>ESKAPPOULOS</u>	<u>3/26/01</u>	<u>ESKAPPOULOS</u>	<u>4/4/01</u>
10. <u>MICHAEL C MILBEE</u>	<u>LOCT Instructor / Surrogate BOP</u>	<u>Michael C Milbee</u>	<u>3/27/01</u>	<u>Michael C Milbee</u>	<u>4-4-01</u>
11. <u>TID WALT</u>	<u>DSO / Maint / Training</u>	<u>TID WALT</u>	<u>3/27/01</u>	<u>TID WALT</u>	<u>4-4-01</u>
12. <u>timothy P. Cleary</u>	<u>PGM / Operations</u>	<u>timothy P. Cleary</u>	<u>27 MAR 01</u>	<u>timothy P. Cleary</u>	<u>27 MAR 01</u>
13.					
14.					
15.					

NOTES:

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of March 26, 2001 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of March 26, 2001. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE NOTE
1. William J. Gross	Author	<i>William J. Gross</i>	9/30/00	<i>William J. Gross</i>	04/03/01
2. William A. Musselwhite	Reviewer	<i>William A. Musselwhite</i>	12/04/00	<i>William A. Musselwhite</i>	04/03/01
3. Donald W. McSkiff	Reviewer	<i>Donald W. McSkiff</i>	12/05/00	<i>Donald W. McSkiff</i>	04/03/01
4. Saeed A. Khalfay	Developer/Reviewer	<i>Saeed A. Khalfay</i>	12/7/00	<i>Saeed A. Khalfay</i>	4/3/01
5. DIP V. SUNDHARAN	SIMULATOR SUPPORT	<i>DIP V. SUNDHARAN</i>	12/7/00	<i>DIP V. SUNDHARAN</i>	4/3/01
6. James H. Cox	Reviewer	<i>James H. Cox</i>	12/12/00	<i>James H. Cox</i>	4/5/01
7. John W. McDonald	Reviewer	<i>John W. McDonald</i>	11/16/01	<i>John W. McDonald</i>	4/4/01
8. VINCENT V. LEETH	REVIEWER	<i>Vincent V. Leeth</i>	11/17/01	<i>Vincent V. Leeth</i>	4/5/01
9. NORRELL, HOWARD S.	Reviewer (JPM COMB. 2. < only)	<i>Howard S. Norrell</i>	01/24/01	<i>Howard S. Norrell</i>	04/02/01
10. Cole, Walter J.	Validator / Reviewer	<i>Walter J. Cole</i>	1/26/01	<i>Walter J. Cole</i>	4/4/01
11. Allen Joseph B.	Validator / Reviewer	<i>Allen Joseph B.</i>	1/26/01	<i>Allen Joseph B.</i>	4/4/01
12. Harshaw, Kimberly A.	Reviewer / Time Validation	<i>Kimberly A. Harshaw</i>	1/30/01	<i>Kimberly A. Harshaw</i>	4/4/01
13. Carole A. Dickz	Reviewer (Time Validation)	<i>Carole A. Dickz</i>	1-30-01	<i>Carole A. Dickz</i>	4/7/01
14. Kenneth B Jones	Reviewer	<i>Kenneth B Jones</i>	2/21/01	<i>Kenneth B Jones</i>	4/3/01
15. William E. Stover	REVIEWER / WAS	<i>William E. Stover</i>	3/5/01	<i>William E. Stover</i>	4/3/01

NOTES:

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 26 MAR 01 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of 26 MAR 01. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATENOTE
1. Kurt Kruger	Instructor / VALIDATOR	K Kruger	3-10-01	K Kruger	4/3/00
2. RYAN E. WALDSMITH	RO / VALIDATOR	R Waldsmith	03-12-01	R Waldsmith	04-03-2001
3. Scott Blaken	SRO / Validator	S Blaken	3/12/01	S Blaken	4-4-01
4. Kris Harvey	SSO / Validation	K Harvey	3/12/01	K Harvey	4-4-01
5. Henry Curry	CRS / Validation	H Curry	3/13/01	H Curry	4/4/01
6. D.B. SHAFER	URENTURN OVER READER (BRIDGE)	D B Shaffer	3/26/01	D B Shaffer	4/3/01
7. Anthony Williams	Mgt. Training / Training	A Williams	3/24/01	A Williams	4/3/01
8. RICK STEBBINS	SRO / SURROGATE / INSTR.	R Stebbins	3/26/01	R Stebbins	4/4/01
9. ESKAPPOULOS	Mgt. Operations / Operations	E Skappoulos	3/26/01	E Skappoulos	4/4/01
10. MICHAEL C. MILBOE	LOCT Instructor / SURROGATE BOY	M C Milboe	3/27/01	M C Milboe	4-4-01
11. TID WALT	DSO / Mgt. Training	T Walt	3/27/01	T Walt	4-4-01
12. Timothy P. Cleary	PGM / OPERATIONS	T P Cleary	3/28/01	T P Cleary	4 APR 01
13.					
14.					
15.					

NOTES:

1. Pre-Examination

RO written exam

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 4/2/01 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of _____. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. <u>Ken Grover</u>		<u>[Signature]</u>	<u>2/9/01</u>			
2. <u>Hal Warren</u>		<u>[Signature]</u>	<u>02-09-01</u>			
3. <u>William Marshall</u>		<u>William W. Marshall</u>	<u>2/9/01</u>			
4. <u>Ed Shore</u>		<u>[Signature]</u>	<u>2-13-01</u>			
5. <u>Jim Early</u>		<u>[Signature]</u>	<u>2-9-01</u>			
6. <u>Lori T. Huskey</u>		<u>[Signature]</u>	<u>3-2-01</u>			
7. _____						
8. _____						
9. _____						
10. _____						
11. _____						
12. _____						
13. _____						
14. _____						
15. _____						

NOTES:

Surry 2 of _____

Facility: RNP	Date of Examination: 26 March 2001	Operating Test Number:
----------------------	---	------------------------

1. GENERAL CRITERIA	Initials		
	a	b	c
a. The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	WJS	DMC	RAB
b. There is no day-to-day repetition between this and other operating tests to be administered during this examination.	WJS	DMC	RAB
c. The operating test shall not duplicate items from the applicants' audit test(s) (see Section D.1.a).	WJS	DMC	RAB
d. Overlap with the written examination and between operating test categories is within acceptable limits.	WJS	DMC	RAB
e. It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	WJS	DMC	RAB

2. WALK-THROUGH (CATEGORY A & B) CRITERIA	---	---	---
a. Each JPM includes the following, as applicable: <ul style="list-style-type: none"> - initial conditions - initiating cues - references and tools, including associated procedure - validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee - specific performance criteria that include: <ul style="list-style-type: none"> - detailed expected actions with exact criteria and nomenclature - system response and other examiner cues - statements describing important observations to be made by the applicant - criteria for successful completion of the task - identification of critical steps and their associated performance standards restrictions on the sequence 	WJS	DMC	RAB
b. The prescribed questions in Category A are predominantly open reference and meet the criteria in Attachment 1 of ES-301.	WJS	DMC	RAB
c. Repetition from operating tests used during the previous licensing examination is within acceptable limits (30% for the walk-through) and do not compromise test integrity.	WJS	DMC	RAB
d. At least 20 percent of the JPMs on each test are new or significantly modified.	WJS	DMC	RAB

3. SIMULATOR (CATEGORY C) CRITERIA	---	---	---
a. The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.	WJS	DMC	RAB

Printed Name / Signature	Date
a. Author <u>William J. Gross / WJS</u>	<u>29 Jan 01</u>
b. Facility Reviewer(*) <u>Donald W. McCaskle II / DMC</u>	<u>2/5/01</u>
c. NRC Chief Examiner (*) <u>RICHARD S. BARNWELL / RAB</u>	<u>3/16/01</u>
d. NRC Supervisor (*) <u>MIKE ERNSTES / ME</u>	<u>3/19/01</u>

(*) The facility signature is not applicable for NRC-developed tests; two independent NRC reviews are required.

Facility: RNP		Date of Exam: 26 March 2001		Operating Test No.:	
QUALITATIVE ATTRIBUTES		Initials			
		a	b	c	
1.	The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events.	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
2.	The scenarios consist mostly of related events.	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
3.	Each event description consists of <ul style="list-style-type: none"> the point in the scenario when it is to be initiated the malfunction(s) that are entered to initiate the event the symptoms/cues that will be visible to the crew the expected operator actions (by shift position) the event termination point (if applicable) 	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
4.	No more than one non-mechanistic failure (e.g., pipe break) is incorporated into the scenario without a credible preceding incident such as a seismic event.	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
5.	The events are valid with regard to physics and thermodynamics.	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
7.	If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.	NA	NA	NA	
8.	The simulator modeling is not altered.	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
9.	The scenarios have been validated. Any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
10.	Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered in accordance with Section D.4 of ES-301.	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
12.	Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form with the simulator scenarios).	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	<i>WJS</i>	<i>DMC</i>	<i>MSB</i>	

TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.4.D)	Actual Attributes	---	---	---
1. Total malfunctions (5-8)	7 / 7	WFS	DMC	MSB
2. Malfunctions after EOP entry (1-2)	1 / 2	WFS	DMC	MSB
3. Abnormal events (2-4)	4 / 5	WFS	DMC	MSB
4. Major transients (1-2)	2 / 1	WFS	DMC	MSB
5. EOPs entered/requiring substantive actions (1-2)	1 / 2	WFS	DMC	MSB
6. EOP contingencies requiring substantive actions (0-2)	2 / 1	WFS	DMC	MSB
7. Critical tasks (2-3)	2 / 2	WFS	DMC	MSB

A. William J. Gross / Will J. Gross Author 29 Jan 01

B. Donald W. McCreary / D.W. McCreary Facility Reviewer 2/5/01

C. RICHARD S. BARNWELL / Richard S. Barnwell NRC Lead Examiner

OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			SRO U-1 Scen. 1 SRO	SRO U-1 Scen. 2 BOP	SRO U-2 Scen. 1 SRO	SRO U-2 Scen. 2 BOP		
RO	Reactivity	1						
	Normal	1						
	Instrument / Component	4						
	Major	1						
As RO	Reactivity	1						
	Normal	0						
	Instrument / Component	2						
	Major	1						
SRO-I								
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
As SRO	Major	1						
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
SRO-U	Major	1						
	Reactivity	0						
	Normal	1	1	1	1	1		
	Instrument / Component	2	2-3-4-5	2-4	2-3-4-5	2-4		
	Major	1	6-7	6	6-7	6		
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (2) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:

William J. Gross / William J. Gross 12/14/00

Chief Examiner:

INITIAL

OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			SRO I-1 Scen. 1 RO	SRO I-1 Scen. 2 SRO	SRO I-2 Scen. 1 RO	SRO I-2 Scen. 2 SRO		
RO	Reactivity	1						
	Normal	1						
	Instrument / Component	4						
	Major	1						
As RO	Reactivity	1	1-3		1-3			
	Normal	0						
	Instrument / Component	2	4-5		4-5			
	Major	1	6-7		6-7			
SRO-I								
	Reactivity	0						
	Normal	1		1		1		
	Instrument / Component	2		2-3-4-5		2-3-4-5		
As SRO	Major	1		6		6		
SRO-U	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
	Major	1						

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (2) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:

William J. Gross / Will J. Gross 12/12/00

Chief Examiner:

OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			RO-1 Scen. 2 RO	RO-1 Scen. 1 BOP	RO-2 Scen. 2 RO	RO-2 Scen. 1 BOP	RO-3 Scen. 1 RO	RO-3 Scen. 2 BOP
RO	Reactivity	1	1		1		1-3	
	Normal	1		1		1		1
	Instrument / Component	4	3-5	2-3	3-5	2-3	4-5	2-4
	Major	1	6	6-7	6	6-7	6-7	6
As RO	Reactivity	1						
	Normal	0						
	Instrument / Component	2						
	Major	1						
SRO-I								
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
As SRO	Major	1						
SRO-U	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
	Major	1						

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (2) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:

William J. Gross / Will J. Gross 12/12/00

Chief Examiner:

OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			RO-4 Scen. 2 RO	RO-4 Scen. 1 BOP	RO-5 Scen. 1 RO	RO-5 Scen. 2 BOP	RO-6 Scen. 2 RO	RO-6 Scen. 1 BOP
RO	Reactivity	1	1		1-3		1	
	Normal	1		1		1		1
	Instrument / Component	4	3-5	2-3	4-5	2-4	3-5	2-3
	Major	1	6	6-7	6-7	6	6	6-7
As RO	Reactivity	1						
	Normal	0						
	Instrument / Component	2						
	Major	1						
SRO-I								
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
As SRO	Major	1						
	Reactivity	0						
	Normal	1						
SRO-U	Instrument / Component	2						
	Major	1						
	Reactivity	0						
SRO-U	Normal	1						
	Instrument / Component	2						
	Major	1						

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (2) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:

William J. Gross / Will J. Gross 12/12/00

Chief Examiner:

OPERATING TEST NO.: RNP

Competencies	SROU-1		SROU-2		SROI-1		SROI-2	
	SCENARIO		SCENARIO		SCENARIO		SCENARIO	
	1 SRO	2 BOP	1 SRO	2 BOP	2 SRO	1 RO	2 SRO	1 RO
Understand and Interpret Annunciators and Alarms	2-3-4-5-6-7-8	2-4-6-7	2-3-4-5-6-7-8	2-4-6-7	2-3-4-5-6-7	4-5-6-7-8	2-3-4-5-6-7	4-5-6-7-8
Diagnose Events and Conditions	2-3-4-5-6-7-8	2-4-6-7	2-3-4-5-6-7-8	2-4-6-7	2-3-4-5-6-7	4-5-6-7-8	2-3-4-5-6-7	4-5-6-7-8
Understand Plant and System Response	1-2-3-4-6-7	1-2-6	1-2-3-4-6-7	1-2-6	1-2-3-5-6-7	1-3-4-6-7	1-2-3-5-6-7	1-3-4-6-7
Comply With and Use Procedures (1)	ALL	1-2-4-6-7	ALL	1-2-4-6-7	ALL	1-3-4-5-6-7-8	ALL	1-3-4-5-6-7-8
Operate Control Boards (2)		1-2-4-6-7		1-2-4-6-7		1-3-4-5-6-7-8		1-3-4-5-6-7-8
Communicate and Interact With the Crew	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL
Demonstrate Supervisory Ability (3)	ALL		ALL		ALL		ALL	
Comply With and Use Tech. Specs. (3)	2-4-5		2-4-5		2-4		2-4	

Notes:

- (1) Includes Technical Specification compliance for an RO.
- (2) Optional for an SRO-U.
- (3) Only applicable to SROs.

Author:

William J. Gross / Will J. Gross 12/2/00

Chief Examiner:

OPERATING TEST NO.: RNP

Competencies	RO-1		RO-2		RO-3		RO-4		RO-5		RO-6	
	SCENARIO		SCENARIO		SCENARIO		SCENARIO		SCENARIO		SCENARIO	
	2 RO	1 BOP	2 RO	1 BOP	1 RO	2 BOP	2 RO	1 BOP	1 RO	2 BOP	2 RO	1 BOP
Understand and Interpret Annunciators and Alarms	3-5-6	2-3-6	3-5-6	2-3-6	4-5-6-7-8	2-4-6-7	3-5-6	2-3-6	4-5-6-7-8	2-4-6-7	3-5-6	2-3-6
Diagnose Events and Conditions	3-5-6	2-3-6	3-5-6	2-3-6	4-5-6-7-8	2-4-6-7	3-5-6	2-3-6	4-5-6-7-8	2-4-6-7	3-5-6	2-3-6
Understand Plant and System Response	1-3-5-6	1-2-3-6	1-3-5-6	1-2-3-6	1-3-4-6-7	1-2-6	1-3-5-6	1-2-3-6	1-3-4-6-7	1-2-6	1-3-5-6	1-2-3-6
Comply With and Use Procedures (1)	1-3-5-6	1-2-3-6-7	1-3-5-6	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6	1-2-3-6-7
Operate Control Boards (2)	1-3-5-6	1-2-3-6-7	1-3-5-6	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6	1-2-3-6-7
Communicate and Interact With the Crew	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL
Demonstrate Supervisory Ability (3)												
Comply With and Use Tech. Specs. (3)												

Notes:

- (1) Includes Technical Specification compliance for an RO.
- (2) Optional for an SRO-U.
- (3) Only applicable to SROs.

Author:

William J. Gross / Will J. Gross 12/12/00

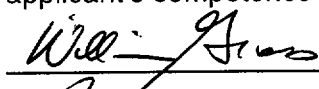
Chief Examiner:

OPERATING TEST NO.:

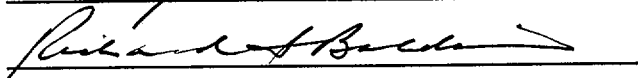
Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			SRO U-1		SRO U-2			
			Scen. 1 SRO	Scen. 2 SRO	Scen. 1 SRO	Scen. 2 SRO		
RO	Reactivity	1						
	Normal	1						
	Instrument / Component	4						
	Major	1						
As RO	Reactivity	1						
	Normal	0						
	Instrument / Component	2						
	Major	1						
SRO-I								
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
As SRO	Major	1						
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
SRO-U	Major	1						
	Reactivity	0	1-3	1	1-3	1		
	Normal	1	1	1	1	1		
	Instrument / Component	2	2-3-4-5	2-3-4-5	2-3-4-5	2-3-4-5		
	Major	1	6	6	6	6		

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (2) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:



Chief Examiner:



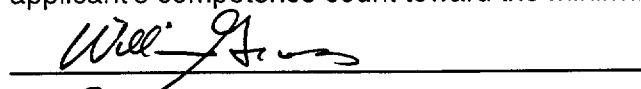
FINAL - BEFORE
EXAM ADMINISTRATION

OPERATING TEST NO.:

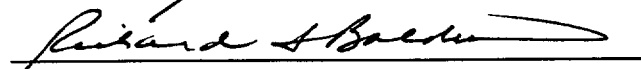
Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			SRO I-1		SRO I-2			
			Scen. 1 SRO	Scen. 2 RO	Scen. 1 SRO	Scen. 2 RO		
RO	Reactivity	1						
	Normal	1						
	Instrument / Component	4						
	Major	1						
As RO	Reactivity	1		1		1		
	Normal	0		5		5		
	Instrument / Component	2		3-5		3-5		
	Major	1		6		6		
SRO-I								
	Reactivity	0	1-3		1-3			
	Normal	1	1		1			
	Instrument / Component	2	2-3-4-5		2-3-4-5			
As SRO	Major	1	6		6			
SRO-U	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
	Major	1						

- Instructions: (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
- (4) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
- (5) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:



Chief Examiner:

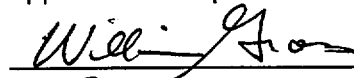


OPERATING TEST NO.:

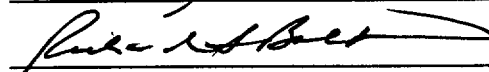
Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			RO-1		RO-2		RO-3	
			Scen. 1 RO	Scen. 2 BOP	Scen. 2 RO	Scen. 1 BOP	Scen. 1 RO	Scen. 2 BOP
RO	Reactivity	1	1-3		1		1-3	
	Normal	1		1	5	1		1
	Instrument / Component	4	4-5	2-4	3-5	2-3	4-5	2-4
	Major	1	6	6	6	6	6	6
As RO	Reactivity	1						
	Normal	0						
	Instrument / Component	2						
	Major	1						
SRO-I								
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
As SRO	Major	1						
	Reactivity	0						
	Normal	1						
SRO-U	Instrument / Component	2						
	Major	1						
	Reactivity	0						
SRO-U	Normal	1						
	Instrument / Component	2						
	Major	1						

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (6) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (7) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:



Chief Examiner:



OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			RO-4		RO-5			
			Scen. 1 RO	Scen. 2 BOP	Scen. 1 RO	Scen. 2 BOP		
RO	Reactivity	1	1-3		1-3			
	Normal	1		1		1		
	Instrument / Component	4	4-5	2-4	4-5	2-4		
	Major	1	6	6	6	6		
As RO	Reactivity	1						
	Normal	0						
	Instrument / Component	2						
	Major	1						
SRO-I								
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
As SRO	Major	1						
	Reactivity	0						
	Normal	1						
SRO-U	Instrument / Component	2						
	Major	1						
	Reactivity	0						
SRO-U	Normal	1						
	Instrument / Component	2						
	Major	1						

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (8) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (9) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:

Will Jones

Chief Examiner:

Richard S. Baker

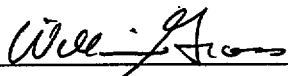
OPERATING TEST NO.: RNP

Competencies	SROU-1		SROU-2		SROI-1		SROI-2	
	SCENARIO		SCENARIO		SCENARIO		SCENARIO	
	1 SRO	2 SRO	1 SRO	2 SRO	1 SRO	2 RO	1 SRO	2 RO
Understand and Interpret Annunciators and Alarms	2-3-4-5-6-7-8	2-3-4-5-6	2-3-4-5-6-7-8	2-3-4-5-6	2-3-4-5-6-7-8	3-5-6	2-3-4-5-6-7-8	3-5-6
Diagnose Events and Conditions	2-3-4-5-6-7-8	2-3-4-5-6-7	2-3-4-5-6-7-8	2-3-4-5-6-7	2-3-4-5-6-7-8	3-5-6-7	2-3-4-5-6-7-8	3-5-6-7
Understand Plant and System Response	1-2-3-4-5-6-7	1-2-3-4-5-6-7	1-2-3-4-5-6-7	1-2-3-4-5-6-7	1-2-3-4-5-6-7	1-3-5-6-7	1-2-3-4-5-6-7	1-3-5-6-7
Comply With and Use Procedures (1)	ALL	ALL	ALL	ALL	ALL	1-3-5-6-7	ALL	1-3-5-6-7
Operate Control Boards (2)						1-3-5-6-7		1-3-5-6-7
Communicate and Interact With the Crew	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL
Demonstrate Supervisory Ability (3)	ALL	ALL	ALL	ALL	ALL		ALL	
Comply With and Use Tech. Specs. (3)	2-4-5	2-4-6	2-4-5	2-4-6	2-4-5		2-4-5	

Notes:

- (1) Includes Technical Specification compliance for an RO.
- (2) Optional for an SRO-U.
- (3) Only applicable to SROs.

Author:



Chief Examiner:



OPERATING TEST NO.: RNP

Competencies	RO-1		RO-2		RO-3		RO-4		RO-5	
	SCENARIO		SCENARIO		SCENARIO		SCENARIO		SCENARIO	
	1 RO	2 BOP	2 RO	1 BOP	1 RO	2 BOP	2 RO	1 BOP	1 RO	2 BOP
Understand and Interpret Annunciators and Alarms	4-5-6-7-8	2-4-6	3-5-6	2-3-6-7	4-5-6-7-8	2-4-6	3-5-6	2-3-6-7	4-5-6-7-8	2-4-6
Diagnose Events and Conditions	4-5-6-7-8	2-4-6-7	3-5-6-7	2-3-6-7	4-5-6-7-8	2-4-6-7	3-5-6-7	2-3-6-7	4-5-6-7-8	2-4-6-7
Understand Plant and System Response	1-3-4-5-6-7	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7	1-2-4-6-7
Comply With and Use Procedures (1)	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7
Operate Control Boards (2)	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7
Communicate and Interact With the Crew	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL
Demonstrate Supervisory Ability (3)										
Comply With and Use Tech. Specs. (3)										

Notes:

- (4) Includes Technical Specification compliance for an RO.
 (5) Optional for an SRO-U.
 (6) Only applicable to SROs.

Author:



Chief Examiner:



OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			SRO U-1		SRO U-2			
			Scen. 1 SRO	Scen. 2 SRO	Scen. 1 SRO	Scen. 2 SRO		
RO	Reactivity	1						
	Normal	1						
	Instrument / Component	4						
	Major	1						
As RO	Reactivity	1						
	Normal	0						
	Instrument / Component	2						
	Major	1						
SRO-I								
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
As SRO	Major	1						
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
SRO-U	Major	1						
	Reactivity	0	1-3	1	1-3	1		
	Normal	1	1	1	1	1		
	Instrument / Component	2	2-3-4-5	2-3-4-5	3-4-5	2-4-5		
	Major	1	6	6	6	6		

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (2) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (3) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author: *Amusselwhite*

Chief Examiner: *As Belcher*

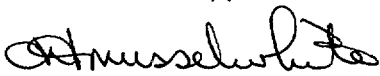
FINAL AFTER EXAM
ADMINISTERED

OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			SRO I-1		SRO I-2			
			Scen. 1 SRO	Scen. 2 RO	Scen. 1 SRO	Scen. 2 RO		
RO	Reactivity	1						
	Normal	1						
	Instrument / Component	4						
	Major	1						
As RO	Reactivity	1		1		1		
	Normal	0		5		5		
	Instrument / Component	2		3-5		3-5		
	Major	1		6		6		
SRO-I								
	Reactivity	0	1-3		1-3			
	Normal	1	1		1			
	Instrument / Component	2	3-4-5		3-4-5			
As SRO	Major	1	6		6			
SRO-U	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
	Major	1						

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (4) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (5) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:



Chief Examiner:



OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			RO-1		RO-2		RO-3	
			Scen. 1 RO	Scen. 2 BOP	Scen. 2 RO	Scen. 1 BOP	Scen. 1 RO	Scen. 2 BOP
RO	Reactivity	1	1-3		1		1-3	
	Normal	1		1	5	1		1
	Instrument / Component	4	4-5	2-4	3-5	2-3	4-5	2-4
	Major	1	6	6	6	6	6	6
As RO	Reactivity	1						
	Normal	0						
	Instrument / Component	2						
	Major	1						
SRO-I								
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
As SRO	Major	1						
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
SRO-U	Major	1						
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (6) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (7) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author: 

Chief Examiner: 

OPERATING TEST NO.:

Applicant Type	Evolution Type	Minimum Number	Candidate / Scenario Number / Position					
			RO-4		RO-5			
			Scen. 1 RO	Scen. 2 BOP	Scen. 1 RO	Scen. 2 BOP		
RO	Reactivity	1	1-3		1-3			
	Normal	1		1		1		
	Instrument / Component	4	4-5	2-4	4-5	2-4		
	Major	1	6	6	6	6		
As RO	Reactivity	1						
	Normal	0						
	Instrument / Component	2						
	Major	1						
SRO-I								
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
As SRO	Major	1						
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						
SRO-U	Major	1						
	Reactivity	0						
	Normal	1						
	Instrument / Component	2						

- Instructions:
- (1) Enter the operating test number and Form ES-D-1 event numbers for each evolution type.
 - (8) Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.4.d) but must be significant per Section C.2.a of Appendix D.
 - (9) Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author: *Amusselwhite*

Chief Examiner: *Asbee*

OPERATING TEST NO.: RNP

Competencies	SROU-1		SROU-2		SROI-1		SROI-2	
	SCENARIO		SCENARIO		SCENARIO		SCENARIO	
	1 SRO	2 SRO	1 SRO	2 SRO	1 SRO	2 RO	1 SRO	2 RO
Understand and Interpret Annunciators and Alarms	2-3-4-5-6-7-8	2-3-4-5-6	3-4-5-6-7-8	2-4-5-6	3-4-5-6-7-8	3-5-6	3-4-5-6-7-8	3-5-6
Diagnose Events and Conditions	2-3-4-5-6-7-8	2-3-4-5-6-7	3-4-5-6-7-8	2-4-5-6-7	3-4-5-6-7-8	3-5-6-7	3-4-5-6-7-8	3-5-6-7
Understand Plant and System Response	1-2-3-4-5-6-7	1-2-3-4-5-6-7	1-3-4-5-6-7	1-2-4-5-6-7	1-3-4-5-6-7	1-3-5-6-7	1-3-4-5-6-7	1-3-5-6-7
Comply With and Use Procedures (1)	ALL	ALL	ALL	ALL	ALL	1-3-5-6-7	ALL	1-3-5-6-7
Operate Control Boards (2)						1-3-5-6-7		1-3-5-6-7
Communicate and Interact With the Crew	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL
Demonstrate Supervisory Ability (3)	ALL	ALL	ALL	ALL	ALL		ALL	
Comply With and Use Tech. Specs. (3)	2-4-5	2-4-6	4-5	2-4-6	4-5		4-5	

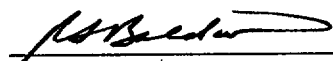
Notes:

- (1) Includes Technical Specification compliance for an RO.
- (2) Optional for an SRO-U.
- (3) Only applicable to SROs.

Author:



Chief Examiner:



OPERATING TEST NO.: RNP

Competencies	RO-1		RO-2		RO-3		RO-4		RO-5	
	SCENARIO		SCENARIO		SCENARIO		SCENARIO		SCENARIO	
	1 RO	2 BOP	2 RO	1 BOP	1 RO	2 BOP	2 RO	1 BOP	1 RO	2 BOP
Understand and Interpret Annunciators and Alarms	4-5-6-7-8	2-4-6	3-5-6	2-3-6-7	4-5-6-7-8	2-4-6	3-5-6	2-3-6-7	4-5-6-7-8	2-4-6
Diagnose Events and Conditions	4-5-6-7-8	2-4-6-7	3-5-6-7	2-3-6-7	4-5-6-7-8	2-4-6-7	3-5-6-7	2-3-6-7	4-5-6-7-8	2-4-6-7
Understand Plant and System Response	1-3-4-5-6-7	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7	1-2-4-6-7
Comply With and Use Procedures (1)	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7
Operate Control Boards (2)	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7	1-3-5-6-7	1-2-3-6-7	1-3-4-5-6-7-8	1-2-4-6-7
Communicate and Interact With the Crew	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL
Demonstrate Supervisory Ability (3)										
Comply With and Use Tech. Specs. (3)										

Notes:

- (4) Includes Technical Specification compliance for an RO.
 (5) Optional for an SRO-U.
 (6) Only applicable to SROs.

Author:



Chief Examiner:



Facility: RNP		Date of Exam: 26-Mar-01		Exam Level: SRO			
Item Description				Initial			
				a	b*	c#	
1.	Questions and answers technically accurate and applicable to facility			WJS	DM	RSB	
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available			WJS	DM	RSB	
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401			WJS	DM	RSB	
4.	Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input checked="" type="checkbox"/> the audit exam was systematically and randomly developed; or <input type="checkbox"/> the audit exam was completed before the license exam was started; or <input type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> the license exam was prepared by the NRC			WJS	DM	RSB	
5.	Bank use meets limits (no more than 50 percent from the bank, at least 10 percent new, and the rest modified); enter the actual question distribution at right	Bank	Modified	New	WJS	DM	RSB
		41	41	18			
6.	Between 50 and 60 percent of the questions on the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right	Memory	C/A		WJS	DM	RSB
		43	57				
7.	References/handouts provided do not give away answers			WJS	DM	RSB	
8.	Question content conforms with specific K/A statements in the previously approved examination outline; deviations are justified			WJS	DM	RSB	
9.	Question psychometric quality and format meet ES, Appendix B, guidelines			WJS	DM	RSB	
10.	The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet			WJS	DM	RSB	

	Printed Name / Signature	Date
a. Author	William J. Gross / <i>William J. Gross</i>	29 Jan 01
b. Facility Reviewer(*)	Donald W. McCaskill / <i>Donald W. McCaskill</i>	2/5/01
c. NRC Chief Examiner(*)	RICHARD S. BALDWIN / <i>Richard S. Baldwin</i>	3/16/01
d. NRC Regional Supervisor(*)	MIKE ERNSTES / <i>Mike Ernstes</i>	3/19/01

Note: * The facility reviewer's signature is not applicable for NRC-developed examinations; two independent NRC reviews are required.
See special instructions (Section E.2.c) for Items 1, 5, and 8.

Facility: RNP		Date of Exam: 26-Mar-01		Exam Level: RO																	
Item Description				Initial																	
				a	b*	c#															
1.	Questions and answers technically accurate and applicable to facility			WJS	DM	MB															
2.	a. NRC K/As referenced for all questions b. Facility learning objectives referenced as available			WJS	DM	MB															
3.	RO/SRO overlap is no more than 75 percent, and SRO questions are appropriate per Section D.2.d of ES-401			WJS	DM	MB															
4.	Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input checked="" type="checkbox"/> the audit exam was systematically and randomly developed; or <input type="checkbox"/> the audit exam was completed before the license exam was started; or <input type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> the license exam was prepared by the NRC			WJS	DM	MB															
5.	Bank use meets limits (no more than 50 percent from the bank, at least 10 percent new, and the rest modified); enter the actual question distribution at right	Bank 44	Modified 37	New 19	WJS	DM	MB														
6.	Between 50 and 60 percent of the questions on the exam (including 10 new questions) are written at the comprehension/analysis level; enter the actual question distribution at right	Memory 44	C/A 56		WJS	DM	MB														
7.	References/handouts provided do not give away answers			WJS	DM	MB															
8.	Question content conforms with specific K/A statements in the previously approved examination outline; deviations are justified			WJS	DM	MB															
9.	Question psychometric quality and format meet ES, Appendix B, guidelines			WJS	DM	MB															
10.	The exam contains 100, one-point, multiple choice items; the total is correct and agrees with value on cover sheet			WJS	DM	MB															
<table border="0"> <tr> <td></td> <td>Printed Name / Signature</td> <td>Date</td> </tr> <tr> <td>a. Author</td> <td>William J. Gross / <i>WJG</i></td> <td>29 Jan 01</td> </tr> <tr> <td>b. Facility Reviewer(*)</td> <td>Donald W. McLaughlin / <i>D. McLaughlin</i></td> <td>2/5/01</td> </tr> <tr> <td>c. NRC Chief Examiner(*)</td> <td>RICHARD S. BALDWIN / <i>Richard Baldwin</i></td> <td>3/16/01</td> </tr> <tr> <td>d. NRC Regional Supervisor(*)</td> <td>MIKE ERNSTER / <i>Mike Ernster</i></td> <td>2/12/01</td> </tr> </table>								Printed Name / Signature	Date	a. Author	William J. Gross / <i>WJG</i>	29 Jan 01	b. Facility Reviewer(*)	Donald W. McLaughlin / <i>D. McLaughlin</i>	2/5/01	c. NRC Chief Examiner(*)	RICHARD S. BALDWIN / <i>Richard Baldwin</i>	3/16/01	d. NRC Regional Supervisor(*)	MIKE ERNSTER / <i>Mike Ernster</i>	2/12/01
	Printed Name / Signature	Date																			
a. Author	William J. Gross / <i>WJG</i>	29 Jan 01																			
b. Facility Reviewer(*)	Donald W. McLaughlin / <i>D. McLaughlin</i>	2/5/01																			
c. NRC Chief Examiner(*)	RICHARD S. BALDWIN / <i>Richard Baldwin</i>	3/16/01																			
d. NRC Regional Supervisor(*)	MIKE ERNSTER / <i>Mike Ernster</i>	2/12/01																			
<p>Note: * The facility reviewer's signature is not applicable for NRC-developed examinations; two independent NRC reviews are required.</p> <p># See special instructions (Section E.2.c) for Items 1, 5, and 8.</p>																					

ROBINSON 2001
Written Examination
Review Worksheet

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward			
Common Questions														
1	F	2										S	Direct. Question Appears to be ok.	
2	H	3										S	Sig. Modified. Question appears to be ok. Is the requirements for licensed positions? Do we need to delineate what position we are talking about?	
3	H	3				X						E	Direct. Distractor 'c' does not seem to be credible. Why would anyone assume a SGTR? Discuss. Otherwise it appears OK.	
4	H	4										S	Sig. Modified. Appears to be ok.	
5	H	3										S	Sig. Modified. Appears to be ok. Not sure that this is a higher level question. It does require calculating the times, however, not very difficult.	
6	H	3										S	Sig. Modified. Appears to be ok.	
7	H	3										S	Direct. Is it true that there is no appreciable increase in PRT temperature? Was this run on the simulator to verify this is true? If not run it to ensure this is correct.	
8	H	3										S	Direct. Appears to be ok.	
9	H	3										S	Direct. Appears to be ok.	

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws				4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units		
Instructions												
[Refer to Appendix B for additional information regarding each of the following concepts.]												
1.	Enter the level of knowledge (LOK) of each question as either (F)undamental or (H)igher cognitive level.											
2.	Enter the level of difficulty (LOD) of each question using a 1 - 5 (easy - difficult) rating scale (questions in the 2 - 4 range are acceptable).											
3.	Check the appropriate box if a psychometric flaw is identified: <ul style="list-style-type: none"> • The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information). • The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc). • The answer choices are a collection of unrelated true/false statements. • More than one distractor is not credible. • One or more distractors is (are) partially correct (e.g., if the applicant can make unstated assumptions that are not contradicted by stem). 											
4.	Check the appropriate box if a job content error is identified: <ul style="list-style-type: none"> • The question is not linked to the job requirements (i.e., the question has a valid K/A but, as written, is not operational in content). • The question requires the recall of knowledge that is too specific for the closed reference test mode (i.e., it is not required to be known from memory). • The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons). • The question requires reverse logic or application compared to the job requirements. 											
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.	For any "U" ratings, at a minimum, explain how the Appendix B psychometric attributes are not being met.											

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
10	H	3				X						E	<p>Direct. Is CRSS a known acronym? A safety injection will cause a Phase A. This signal will be present prior to the inadvertent containment spray actuation. Why is this not also an answer?</p> <p>Discuss.</p>
11	F	3				X						E	<p>Sig. Mod. Distractor 'b' and 'c' do not make sense. The explanation does not help why it is reasonable to assume anyone would pick this.</p> <p>Discuss.</p> <p>2/28/01</p> <p>Changed the stem to reorder the bullets and changed distractors b and c. Change is ok.</p>
12	H	3										S	<p>NEW. Appears to be ok.</p>
13	H	3										S	<p>Sig. Mod. Disagree with level of difficulty. Applying simple addition to a number that is memorized does not constitute a higher cognitive level question.</p> <p>Discuss.</p> <p>Changed level of difficulty to a 2.</p>
14	F	3										?	<p>Sig. Mod. What reference is going to be provided? IF the reference is the same as provided with the draft exam, this reference will make the question a direct look-up. Depending on the references this question may have to be deleted. Is it necessary to have to provide the procedure with the test?</p> <p>Discuss</p> <p>The reference comment was removed. No reference will be provided 2/28/01 ok as changed.</p>
15	H	3										S	<p>Sig. Modified. Is it necessary to provide the value on the graph? Why don't we use 15 days? At least we could allow them to interpolate.</p> <p>Discuss:</p> <p>Other wise appears ok.</p> <p>February 28, 2001</p> <p>OK as is. But changed 'c' to 29.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
21	F	3										S	Direct. Appears to be ok.
22	F	3										S	Direct. Appears to be ok. From the material sent can not determine if the distractors are actually plausible.
23	F	3				X						E/S	Direct. The question appears to be very easy. Do not agree with the level of difficulty. It is more of a 2. The explanation for distractor a does not seem to be correct. AOP-004 purpose states that "no other accident condition exists within the primary plant requiring the EOPs or any other AOP." This question could be modified to easily put in some other info and make it a sig modified question. The question is ok as is, however it seems pretty obvious. February 28, 2001 OK as is. No change necessary.
24	H	3										E	<u>NEW</u> . How do you know from the question that a load reduction will be necessary. Not sure I understand how you determine that. Discuss. Was this run on the simulator to verify answer? February 28, 2001 There was a rod insertion before, so it is depressed. The only way to raise power is to dilute. OK as is.
25	F	2										U	Direct. Disagree with LOD. More like a 1. The KA states "Ability to prioritize and interpret the significance of each annunciator or alarm. Not sure that this question meets that KA. This question does neither prioritize or interpret the significance of the alarm. Needs to be replaced. February 28, 2001 Replaced with new question. New question has prioritization of alarms. Distractor 'a' did not seem plausible. The initial conditions will be added to have 100% power. Looks good as changed.
26	F	3										S	Direct. Is CRSS the correct abbreviation? Appears to be ok. OK as is.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
27	H	3										E	<p>Sig. Modified. What references will be provided? If the EPP-15 plot is just given this will be ok, if the EPP procedure is also given then the question is easily answered. Why do we use a point on the line? Discuss.</p> <p>February 28, 2001</p> <p>Yes just get the plot., Changed the stem as suggested.</p> <p>Ok as is.</p>
28	F	3										?	<p>NEW. Question appears to be ok but would be better if it was changed to have either c or d the correct answer.</p> <p>February 28, 2001</p> <p>OK as is no change is necessary.</p> <p>Trips are blocked before 20%. Have to realize they are blocked.</p>
29	F	3				X						E	<p>Sig. Modified. Distractor 'c' can not be correct. This is the answer for question # 22. Since #22 is answered first one could eliminate that answer immediately. This distractor needs to be changed/replaced.</p> <p>February 28, 2001</p> <p>Replaced 'c' with R-2 containment area monitor. And then reordered them to be numerical.</p> <p>Ok as changed.</p>
30	H	3										S	Sig. Modified. Question appears to be ok.
31	H	3										S	<p>Sig. Modified. Question appears to be ok.</p> <p>February 28, 2001</p> <p>added a dot to the first bullet.</p>
32	H	4										S	<p>Sig. Modified. DO not agree with the LOD. This basically is a insert the numbers and do a simple calculation. This appears to be ok. It looks like a 3.</p> <p>February 28, 2001</p> <p>Changed to a 3.</p>
33	F	2										S	Sig. Modified. Appears to be ok. Simple.
34	F	3										S	Sig. Modified. Appears to be ok.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
35	F	3	X									E	<p>Direct. Is it necessary to tell the applicants in the stem that Bus 3 was de energized? It seems this is information they should find out. This provides information that will help formulate the final answer. Otherwise it appears ok.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Removed the bus 3 reference.</p> <p>Ok as changed.</p>
41	H	3										S	<p>NEW. The distractor analysis and reference material does not provide information on how the loss of power and the instrument failing low this effects the output of the bistable.</p> <p>Otherwise it appears to be ok.</p> <p>Discuss.</p> <p>Energized to actuate. Loss of 954 will prevent that box from being true. Will not get 2/3 for 2/2.</p> <p>OK as is no change necessary.</p>
42	H	3										S	Sig Modified. Appears to be ok.
43	H	3	X									E	<p>NEW. Is it necessary to say reactor trip due to low low level alarm? Could you put a value in stem to represent that? For example, 6%.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Removed the reference to low low level.</p> <p>OK as changed.</p>
44	F	3										S	<p>Sig. Modified. Disagree with LOD, more like a 2. Appears to be ok.</p> <p>February 28, 2001</p> <p>Changed level to a 2</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
45	F	3										S	<p>Direct. Appears to be ok. Does the licensee feel that this information is something they expect the applicants to know. It seems to be into the procedure.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Licensee, can be answered by both. This is a systems knowledge question, not a procedure use question.</p> <p>OK as is.</p>
46	H	4										?	<p>NEW. How is this not memory. If you do not know the answer, how do you comprehend the information in the stem of the question to come up with the answer.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Distractor 'd' to remove until power is less than or equal to 70%.</p> <p>Have to know what condition the draw is in. May think that the draw is removed from service.</p> <p>OK as is. No change necessary.</p>
47	H	3										S	<p>NEW. Not sure how you get the answer. Need licensee show me how to get the answer from the reference material provided. Appears to be ok.</p> <p>Discuss.</p> <p>EPP 015 deals with conserving inventory or RWST.</p> <p>Ok as is. No change necessary.</p> <p>February 28, 2001</p>
48	H	3				X						E	<p>Direct. How do you get pzs spray flow with NO RCPs running? This distractor needs to be replaced.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>changed 'c' to be auxiliary spray flow vice pressurizer spray flow.</p> <p>Ok as changed.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
49	H	3	X									E	<p>Direct. Was this run on the simulator. I am not sure that you will see much of a change of power. This needs to be tightened up to allow for ie, instantaneous changes. What happens if this runs, it will most likely come back to an equilibrium state. Need to look at this further.</p> <p>February 28, 2001</p> <p>OK will change to add initially to the stem.</p>
50	H	3										S	<p>Direct. Appears to be ok.</p>
51	H	3				X						U/E	<p>NEW. Distractor 'b' does not make sense. First, the plant is in adverse containment requirements. Reducing the level to less than 8% makes it wrong. This is a specific determiner. This distractor has to be changed.</p> <p>When would you purposefully reduce level to get the S/Gs below a certain value? This is not a normal evolution, if ever.</p> <p>Is this a question you expect an RO to answer without the procedure? I am not sure that this is RO level of knowledge. DO you expect operators to know steps in a little used procedure?</p> <p>Suggestion. Since procedure step 11 states "Maintain a Minimum of 80 GPM AFW Flow to Each S/G with level less than 8%[18%], How about making S/G "C" at 19% and change the answer to "C".</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Levels are Narrow range. Do not feel that it is necessary to add narrow.</p> <p>Decided not to use the above suggestion. Just changed the distractors.</p> <p>OK as changed.</p>
52	H	3										S	<p>Sig. Modified. Appears to be ok.</p>
53	H	3										S	<p>Sig. Modified. What handouts will be provided? Are they going to be in a book?</p> <p>Appears to be ok.</p> <p>Yes they will get these curves in a package.</p> <p>February 28, 2001</p> <p>ok as is.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
54	H	3										E	<p>Direct. Disagree with LOD. This question is nothing more than putting the information in Attachment 10.1. It is a recognition of an out of tolerance condition. This is nothing more than putting numbers from the question. How is this higher cognitive level?</p> <p>This question is OK, however, it is not a higher level question.</p> <p>February 28, 2001</p> <p>Changed from higher level to a memory.</p>
55	H	3	X									E	<p>NEW. The wording in the stem could be cleaner. Last bullet could be written to say ... (using a new TC Number) with the issuance of Revision 45. Vise issue of</p> <p>Disagree with comprehension level. The is more of a memory level question that incorporates simple math.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Changed as requested. Think that it is application.</p> <p>Ok as discussed.</p>
61	F	3										S	<p>Direct. LOD more of a 2. Appears to be ok.</p> <p>February 28, 2001</p> <p>Changed to a 2</p> <p>OK as is</p>
62	H	3										S	Sig. Modified. Appears to be oK.
63	F	3										S	Direct. Appears to be ok.
64	F	2										S	Direct. Appears to be ok.
65	F	3										S	Sig Modified. Appears to be ok.
66	F	3										S	Sig. Modified. Appears. To be ok.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
67	H	3				X						E	<p>Sig. Modified.</p> <p>Distractor 'b', should this be opens also vice open?</p> <p>Do not agree with Comprehension level. If you do not know this information how would you answer the question?</p> <p>February 28, 2001</p> <p>Changed to opens</p> <p>Ok as is.</p>
68	H	3				X						E	<p>NEW.</p> <p>How do you know that no RCPs are running from the Stem of the question? It is not stated but the procedure provided at step 9 asks if there are any running. This may make this distractor easily eliminated.</p> <p>Are RO applicants required to know this knowledge?</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>RVLIS full range means no RCPs running. Conditions put in a Superheat condition. RCPs would have been secured due to EOPs.</p> <p>Distractor 'c' is plausible because of the information provided in the procedure.</p> <p>Ros are required to know major action category. OK as is.</p>
69	H	3										S	<p>Direct. Distractors 'a' and 'c' use values, are these numbers that the applicants would reasonably have a misconception on?</p> <p>February 28, 2001</p> <p>changed the distractors to back pressure vice condenser vacuum.</p> <p>dictractor 'a' changed to 5.5 inches back pressure. Distractor 'c' was changed to 10 hgA .</p> <p>OK as changed.</p>
70	H	4										S	<p>Sig. Modified. Appears to be ok.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
71	F	2										E	<p>Direct. Appears to be ok. KA does not seem to match. The extent of potential damage to operational damage to plant equipment. The question seems to cover entry conditions into DSP-001.</p> <p>Distractor 'c' is not a correct answer. However if the crew used this procedure at less than 200 degrees F would you fault them?</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Ok as is.</p> <p>Would not be proper to go to this procedure.</p>
72	F	3										S	Direct. Appears to be ok.
73	F	2										S	Direct. Appears to be ok. Simple.
74	F	3										S	Sig. Modified. Appears to be ok.
75	F	3										S	<p>Direct. Are RO applicants responsible for this information?</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>YES, Entry conditions to S-1.</p>
81	H	3										S	Sig. Modified. Appears to be ok
82	F	2										S	Sig. Modified. Appears to be ok. Simple
83	F	3										S	<p>Direct. LOD is more like a 2. Simple</p> <p>Appears to be ok.</p> <p>February 28, 2001</p> <p>Changed level of difficulty to a 2.</p> <p>Ok as is.</p>
84	F	2										S	Direct. Appears to be ok.
85	H	3										S	Direct. Appears to be ok.
86	H	3										S	Direct. Appears to be ok.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
87	H	3										U	<p>NEW. This question appears to be ok, however, it does not match the K/A listed. The KA concerns the Containment Cooling System (CCS). The Specific KA is "... Knowledge of the effect that a loss or malfunction of the CCS will have on the following: K3.02 Containment instrument readings."</p> <p>This specific question provides initial conditions of a LOCA with changing containment parameters. The question asks what to do about depressurization with certain containment parameter changes.</p> <p>I do not believe this question matches the KA.</p> <p>Discuss with BC/Facility.</p> <p>February 28, 2001</p> <p>Ok as is, no change is necessary. Discussed with licensee. Use as is.</p>
88	H	3				X						E	<p>Direct. Recommend to change distractor 'a' to look like distractor 'b'. For distractor 'a' DG 'A' make its part be the same as distractor 'b' for EDG 'B'. Distractor 'a' should then read, Starts, but field fails to flash, and EDG 'B' does not start. This will test the train knowledge.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Changed a to look like 'b'.</p> <p>OK as changed.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
89	H	3										E/U	<p>NEW. Disagree with level of cognitive level. This is more of a memory level question. There is no information in the stem that has to be synthesized. Either you know it or you do not.</p> <p>This is a system knowledge question.</p> <p>The KA does not match either.</p> <p>The KA states " Ability to (a) predict the impacts of the following malfunctions or operations on the RPIS; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Misaligned rods.</p> <p>The question requires the applicant to recall what power cabinet causing the urgent alarm. This question does not reflect the above KA.</p> <p>Discuss with BC/Facility.</p> <p>February 28, 2001</p> <p>Replaced with a bank question. Still have enough NEW questions.</p> <p>Replacement is ok as is.</p>
90	F	3				X						E	<p>Direct. In discussing distractor 'a', when if ever is independent verification performed and the initials N/Aed? This does not seem plausible.</p> <p>What is functional verification, how is it used?</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Changed a to be not necessary. Functional is more of a check of for example if trip a B/S then verify the B/S light is lit.</p> <p>Ok as changed.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
91	H	3	X									E	<p>Sig. Modified. Why is it necessary to state 1/2 or 3/4 valves in the stem are closed. Why can we not just say that 2 Stop Valves and 3 governor valves are shut. This is teaching the applicant how many valves if they don't know this information.</p> <p>Recommend changing the stem as discussed above.</p> <p>Otherwise appears to be ok. Discuss.</p> <p>February 28, 2001</p> <p>Changed the stem as requested.</p> <p>Ok as changed.</p>
92	H	3										S	Direct. Appears to be ok.
93	H	3				X						E	<p>Direct.</p> <p>The reasoning for distractors 'c' and 'd' don't help me decide why they are incorrect. I can not figure out if these are plausible.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Ok as is.</p>
94	H	3										U	<p>NEW. The KA for this question states "Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications (Pressurizer Pressure)"</p> <p>The answer to this question deals with entry into Technical Specifications on Pressurizer level.</p> <p>The question and KA does not match. Will need to change the answer to b and make that one out of tolerance Discuss.</p> <p>February 28, 2001</p> <p>Changed distractors a and b. 'A' is no longer the answer and b is now the answer.</p> <p>OK as is with changes made.</p>
95	H	3										S	NEW. Appears to be ok.
RO ONLY													

N=14

B-49

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
16	F	2										S	NEW. Appears to be ok.
17	H	3										S	NEW. Appears to be ok.
18	H	3				X						E	<p>NEW. Distractors 'a' and 'b' are both isolated during the tube rupture isolation procedure. These do not make sense. I could accept one of these. Need to replace one of them.. Would like to have b replaced. At least 'a' is feasible since there is a ruptured/faulted S/G.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Changed 'b' to read RCS and ruptured S/G pressure will equalize.</p> <p>Ok as changed.</p>
19	H	3										S	Direct. Appears to be ok.
20	F	2										S	Sig. Modified. Appears to be ok.
36	H	3				X						E	<p>Sig. Modified. The procedure requires that RVLIS upper range be greater than or equal to 100%. If it is not, then the RNO states to increase PZR level to > 74%. The answer by adding 18% to the initial conditions, 56% PZR level, will bring level to 74%. This is not greater than 74%. Need to add 1% or at least 19% to get greater than 74%.</p> <p>Do you expect the RO applicants to know this type of knowledge. The RNO of step 35 of a procedure?</p> <p>Otherwise appears to be ok.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Changed to 19%. Ok as changed.</p>
37	H	3										S	Direct. Appears to be ok.
38	F	3										S	Direct. Appears to be ok.
39	F	3										S	Sig. Modified. Appears to be ok.
40	F	2										S	Sig. Modified. Appears to be ok.
56	H	3										S	NEW. Appears to be ok.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
57	F	3										S	Direct. Appears to be ok.
58	F	3										S	Direct. Appears to be ok.
59	F	3	X									S	Direct. The stem of the question leads you to think that there is some sort of fold out page needed to do this. While in fact this question is asking what is this next procedural step. Is this something the RO applicants are required to know? Discuss with facility. February 28, 2001 OK as is.
60	F	3										S	Sig. Modified. Appears to be ok.
76	H	3										S	Sig. Modified. Do not agree with level of difficulty. In order to answer this question you have to know the 3.5%/hr power requirement. Then you subtract the power changes and determine if it is in one hour or in minutes. Discuss. February 28, 2001 OK as is. Licensee noted the comment.
77	F	2				X						E	Sig Modified. All 4 distractors have service water in it. We can change this to read a. Service water /Deepwell water b. Deepwell water / fire water c. Fire water / Service Water d. Service Water/ Fire water This way Service Water only appears 3 times and requires more thought. February 28, 2001 Ok as changed.
78	H	3										S	Sig. Modified. Appears to be ok.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
79	H	3										S	<p>NEW. Are RO applicants responsible for this type of knowledge? Otherwise it appears to be ok.</p> <p>February 28, 2001</p> <p>Yes they expect the RO's to know this information. RO's are not required to know EP and TS bases.</p> <p>OK as is.</p>
80	F	3				X						E	<p>Direct. Distractor 'a' is suspect in being correct. Was this run on the simulator? I could imagine that the valves could open fully and then immediately throttle to the setpoint.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>There is a feed back loop where it senses flow, it will modulate open but it will never go fully open.</p> <p>OK as is.</p>
96	F	3										S	Direct. Appears to be ok.
97	F	2										S	Direct. Appears to be ok.
98	H	3										S	Direct. Appears to be ok.
99	H	3										S	<p>Sig. Modified. Appears to be ok. However, the print is very hard to read the flowpath. Need to do something with this print if used this way on the test.</p> <p>February 28, 2001</p> <p>Will provide another drawing that is clearer.</p>
100	F	2										S	Direct. Appears to be ok.
SRO ONLY													

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
16	H	4	X			X						E	<p>Direct. Disagree with level of difficulty. This is a low level comprehension. If you do not know that the setpoint being conservative does not require a operability determination. In addition, distractor 'a' may be correct. In that, in order to have determined an operability of the channel.</p> <p>In operability time is zero in 'a'.</p> <p>Additionally, the I&C Supervisor does not make inoperability determinations. The stem is not correct.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Changed I&C to Work Control SRO.</p> <p>Changed a to read an operability not required since setpoint less than 5%. 5% shows up in procedures.</p> <p>OK as changed.</p> <p>should be a</p>
17	H	?	X									E	<p>Sig. Modified. The question was not rated. Believe it should be a 3.</p> <p>What documents are going to be provided?</p> <p>The stem needs to be adjusted to reflect that 18" below is actually (-)18" below. The reference uses the minus sign.</p> <p>How do you know that you use TIF for less than full cavity? What keys them into this? IS it necessary to add this information to the stem. If you do then it makes the answer easier to obtain.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>should be a 3</p> <p>OK the way it is. No changes necessary.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
18	H	3				X						E	<p>Sig. Modified. The modification to the question made the distractors easier to determine the incorrect one.</p> <p>Distractors 'c' and 'd' both describe depressurization using the preferred and alternate methods. Since the stem does not describe any condition for depressurization then both can be eliminated.</p> <p>Suggest changing 'd' to read increase charging flow and depressurize RCS. Or Increase charging flow and maintain RCS and Ruptured S/G pressures equal.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Changed distractors as suggested.</p> <p>Ok as changed.</p>
19	F	2										U	<p>Direct. This question is NOT an SRO Only type question. This is basic procedure use and can be answered by both SRO and RO applicants. This does not meet the SRO level question.</p> <p>ES-401 D.2.d requires questions to evaluate the SROs at a higher license level. This is information that is unique to the SRO job position.</p> <p>This question does not test at this level.</p> <p>The question needs to be replaced.</p> <p>Discuss B/C and Facility.</p> <p>February 28, 2001</p> <p>This question has been replaced. The replacement is ok with the exception of teaching in the stem. The NRC accepts the changes to the question.</p>
20	H	3										S	<p>Sig. Modified.</p> <p>All the questions that use handouts should say Using the supplied.... rather than Given the supplied... It seems to flow better.</p> <p>February 28, 2001</p> <p>Change made.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
36	F	3										S	<p>Sig. Modified.</p> <p>Not sure why in this case this is not characterized as a higher level question? This requires analysis of the conditions in the stem.</p> <p>February 28, 2001</p> <p>Agree with comment.</p>
37	F	3				X						E	<p>Sig. Modified. This questions will not have any handouts will it? I assume not.</p> <p>I think that all distractors should have the word "and" put in the first bullet. This is the way the TS's are written.</p> <p>The answer is the same as it would be for Action A. one or more rod(s) inoperable. Are we discriminating if we use this answer. Would it be better if we did one rod out of spec and use the parts of the answer with that.</p> <p>Recommendation: Change the answer to use 'b' and adjust the stem as necessary.</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Did put the ands in but the KA talks about more than one rod. Will leave it the way it was. The ands were put in and is ok as is.</p>
38	H	3										S	<p>Sig. Modified. Change stem to state Using the supplied references.. Vice Given</p> <p>Otherwise appears to be ok.</p> <p>February 28, 2001</p> <p>ok changed.</p>
39	F	3										S	<p>Direct. Why is this an SRO only level question?</p> <p>It is memory of a Precaution and limitation.</p> <p>Discuss with BC and facility.</p> <p>February 28, 2001</p> <p>Question replaced. See the replaced question.</p> <p>Appears to be ok.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
40	F	2	X									E	<p>Direct. The question as written does not give you a time frame for the reduction of PZR level. The fold out page states that if level goes below 10% then you have to SI. This would take 1.5 minutes to get to this requirement. Do you SI before you get to the value? If so the question is ok as stands. If not, then there may be no answer. Should we put a time frame in the stem?</p> <p>February 28, 2001</p> <p>Change last bullet to have 'b' and 'c' running at MAX speed.</p> <p>Distractor 'b' seems to be also correct. Need to revisit. ☐☐</p>
56	F	3				X						E	<p>Sig. Modified. SRO only question?</p> <p>The procedure states that it requires 4 data points. Will the answer be totally correct?</p> <p>It seems that we need to change that to have at least 2 more doublings?</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>Only need 3 data points. Before you get the first doubling you actually have one data point. That means that you have 2 data points when you get the first doubling.</p> <p>In the question there is 3 data points because of 2 doublings. Need to have 3 doublings to get 4 data points.</p> <p>Appears to be ok as is.</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
57	H	3										E	<p>Direct. SRO only question?</p> <p>Otherwise appears to be ok if deemed to be SRO.</p> <p>February 28, 2001</p> <p>Changed the stem to get technically correct. Reduced to 260 vice 360 degrees.</p> <p>Changed to remove soak from the stem. Needs to change the pressure.</p> <p>Need to change distractor 'b' because we can not get the initial condition to get RHR the correct answer.</p> <p>The new answer will be increase letdown flow by opening an additional orifice.</p> <p>Change appears to be ok.</p> <p>Need to review when done.ooooo</p>
58	H	3										S	<u>NEW</u> . Appears to be ok.
59	H	2										S	<p>Direct. Use "Using..." Vice "Given..."</p> <p>Very Very simple. Agree with a 2.</p> <p>Appears to be ok.</p> <p>February 28, 2001</p> <p>Changed</p>
60	H	3										S	<p>Sig. Modified. More of a 2. Find place in procedure where the parameters listed are called for. Or find place on graph for 2 other distractors and see where they fall.</p> <p>Very low comprehension level</p> <p>Appears to be ok. Need to evaluate over all status of these questions to ensure not that many SRO only questions are simple.</p> <p>February 28, 2001</p> <p>Changed LOD to a 2.</p>
76	H	3										S	<u>NEW</u> . Appears to be ok.
77	H	3										S	Sig. Modified. Appears to be ok.

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
78	F	3										S?	<p>Sig. Modified. SRO only?</p> <p>Appears to be ok.</p> <p>February 28, 2001</p> <p>RO's are not required to know > 1 hour action statements. This is a 2 hour TS action statement. Application of the TS.</p> <p>Accept.</p>
79	F	3										S?	<p>NEW. More of a 2. Memory level. Why is this SRO only?</p> <p>February 28, 2001</p> <p>Changed the question. Considerably different from the original question.</p> <p>Change is ok.</p>
80	H	3										S	<p>Sig. Modified. Are Technical Specifications going to be provided? IF so this is nothing more than a look-up. I consider this to be a pure memory level question. Granted the stem provides a lot of information, however, once you get to the AFW statement one should realize that TS overrides the previous TS.</p> <p>February 28, 2001</p> <p>No TS Allowed. Ok as is.</p>
96	F	2										S?	<p>Direct. Why is this SRO only? Would this not be required knowledge of an RO operator?</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>oooooooooooo NEW</p>
97	H	3										S?	<p>Sig. Modified. Why is this SRO only?</p> <p>Discuss.</p> <p>February 28, 2001</p> <p>oooooooooooo</p>

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. U/E/S	6. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job- Link	Minutia	#/ units	Back- ward		
98	F	3										S?	<p>Sig. Modified. Is Path 1 going to be provided? If not, the question is ok. IF it is the question is a mere lookup and would not be acceptable.</p> <p>February 28, 2001</p> <p>Will not be given the path. Ok as is.</p>
99	F	2										S	<p>Direct. Appears to be ok.</p>
100	F	3				X						U	<p>Direct. Change Given to Using.</p> <p>What references would be given?</p> <p>Why would any one select distractors 'c' and 'd'? TS Reference 3.9.6 requires greater than or equal to 23 feet. Why would any one select draining the pool to a level below TS?</p> <p>What is the concentration of the RWST? Is this a number that the applicants are required to know?</p> <p>These 2 distractors need to be replaced or replace the question.</p> <p>Discuss with BC and Facility.</p> <p>February 28, 2001</p> <p>Changed c and d to 4 and 8 feet respectfully. And change b to 550 lbs.</p> <p>Ok AS CHANGED. May need to have a different number. Look at again.</p> <p>oooooooo</p>

Facility:		Date of Exam:		Exam Level: RO/SRO		
Item Description		Initials				
		a	b	c		
1.	Clean answer sheets copied before grading			rsb		
2.	Answer key changes and question deletions justified and documented			rsb		
3.	Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)			rsb		
4.	Grading for all borderline cases (80% +/- 2%) reviewed in detail			rsb		
5.	All other failing examinations checked to ensure that grades are justified			rsb		
6.	Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants			rsb		

	Printed Name / Signature	Date
a. Grader	<u>STEVEN D. ROSE / </u>	<u>4/10/01</u>
b. Facility Reviewer(*)	_____	_____
c. NRC Chief Examiner (*)	<u>RICHARD S. BARNETT / </u>	<u>4/10/01</u>
d. NRC Supervisor (*)	<u>MICHAEL E. ERNSTES / </u>	<u>4/24/01</u>

(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.

ParSCORE™ SCORE SHEET

T F		T F		T F		T F																								
1	A	3	C	●	E	11	A	3	C	●	E	21	A	3	C	●	E	31	A	3	C	●	E	41	●	C	●	D	E	
2	●	B	C	●	E	12	●	B	C	●	E	22	A	B	C	●	E	32	●	B	C	●	E	42	A	B	●	D	E	
3	●	C	●	D	E	13	A	●	C	●	E	23	●	C	●	D	E	33	A	●	C	●	E	43	●	C	●	D	E	
4	●	B	C	●	E	14	A	●	C	●	E	24	A	B	C	●	E	34	A	B	C	●	E	44	A	B	C	●	E	
5	●	●	C	●	E	15	●	●	C	●	E	25	A	3	C	●	E	35	●	●	C	●	E	45	●	●	C	●	E	
6	A	B	C	●	E	16	A	B	C	●	E	26	●	●	B	C	●	E	36	A	B	●	D	E	46	A	B	●	D	E
7	A	3	C	●	E	17	●	●	C	●	E	27	A	3	C	●	E	37	●	●	C	●	E	47	●	●	C	●	E	
8	A	B	●	D	E	18	A	B	●	D	E	28	●	●	B	C	●	E	38	A	B	●	D	E	48	A	●	C	●	E
9	●	3	C	●	E	19	●	●	C	●	E	29	●	●	●	C	●	E	39	A	3	C	●	E	49	●	●	C	●	E
10	A	B	●	D	E	20	A	B	●	D	E	30	A	●	C	●	E	40	●	●	B	C	●	E	50	A	●	C	●	E

35	A	B	C	D	E
36	A	B	C	D	E
37	A	B	C	D	E
38	A	B	C	D	E
39	A	B	C	D	E
40	A	B	C	D	E
41	A	B	C	D	E
42	A	B	C	D	E
43	A	B	C	D	E
44	A	B	C	D	E
45	A	B	C	D	E
46	A	B	C	D	E
47	A	B	C	D	E
48	A	B	C	D	E
49	A	B	C	D	E
50	A	B	C	D	E
51	A	B	C	D	E
52	A	B	C	D	E
53	A	B	C	D	E
54	A	B	C	D	E
55	A	B	C	D	E
56	A	B	C	D	E
57	A	B	C	D	E
58	A	B	C	D	E
59	A	B	C	D	E
60	A	B	C	D	E
61	A	B	C	D	E
62	A	B	C	D	E
63	A	B	C	D	E
64	A	B	C	D	E
65	A	B	C	D	E
66	A	B	C	D	E
67	A	B	C	D	E
68	A	B	C	D	E
69	A	B	C	D	E
70	A	B	C	D	E
71	A	B	C	D	E
72	A	B	C	D	E
73	A	B	C	D	E
74	A	B	C	D	E
75	A	B	C	D	E
76	A	B	C	D	E
77	A	B	C	D	E
78	A	B	C	D	E
79	A	B	C	D	E
80	A	B	C	D	E
81	A	B	C	D	E
82	A	B	C	D	E
83	A	B	C	D	E
84	A	B	C	D	E
85	A	B	C	D	E
86	A	B	C	D	E
87	A	B	C	D	E
88	A	B	C	D	E
89	A	B	C	D	E
90	A	B	C	D	E
91	A	B	C	D	E
92	A	B	C	D	E
93	A	B	C	D	E
94	A	B	C	D	E
95	A	B	C	D	E
96	A	B	C	D	E
97	A	B	C	D	E
98	A	B	C	D	E
99	A	B	C	D	E
100	A	B	C	D	E
101	A	B	C	D	E
102	A	B	C	D	E
103	A	B	C	D	E
104	A	B	C	D	E
105	A	B	C	D	E
106	A	B	C	D	E
107	A	B	C	D	E
108	A	B	C	D	E
109	A	B	C	D	E
110	A	B	C	D	E
111	A	B	C	D	E
112	A	B	C	D	E
113	A	B	C	D	E
114	A	B	C	D	E
115	A	B	C	D	E
116	A	B	C	D	E
117	A	B	C	D	E
118	A	B	C	D	E
119	A	B	C	D	E
120	A	B	C	D	E
121	A	B	C	D	E
122	A	B	C	D	E
123	A	B	C	D	E
124	A	B	C	D	E
125	A	B	C	D	E
126	A	B	C	D	E
127	A	B	C	D	E
128	A	B	C	D	E
129	A	B	C	D	E
130	A	B	C	D	E
131	A	B	C	D	E
132	A	B	C	D	E
133	A	B	C	D	E
134	A	B	C	D	E
135	A	B	C	D	E
136	A	B	C	D	E
137	A	B	C	D	E
138	A	B	C	D	E
139	A	B	C	D	E
140	A	B	C	D	E
141	A	B	C	D	E
142	A	B	C	D	E
143	A	B	C	D	E
144	A</				

STUDENT ENROLLMENT SHEET

©ECONOMICS RESEARCH, INC. 1990

I.D. NUMBER									
S	R	O							
0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9

AREA CODE			PHONE NUMBER						
0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9

LAST NAME										FIRST NAME										M.I.	CODE
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A				
B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B				
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C				
D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D				
E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E				
F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F				
G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G				
H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H				
I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I				
J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J	J				
K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K	K				
L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L				
M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M				
N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N				
O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O				
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P				
Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q				
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R				
S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S				
T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T				
U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U				
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				
W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W				
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y				
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z				

TEST
FORMA
B
C
DEXAM
NUMBER

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

HOUR/DAY

NAME
SUBJECT
DATEParSCORE™
SCORE SHEET

T F					T F					T F					T F					T F									
1	A	B	C	D	E	11	A	B	C	D	E	21	A	B	C	D	E	31	A	B	C	D	E	41	A	B	C	D	E
2	A	B	C	D	E	12	A	B	C	D	E	22	A	B	C	D	E	32	A	B	C	D	E	42	A	B	C	D	E
3	A	B	C	D	E	13	A	B	C	D	E	23	A	B	C	D	E	33	A	B	C	D	E	43	A	B	C	D	E
4	A	B	C	D	E	14	A	B	C	D	E	24	A	B	C	D	E	34	A	B	C	D	E	44	A	B	C	D	E
5	A	B	C	D	E	15	A	B	C	D	E	25	A	B	C	D	E	35	A	B	C	D	E	45	A	B	C	D	E
6	A	B	C	D	E	16	A	B	C	D	E	26	A	B	C	D	E	36	A	B	C	D	E	46	A	B	C	D	E
7	A	B	C	D	E	17	A	B	C	D	E	27	A	B	C	D	E	37	A	B	C	D	E	47	A	B	C	D	E
8	A	B	C	D	E	18	A	B	C	D	E	28	A	B	C	D	E	38	A	B	C	D	E	48	A	B	C	D	E
9	A	B	C	D	E	19	A	B	C	D	E	29	A	B	C	D	E	39	A	B	C	D	E	49	A	B	C	D	E
10	A	B	C	D	E	20	A	B	C	D	E	30	A	B	C	D	E	40	A	B	C	D	E	50	A	B	C	D	E
51	A	B	C	D	E	61	A	B	C	D	E	71	A	B	C	D	E	81	A	B	C	D	E	91	A	B	C	D	E
52	A	B	C	D	E	62	A	B	C	D	E	72	A	B	C	D	E	82	A	B	C	D	E	92	A	B	C	D	E
53	A	B	C	D	E	63	A	B	C	D	E	73	A	B	C	D	E	83	A	B	C	D	E	93	A	B	C	D	E
54	A	B	C	D	E	64	A	B	C	D	E	74	A	B	C	D	E	84	A	B	C	D	E	94	A	B	C	D	E
55	A	B	C	D	E	65	A	B	C	D	E	75	A	B	C	D	E	85	A	B	C	D	E	95	A	B	C	D	E
56	A	B	C	D	E	66	A	B	C	D	E	76	A	B	C	D	E	86	A	B	C	D	E	96	A	B	C	D	E
57	A	B	C	D	E	67	A	B	C	D	E	77	A	B	C	D	E	87	A	B	C	D	E	97	A	B	C	D	E
58	A	B	C	D	E	68	A	B	C	D	E	78	A	B	C	D	E	88	A	B	C	D	E	98	A	B	C	D	E
59	A	B	C	D	E	69	A	B	C	D	E	79	A	B	C	D	E	89	A	B	C	D	E	99	A	B	C	D	E
60	A	B	C	D	E	70	A	B	C	D	E	80	A	B	C	D	E	90	A	B	C	D	E	100	A	B	C	D	E
101	A	B	C	D	E	111	A	B	C	D	E	121	A	B	C	D	E	131	A	B	C	D	E	141	A	B	C	D	E
102	A	B	C	D	E	112	A	B	C	D	E	122	A	B	C	D	E	132	A	B	C	D	E	142	A	B	C	D	E
103	A	B	C	D	E	113	A	B	C	D	E	123	A	B	C	D	E	133	A	B	C	D	E	143	A	B	C	D	E
104	A	B	C	D	E	114	A	B	C	D	E	124	A	B	C	D	E	134	A	B	C	D	E	144	A	B	C	D	E
105	A	B	C	D	E	115	A	B	C	D	E	125	A	B	C	D	E	135	A	B	C	D	E	145	A	B	C	D	E
106	A	B	C	D	E	116	A	B	C	D	E	126	A	B	C	D	E	136	A	B	C	D	E	146	A	B	C	D	E
107	A	B	C	D	E	117	A	B	C	D	E	127	A	B	C	D	E	137	A	B	C	D	E	147	A	B	C	D	E
108	A	B	C	D	E	118	A	B	C	D	E	128	A	B	C	D	E	138	A	B	C	D	E	148	A	B	C	D	E
109	A	B	C	D	E	119	A	B	C	D	E	129	A	B	C	D	E	139	A	B	C	D	E	149	A	B	C	D	E
110	A	B	C	D	E	120	A	B	C	D	E	130	A	B	C	D	E	140	A	B	C	D	E	150	A	B	C	D	E
151	A	B	C	D	E	161	A	B	C	D	E	171	A	B	C	D	E	181	A	B	C	D	E	191	A	B	C	D	E
152	A	B	C	D	E	162	A	B	C	D	E	172	A	B	C	D	E	182	A	B	C	D	E	192	A	B	C	D	E
153	A	B	C	D	E	163	A	B	C	D	E	173	A	B	C	D	E	183	A	B	C	D	E	193	A	B	C	D	E
154	A	B	C	D	E	164	A	B	C	D	E	174	A	B	C	D	E	184	A	B	C	D	E	194	A	B	C	D	E
155	A	B	C	D	E	165	A	B	C	D	E	175	A	B	C	D	E	185	A	B	C	D	E	195	A	B	C	D	E
156	A	B	C	D	E	166	A	B	C	D	E	176	A	B	C	D	E	186	A	B	C	D	E	196	A	B	C	D	E
157	A	B	C	D	E	167	A	B	C	D	E	177	A	B	C	D	E	187	A	B	C	D	E	197	A	B	C	D	E
158	A	B	C	D	E	168	A	B	C	D	E	178	A	B	C	D	E	188	A	B	C	D	E	198	A	B	C	D	E
159	A	B	C	D	E	169	A	B	C	D	E	179	A	B	C	D	E	189	A	B	C	D	E	199	A	B	C	D	E
160	A	B	C	D	E	170	A	B	C	D	E	180	A	B	C	D	E	190	A	B	C	D	E	200	A	B	C	D	E

Facility: <u>Robinson Steam Electric Plant</u>		Date of Examination: <u>3/26-30/01 & 4/2/01</u>
Task Description	Date Complete	
1. Facility written exam comments or graded exams received and verified complete	4/10/01	
2. Facility written exam comments reviewed and incorporated and NRC grading completed, if necessary	4/10/01	
3. Operating tests graded by NRC examiners	4/24/01	
4. NRC Chief examiner review of written exam and operating test grading completed	4/24/01	
5. Responsible supervisor review completed	4/24/01	
6. Management (licensing official) review completed	4/30/01	
7. License and denial letters mailed	4/30/01	
8. Facility notified of results	5/1/01	
9. Examination report issued (refer to NRC MC 0610)	5/1/01	
10. Reference material returned after final resolution of any appeals	N/A	

Methodology for Selecting KAs for RO and SRO Written Examinations

RO EXAMINATION SELECTION

- 1) Enter ALL NUREG-1122, Revision 2, KAs into electronic database.
- 2) Assign generic KAs that are applicable to individual systems and E/APEs an associated KA number. Maintain RO and SRO importance factors (i.e., 2.4.31, "Knowledge of annunciators, alarms and indications, and use of the alarm response instructions," is assigned to all Systems and E/APEs to which it may be applied, numbered as System/E/APE followed by the generic number, 036 2.4.31).
- 3) Provide a Random Number Generator field to electronic database.
- 4) Allow electronic database to generate random numbers assigned to each KA.
- 5) Sort electronic database by random number field.
- 6) Select first KA sorted by random number.
- 7) Insert into appropriate field in ES-401-4, and ES-401-5 (RO) based on the following criteria:
 - a) If RO importance is ≥ 2.5 , select as topic applicable to RO examination, labeling the KA as "SELECTED".
 - b) If RO importance is < 2.5 , discard selection and progress to next randomly selected KA, labeling the KA as "NOT SELECTED – KA < 2.5 ".
 - c) If KA is not applicable to Westinghouse plants, and to RNP in particular, discard selection and progress to next randomly selected KA, labeling the KA as "NOT SELECTED – NOT WESTINGHOUSE," or "NOT SELECTED – NOT APPLICABLE TO PLANT," as appropriate.
- 8) Ensure Categories in each Tier are addressed by at least two KAs and Category distribution within each Group in each Tier are distributed evenly by:
 - a) Determining total number of KAs in each Group within a Tier and dividing this value by the number of categories in the Group (i.e., ES-401-4, Tier 2/Group 1, requires 23 topics covered and there are 11 categories in Tier 1/Group 2. Dividing this results in a value of 2.10).

- b) The maximum number of allowed KAs selected in any one category within a Tier/Group is determined by increasing the value calculated in Step 8a above to the next second highest integer (i.e., 4 KAs in the above example). If the calculated value in Step 8a is an integer, increase by 2 to determine the maximum.
 - c) The minimum number of allowed KAs selected in any one category within a Tier/Group is determined by decreasing the value calculated in Step 8a above to the next second lowest integer (i.e., 1 KA in the above example). If the calculated value in Step 8a is an integer, decrease by 2 to determine the minimum.
- 9) Continue process described in Step 7 above, limiting each System/E/APE to no more than 3 KAs, but attempting to provide an even distribution of all System/E/APEs.
 - 10) Once the required number of KAs in a Tier/Group has been randomly selected, filter remainder of database to eliminate selection of any further KAs from the filled Tier/Group.
 - 11) Continue this process until 100 KAs have been selected.
 - 12) After selection of simulator scenario tasks, plant walk-through JPMs, and administrative JPMs, review entire examination for excessive coverage of topic areas. If determined that excessive coverage of topic area exists, either replace task/JPM or KA from written examination. If KA from written examination replaced, label as "REPLACED – EXCESSIVE COVERAGE." Randomly select a replacement KA from same Tier/Group as described previously, filtering to ensure KA is associated with Tier/Group. Label replacement KA as "REPLACEMENT – EXCESSIVE COVERAGE." Note that this process is performed after completion of entire draft examination outline for both RO and SRO candidates.

SRO EXAMINATION SELECTION

- 1) Transfer ALL KA selections from RO Examination Outline (ES-401-4 and ES-401-5) to SRO Examination Outline (ES-401-3 and ES-401-5).
- 2) Filter database selection as follows:
 - a) Identify only those KAs which are from Categories EA2, AA2, and G in Tier 1.
 - b) Identify only those KAs which are from Categories A2 and G in Tier 2.
 - c) Identify only those KAs which have ties to 10CFR55.43(b) in Tier 3.
- 3) Randomly select 18 additional KAs from database for Tiers 1 and 2 as described in Steps 2a and 2b above.

- 4) Enter selected KAs from database in SRO Examination Outline, Tiers 1 and 2.
- 5) Randomly select 7 additional KAs from database for Tier 3 as described in Step 2c above.
- 6) Enter selected KAs from database in SRO Examination Outline, Tier 3.
- 7) Select transferred KAs for System/E/APE for deletion which correspond to randomly selected SRO KAs for Tiers 1 and 2, labeling as "DELETED - CORRESPONDS TO SRO SELECTION." Where more than one KA has been transferred to SRO Examination Outline which corresponds to a System/E/APE selection for SROs, randomly select one of the transferred KAs for deletion, labeling as "DELETED - CORRESPONDS TO SRO SELECTION/RANDOM SELECTION." Performed by entering transferred KAs into separate electronic database, allowing random number generator to assign random numbers to each, and selecting associated transferred KAs by random number order of lowest to highest until point distribution correct.
- 8) Randomly select additional transferred KAs for deletion as necessary to ensure SRO Examination Outline meets required point distribution for Tiers 1 and 2, labeling as "DELETED – RANDOM SELECTION." Performed by entering transferred KAs into separate electronic database, allowing random number generator to assign random numbers to each, and selecting associated transferred KAs by random number order of lowest to highest until point distribution correct.
- 9) Randomly select transferred KAs for deletion as necessary to ensure SRO Examination Outline meets required point distribution for Tier 3, labeling as "DELETED – RANDOM SELECTION." Performed by entering transferred KAs into separate electronic database, allowing random number generator to assign random numbers to each, and selecting associated transferred KAs by random number order of lowest to highest until point distribution correct.
- 10) After selection of simulator scenario tasks, plant walk-through JPMs, and administrative JPMs, review entire examination for excessive coverage of topic areas. If determined that excessive coverage of topic area exists, either replace task/JPM or KA from written examination. If KA from written examination replaced, label as "REPLACED – EXCESSIVE COVERAGE." Randomly select a replacement KA from same Tier/Group as described previously, filtering to ensure KA is associated with Tier/Group. Label replacement KA as "REPLACEMENT – EXCESSIVE COVERAGE." Note that this process is performed after completion of entire draft examination outline for both RO and SRO candidates.

RANDOMLY SELECT 100 KA TOPICS FOR RO EXAM WHICH MEET USE CRITERIA AND PROVIDE CORRECT POINT DISTRIBUTION

KA TOPIC	DISPOSITION
017K4.01	SELECTED
064A4.02	SELECTED
035K4.01	SELECTED
045K1.18	SELECTED
010 2.1.33	SELECTED
015/017AA1.20	SELECTED
076K2.01	SELECTED
027AK2.03	SELECTED
022AK2.01	NOT SELECTED - KA < 2.5
022A3.01	SELECTED
045K6.01	NOT SELECTED - KA < 2.5
002K5.10	SELECTED
072K5.02	SELECTED
056K2.01	NOT SELECTED - KA < 2.5
056A3.07	NOT SELECTED - KA < 2.5
086A3.01	SELECTED
025K3.01	NOT SELECTED - NOT APPLICABLE TO PLANT
011 2.4.17	SELECTED
068A1.02	NOT SELECTED - KA < 2.5
2.2.13	SELECTED
2.1.1	SELECTED
025AK1.01	SELECTED
WE11EK2.2	SELECTED
001AA2.03	SELECTED
WE05EA2.2	SELECTED
CA13AK1.2	NOT SELECTED - NOT WESTINGHOUSE
061A3.03	SELECTED
033K3.03	SELECTED
CE09EK3.2	NOT SELECTED - NOT WESTINGHOUSE
008K4.02	SELECTED
BE02EK2.2	NOT SELECTED - NOT WESTINGHOUSE
004K2.03	SELECTED
062 2.4.24	SELECTED
015K5.04	SELECTED
001A1.06	SELECTED
BA02AK2.1	NOT SELECTED - NOT WESTINGHOUSE
006A3.06	SELECTED
2.4.43	SELECTED
045K6.12	NOT SELECTED - KA < 2.5
2.3.2	SELECTED
012K6.04	SELECTED
CE06EK2.1	NOT SELECTED - NOT WESTINGHOUSE
064K6.04	NOT SELECTED - KA < 2.5
001AK1.15	NOT SELECTED - KA < 2.5

KA TOPIC	DISPOSITION
071A4.18	NOT SELECTED - KA < 2.5
005K3.01	SELECTED
061K1.07	SELECTED
062K2.01	SELECTED
2.4.45	SELECTED
041K6.03	SELECTED
075K5.01	NOT SELECTED - KA < 2.5
056K1.03	SELECTED
005AK3.03	SELECTED
063 2.1.32	SELECTED
026A1.01	SELECTED
CA16AA1.1	NOT SELECTED - NOT WESTINGHOUSE
051AK2.06	NOT SELECTED - KA < 2.5
WE02EK3.2	SELECTED
2.2.26	SELECTED
BA04AK3.4	NOT SELECTED - NOT WESTINGHOUSE
039K5.08	SELECTED
BE08EK1.1	NOT SELECTED - NOT WESTINGHOUSE
061AK3.02	SELECTED
022K3.02	SELECTED
075A2.02	SELECTED
045A3.06	NOT SELECTED - KA < 2.5
026AA1.05	SELECTED
2.1.3	SELECTED
016K3.01	SELECTED
2.1.18	SELECTED
051AA1.02	NOT SELECTED - KA < 2.5
064K6.05	NOT SELECTED - KA < 2.5
WE09/10EK3.1	SELECTED
WE15EK3.1	SELECTED
029K6.06	NOT SELECTED - KA < 2.5
BE08EK1.3	NOT SELECTED - NOT WESTINGHOUSE
051AA2.01	NOT SELECTED - KA < 2.5
025A4.03	NOT SELECTED - NOT APPLICABLE TO PLANT AND KA < 2.5
011K6.04	SELECTED
059AK2.02	SELECTED
073A4.01	SELECTED
036 2.2.28	SELECTED
013A2.02	SELECTED
028A1.02	SELECTED
009EK2.01	NOT SELECTED - KA < 2.5
074EK2.11	NOT SELECTED - KA < 2.5
015K6.04	SELECTED
2.3.1	SELECTED
003K6.08	NOT SELECTED - KA < 2.5
029EK1.04	NOT SELECTED - KA < 2.5
026K6.03	NOT SELECTED - KA < 2.5

KA TOPIC	DISPOSITION
068 2.3.11	SELECTED
068 2.4.11	SELECTED
012K2.01	SELECTED
BE09EA2.2	NOT SELECTED - NOT WESTINGHOUSE
073K2.01	NOT SELECTED - KA < 2.5
013K2.01	SELECTED
007A3.01	SELECTED
BE13EK3.3	NOT SELECTED - NOT WESTINGHOUSE
076AA1.02	NOT SELECTED - KA < 2.5
079K1.01	SELECTED
051AA2.02	SELECTED
067AA2.04	SELECTED
025AA1.22	NOT SELECTED - ERROR (See NOTE 1 at end of document)
BA03AK1.3	NOT SELECTED - NOT WESTINGHOUSE
033AA2.11	SELECTED
045K1.09	NOT SELECTED - KA < 2.5
014A2.04	SELECTED
WE12EK1.2	SELECTED
071A4.04	NOT SELECTED - KA < 2.5
013A4.03	SELECTED
071A2.05	SELECTED
001K6.01	NOT SELECTED - KA < 2.5
071K1.02	NOT SELECTED - KA < 2.5
003 2.1.32	SELECTED
045K4.25	NOT SELECTED - KA < 2.5
WE03EA1.2	SELECTED
CA16AA1.2	NOT SELECTED - NOT WESTINGHOUSE
2.4.22	SELECTED
BE04EA1.3	NOT SELECTED - NOT WESTINGHOUSE
038EA1.30	SELECTED
003A2.04	NOT SELECTED - KA < 2.5
WE14EK1.2	SELECTED
051AA1.05	NOT SELECTED - KA < 2.5
2.1.29	SELECTED
064A2.22	NOT SELECTED - KA < 2.5
003A2.05	SELECTED
076K1.02	NOT SELECTED - KA < 2.5
103K4.06	SELECTED
TIER/GROUP 2/3 COMPLETE - FILTER OUT REMAINING K/As RELATED TO TIER/GROUP 2/3	
004A1.11	SELECTED
039K3.01	NOT SELECTED - KA < 2.5
003 2.4.4	SELECTED
029K4.03	SELECTED
055K1.03	NOT SELECTED - KA < 2.5
051AA1.02	NOT SELECTED - KA < 2.5
059K4.19	SELECTED
076AA2.06	NOT SELECTED - KA < 2.5

KA TOPIC	DISPOSITION
CA16AK2.2	NOT SELECTED - NOT WESTINGHOUSE
BA02AA2.1	NOT SELECTED - NOT WESTINGHOUSE
086K6.03	NOT SELECTED - KA < 2.5
004K6.25	NOT SELECTED - KA < 2.5
TIER/GROUP 2/2 COMPLETE - FILTER OUT REMAINING K/As RELATED TO TIER/GROUP 2/2	
032AA2.08	NOT SELECTED - KA < 2.5
054AK1.01	SELECTED
001K6.11	SELECTED
022A2.02	NOT SELECTED - KA < 2.5
CE02EK1.3	NOT SELECTED - NOT WESTINGHOUSE
058AK3.01	SELECTED
2.4.40	NOT SELECTED - KA < 2.5
007EK3.01	SELECTED
CA11AK1.2	NOT SELECTED - NOT WESTINGHOUSE
BA07AA1.2	NOT SELECTED - NOT WESTINGHOUSE
001K5.34	NOT SELECTED - KA < 2.5
BA08AK2.2	NOT SELECTED - NOT WESTINGHOUSE
WE06EK2.2	SELECTED
037AA1.11	SELECTED
056AA2.84	NOT SELECTED - KA < 2.5
055 2.4.1	SELECTED
2.2.11	SELECTED
024AK2.06	NOT SELECTED - KA < 2.5
004A4.04	SELECTED
028AK1.01	SELECTED
TIER/GROUP 1/3 COMPLETE - FILTER OUT REMAINING K/As RELATED TO TIER/GROUP 1/3	
2.3.7	NOT SELECTED - KA < 2.5
057AA2.20	SELECTED
001K3.01	SELECTED
TIER/GROUP 2/1 COMPLETE - FILTER OUT REMAINING K/As RELATED TO TIER/GROUP 2/1	
029EK2.01	NOT SELECTED - KA < 2.5
2.4.26	SELECTED
TIER/GROUP 3 COMPLETE - FILTER OUT REMAINING K/As RELATED TO TIER/GROUP 3	
058AK2.02	NOT SELECTED - KA < 2.5
054AK2.01	NOT SELECTED - KA < 2.5
007EK2.04	NOT SELECTED - KA < 2.5
029EA2.01	SELECTED
TIER/GROUP 1/2 COMPLETE - FILTER OUT REMAINING K/As RELATED TO TIER/GROUP 1/2	
BE03EK1.2	NOT SELECTED - NOT WESTINGHOUSE
BE02EA1.1	NOT SELECTED - NOT WESTINGHOUSE
WE08EK3.3	SELECTED
024AA1.05	SELECTED
TIER/GROUP 1/1 COMPLETE - RO SELECTION COMPLETE	

KA TOPIC	DISPOSITION
RANDOMLY SELECT 18 SRO KA TOPICS WHICH ARE LIMITED TO TIER 1 AND 2 A2/EA2/AA2/G TOPICS AND MEET OTHER KA USE CRITERIA	
WE01EA2.2	SELECTED
037AA2.16	SELECTED
001A2.12	SELECTED
076AA2.02	SELECTED
WE08EA2.2	SELECTED
011EA2.11	SELECTED
025 2.1.25	SELECTED
061 2.1.12	SELECTED
WE05EA2.1	SELECTED
038 2.4.4	SELECTED
006A2.12	SELECTED
005AA2.03	SELECTED
055 2.4.16	SELECTED
WE11EA2.2	SELECTED
065AA2.06	SELECTED
026AA2.04	SELECTED
032AA2.01	SELECTED
027AA2.04	SELECTED
RANDOMLY SELECT 7 SRO KA TOPICS WHICH ARE LIMITED TO TIER 3 AND MEET OTHER KA USE CRITERIA	
2.4.16	SELECTED
2.1.33	SELECTED
2.3.4	SELECTED
2.2.18	SELECTED
2.4.30	SELECTED
2.2.26	SELECTED
2.1.34	SELECTED
SELECT FOR DELETION APPROPRIATE NUMBER OF RO KA TOPICS FROM TIER 1 AND 2 TO PROVIDE CORRECT POINT DISTRIBUTION FOR SRO TIER/GROUPS. WHERE POSSIBLE, SELECT SAME SYSTEM FOR DELETION AS ADDED. IF NOT POSSIBLE, RANDOMLY SELECT FOR DELETION.	
001A1.06	DELETED - CORRESPONDS TO SRO SELECTION/RANDOM SELECTION
006A3.06	DELETED - CORRESPONDS TO SRO SELECTION
026AA1.05	DELETED - CORRESPONDS TO SRO SELECTION
027AK2.03	DELETED - CORRESPONDS TO SRO SELECTION
037AA1.11	DELETED - CORRESPONDS TO SRO SELECTION
038EA1.30	DELETED - CORRESPONDS TO SRO SELECTION
055 2.4.1	DELETED - CORRESPONDS TO SRO SELECTION
061A3.03	DELETED - CORRESPONDS TO SRO SELECTION/RANDOM SELECTION
WE05EA2.2	DELETED - CORRESPONDS TO SRO SELECTION
001K6.11	DELETED - RANDOM SELECTION
003 2.1.32	DELETED - RANDOM SELECTION
004K2.03	DELETED - RANDOM SELECTION
005K3.01	DELETED - RANDOM SELECTION
011 2.4.17	DELETED - RANDOM SELECTION
012K6.04	DELETED - RANDOM SELECTION

KA TOPIC	DISPOSITION
013A2.02	DELETED - RANDOM SELECTION
015K5.04	DELETED - RANDOM SELECTION
022A3.01	DELETED - RANDOM SELECTION
029K4.03	DELETED - RANDOM SELECTION
061K1.07	DELETED - RANDOM SELECTION
076K2.01	DELETED - RANDOM SELECTION
WE02EK3.2	DELETED - RANDOM SELECTION
RANDOMLY SELECT FOR DELETION APPROPRIATE NUMBER OF RO KA TOPICS FROM TIER 3 TO PROVIDE CORRECT POINT DISTRIBUTION FOR SRO TIER/GROUPS	
2.1.18	DELETED - CORRESPONDS TO SRO SELECTION/RANDOM SELECTION
2.2.26	DELETED - CORRESPONDS TO SRO SELECTION/RANDOM SELECTION
2.4.22	DELETED - CORRESPONDS TO SRO SELECTION/RANDOM SELECTION

NOTE 1: Incorrectly listed 025AA1.22 as not being selected due to having a KA < 2.5. KA is actually > 2.5. Decision made to NOT attempt to reinsert after error noted due to potential cascading effect of reinserting.