

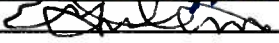


Facility: <u>Saint Lucie</u>		Date of Examination: <u>03/02/15</u>
Developed by: Written - Facility <input checked="" type="checkbox"/> NRC <input type="checkbox"/> // Operating - Facility <input checked="" type="checkbox"/> NRC <input type="checkbox"/>		
Target Date*	Task Description (Reference)	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a and b)	RSB
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	RSB
-120	3. Facility contact briefed on security and 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; Attachment 3)]	RSB
{-75}	6. Integrated examination outline(s) due, including Forms ES-201-2, ES-201-3, ES-301-1, ES-301-2, ES-301-5, ES-D-1's, ES-401-1/2, ES-401-3, and ES-401-4, as applicable (C.1.e and 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 (including written, walk-through JPMs, and scenarios, as applicable), supporting documentation (including Forms ES-301-3, ES-301-4, ES-301-5, ES-301-6, and ES-401-6, and any Form ES-201-3 updates), and reference materials due (C.1.e, f, g and h; C.3.d)	RSB
-30	9. Preliminary license applications (NRC Form 398's) due (C.1.i; C.2.g; ES-202)	RSB
-14	10. Final license applications due and Form ES-201-4 prepared (C.1.i; C.2.i; ES-202)	CB
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	CB
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)	CB
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	CB
-7	14. Final applications reviewed; 1 or 2 (if >10) applications audited to confirm qualifications / eligibility; and examination approval and waiver letters sent (C.2.i; Attachment 5; ES-202, C.2.e; ES-204)	CB
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)	CB
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	CB
<p>* Target dates are generally based on facility-prepared examinations and 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. [Applies only] {Does not apply} to examinations prepared by the NRC.</p>		

Facility: ST. LUCIE		Date of Examination: MARCH 2015		
Item	Task Description	Initials		
		a	b*	c#
W R I T T E N	a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401.	MM	N/A	JBS
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.	MM	N/A	JBS
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	MM	N/A	JBS
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	MM	N/A	JBS
S I M U L A T O R	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients.			
	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, and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s), and that scenarios will not be repeated on subsequent days.			
	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.			
W / T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on the form (2) task repetition from the last two NRC examinations is within the limits specified on the form (3) no tasks are duplicated from the applicants' audit test(s) (4) the number of new or modified tasks meets or exceeds the minimums specified on the form (5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form.	N	A	
	b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) the tasks are distributed among the topics as specified on the form (2) at least one task is new or significantly modified (3) no more than one task is repeated from the last two NRC licensing examinations			
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.			
G E N E R A L	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam sections.	MM	N/A	JBS
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	MM	N/A	JBS
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	MM	N/A	JBS
	d. Check for duplication and overlap among exam sections.	N/A	N/A	N/A
	e. Check the entire exam for balance of coverage.	MM	N/A	JBS
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	MM	N/A	JBS
a. Author	 Printed Name: MICHAEL MEESKS		Date: 03/03/2014	
b. Facility Reviewer (*)	N/A		N/A	
c. NRC Chief Examiner (#)	 Printed Name: RICHARD S. BALDWIN		3/31/2014	
d. NRC Supervisor			4/2/2014	
Note: # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines				

Facility: St. Lucie		Date of Examination: March 2, 2015		
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, in accordance with ES-401.	n/a	n/a	CB
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.	n/a	n/a	CB
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	n/a	n/a	CB
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	n/a	n/a	CB
2. S I M U L A T O R	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients.	PJ	B	CB
	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, and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s), and that scenarios will not be repeated on subsequent days.	PJ	B	CB
	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.	PJ	B	CB
3. W / T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on the form (2) task repetition from the last two NRC examinations is within the limits specified on the form (3) no tasks are duplicated from the applicants' audit test(s) (4) the number of new or modified tasks meets or exceeds the minimums specified on the form (5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form.	PJ	B	CB
	b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) the tasks are distributed among the topics as specified on the form (2) at least one task is new or significantly modified (3) no more than one task is repeated from the last two NRC licensing examinations	PJ	B	CB
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.	PJ	B	CB
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 sections.	PJ	B	CB
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	PJ	B	CB
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	PJ	B	CB
	d. Check for duplication and overlap among exam sections.	PJ	B	CB
	e. Check the entire exam for balance of coverage.	PJ	B	CB
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	PJ	B	CB
a. Author	Paul Farnsworth / <i>Paul Farnsworth</i>	Date	2/20/2015	
b. Facility Reviewer (*)	Terry Benton / <i>Terry Benton</i>	Date	2/20/2015	
c. NRC Chief Examiner (#)	Daniel M. Baker / <i>Daniel M. Baker</i>	Date	2/26/2015	
d. NRC Supervisor	Eugene Guthrie / <i>Eugene Guthrie</i>	Date	2/26/15	
Note:	# Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines			

Facility: St. Lucie		Date of Examination: March 2, 2015		
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, in accordance with ES-401.	n/a	n/a	CB
	b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.	n/a	n/a	CB
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.	n/a	n/a	CB
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.	n/a	n/a	CB
2. S I M U L A T O R	a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients.	P	B	CB
	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, and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s), and that scenarios will not be repeated on subsequent days.	P	B	CB
	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.	P	B	CB
3. W / T	a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on the form (2) task repetition from the last two NRC examinations is within the limits specified on the form (3) no tasks are duplicated from the applicants' audit test(s) (4) the number of new or modified tasks meets or exceeds the minimums specified on the form (5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form.	P	B	CB
	b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) the tasks are distributed among the topics as specified on the form (2) at least one task is new or significantly modified (3) no more than one task is repeated from the last two NRC licensing examinations	P	B	CB
	c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days.		B	CB
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 sections.	P	B	CB
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.	P	B	CB
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.	P	B	CB
	d. Check for duplication and overlap among exam sections.	P	B	CB
	e. Check the entire exam for balance of coverage.	P	B	CB
	f. Assess whether the exam fits the appropriate job level (RO or SRO).	P	B	CB
a. Author	Paul Farnsworth / <u>Paul Farnsworth</u>			Date 3/10/2015
b. Facility Reviewer (*)	Terry Benton / <u>Terry Benton</u>			3/10/2015
c. NRC Chief Examiner (#)	Daniel M. Bacon / <u>Daniel M. Bacon</u>			3/11/2015
d. NRC Supervisor	Gerald J. McCoy / <u>Gerald J. McCoy</u>			3/11/2015
Note:	# Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines			

L-2015-097
Enclosure

ES-201 Examination Security Agreement
(39 pages)

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 3/2/15 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 (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). 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 3/2-3/8/15. 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
Paul Forsworth	Exam Developer	<i>Paul Forsworth</i>	6/3/14	<i>Paul Forsworth</i>	3/18/15
Terry Burton	Exam Reviewer - op	<i>Terry Burton</i>	6-22-14	<i>Terry Burton</i>	3/18/15
John Owens	Exam Project Manager	<i>John Owens</i>	7/2/14	<i>John Owens</i>	3/18/15
Chuck Sizemore	Exam TRN Director	<i>Chuck Sizemore</i>	7/9/14	<i>Chuck Sizemore</i>	3/18/15
Amy Applewin	Exam TRN Specialist	<i>Amy Applewin</i>	7-11-14	<i>Amy Applewin</i>	3/18/15
Josh L Arsenault	Exam Reviewer Support	<i>Josh L Arsenault</i>	9/10/14	<i>Josh L Arsenault</i>	3/19/15
J. Green	Exam Reviewer - Unit	<i>J. Green</i>	9/10/14	<i>J. Green</i>	3/19/15
Darin Munoz	Exam Reviewer - Unit	<i>Darin Munoz</i>	9-10-14	<i>Darin Munoz</i>	3/18/15
Chad Oliver	Unit Supervisor	<i>Chad Oliver</i>	9-10-14	<i>Chad Oliver</i>	3/18/15
Chang, Wesley	RCO	<i>Chang, Wesley</i>	9/10/14	<i>Chang, Wesley</i>	3/18/15
Bald, Richard	FLEET O/TM	<i>Bald, Richard</i>	9/12/14	<i>Bald, Richard</i>	3/18/15
Richard Whitehouse	Exam Reviewer	<i>Richard Whitehouse</i>	9/16/14	<i>Richard Whitehouse</i>	3/18/15
Richard Whitehouse	Exam Developer	<i>Richard Whitehouse</i>	9-29-14	<i>Richard Whitehouse</i>	3/18/15
Dennis Bergerson	Exam Developer	<i>Dennis Bergerson</i>	10/1/14	<i>Dennis Bergerson</i>	3/18/15
Reid Watson	Simulator Engineer	<i>Reid Watson</i>	10/19/14	<i>Reid Watson</i>	3/18/15

3/10/14

NOTES:

- ① E-mail response attached. 3/23/15
- ② Copy of ES-201-3 with sign off attached. 3/23/15

Mann, James

From: Benton, Terry
Sent: Thursday, March 19, 2015 4:07 AM
To: Mann, James
Subject: HLC 22 Security Agreement Closure

Importance: High

James:

I am working mid shift and won't be able to make it to the training building.

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

r/
Terry

Mann, James

From: Sizemore, Charles
Sent: Thursday, March 19, 2015 9:27 AM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

James, to the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Chuck Sizemore
Nuclear Corporate Training Director
NextEra Energy
561-691-2188 Office
561-324-6410 Cell

Mann, James

From: Goodwin, Amy
Sent: Thursday, March 19, 2015 8:03 AM
To: Mann, James
Subject: HLC 22 Security Agreement Closure

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Amy Goodwin

Senior Business Manager – Assets Better
NextEra Energy Resources, LLC
Business Management
Office: 561.694.4224
Mobile: 561.348.4352

Mann, James

From: Joe Arsenault <jgarsen@wtsiconsulting.com>
Sent: Thursday, March 19, 2015 8:39 AM
To: Mann, James
Subject: RE: HLC-22 Security Agreement closure Reminder

This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Joe Arsenault
President
Western Technical Services, Inc.
623-363-0509

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From: Mann, James [<mailto:James.Mann@fpl.com>]

Sent: Thursday, March 19, 2015 4:27 AM

To: Benton, Terry; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Hutchinson, Tim; Oakes, Anthony; Pike, Charlie; Byford, David; Phillips, D A; Ryley, W.A.Skip; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Byrd, Desiree; Rasmus, Paul; Tinti, John; Kudo, Timothy; Martin, Christopher R; Joe Arsenault; 'Francis.giannone@duke-energy.com'

Subject: HLC-22 Security Agreement closure Reminder

Team

The exam for HLC-22 is now complete please take a moment and respond to my previous email regarding closure of the security agreement.

I will make arrangements to collect your badge as soon as possible.

Thank You for your support.

James Mann

Mann, James

From: Myerez, David
Sent: Thursday, March 19, 2015 10:36 PM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

David

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

The exam security badges should be returned to NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) as soon as possible following your sign off of the security agreement.

V/R

Mann, James

From: Oliver, C.D.Chuck
Sent: Saturday, March 21, 2015 10:34 PM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

James,

I have been offsite during this time and am now back as the outage Unit Supervisor. I can try to get over there to drop off my badge next week since I plan on parking in the unit 1 parking lot. In the meantime, here is my response to your request to close out the security agreement.

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Thanks,
Chuck Oliver

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

Mann, James

From: Chang, Wes
Sent: Sunday, March 22, 2015 6:17 PM
To: Mann, James
Subject: RE: HLC-22 Security Agreement closure Reminder

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Wesley Chang

Mann, James

From: Rich Whitehouse <r.c.whitehouse@gmail.com>
Sent: Thursday, March 19, 2015 11:17 AM
To: Mann, James
Subject: Re: HLC-22 Security Agreement closure

This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.

James,

I confirm that enclosed statement is true.

Richard Whitehouse

ps, I will also send a signed scanned security agreement.

On Mar 19, 2015 6:46 PM, "Mann, James" <James.Mann@fpl.com> wrote:

Rich

The exam for HLC-22 is now complete please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Thank You

V/R


James Mann


1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of Mar 3 - Mar 18, 2015 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 (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). 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 Mar 3 - Mar 18, 2015. 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. _____	_____	_____	_____		3/17/15
2. _____	_____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____	_____
6. _____	_____	_____	_____	_____	_____
7. _____	_____	_____	_____	_____	_____
8. _____	_____	_____	_____	_____	_____

 Signed on original at St Lucie Nuclear Power Plant

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 3/2/15 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 (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). 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 3/2-3/19/15. 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
Fred Pollak	SRO	[Signature]	10/22/14		
Yusef F. [unclear]	RCO	[Signature]	10/22/14		
Raul Gray	SRO	[Signature]	10/22/14		
JCC Albright	SRO	[Signature]	10/27/14		
Roger Sherwood	SRO	[Signature]	10/27/14		
SPAIN BUSHMAN	SRO	[Signature]	10/27/14		
Charles Gualtieri	SRO	[Signature]	10/27/14		
JULIA K. STAKER	RCO	[Signature]	11-4-14		
HOLZMACHER	RCO	[Signature]	11-4-14		
TIMOTHY J. WHELEIL	RCO	[Signature]	11-4-14		
Shrek L. Ben	RCO	[Signature]	11/5/14		
SEAN WYLLIE	NBN ANTHUR spw@nrc.gov	[Signature]	11/7/14	<u>0</u>	

NOTES:

① Email Response Attached. 3/23/15

Farnsworth, P.F.Paul

From: Wylie, Sean Patrick <spwylie@tva.gov>
Sent: Thursday, March 19, 2015 5:40 AM
To: Farnsworth, P.F.Paul
Subject: RE: Checking In

This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.

Paul you are welcome. Congratulations on the positive results. Too bad about the 1 RO.

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Sean Wylie

From: Farnsworth, P.F.Paul [P.F.Paul.Farnsworth@fpl.com]
Sent: Wednesday, March 18, 2015 3:07 PM
To: Wylie, Sean Patrick
Cc: Mann, James
Subject: RE: Checking In

TVA External Message. Please use caution when opening.

Written exam was today. It is over. Unofficial results were 14 out of 15. One RO missed one too many questions. We will try to get him one question back. The operating exam results were positive. Please email me back, responding to the info below to get the security agreement closed out. I'll give you a call in a couple of days when the dust settles. Thanks again for your contributions to our exam. Pf

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext.: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

From: Wylie, Sean Patrick [<mailto:spwylie@tva.gov>]
Sent: Saturday, January 31, 2015 7:52 AM

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 3/2/15 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 (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). 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 3/2 - 3/13/15. 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
Fred Pollak	SRO	<i>[Signature]</i>	10/22/14	⊙	
Jeff Finley	RCO	<i>[Signature]</i>	10/22/14	⊙	
Raul Gray	SRO	<i>[Signature]</i>	10/22/14	⊙	
JCC Abolmethy	SRO	<i>[Signature]</i>	10/22/14	⊙	
Roger Sherwood	SRO	<i>[Signature]</i>	10-27-14	Ex-RCO	3-19-15
SPRAYS Bushman	SRO	<i>[Signature]</i>	10-27-14	⊙	
Chascha Gwardis	RCO	<i>[Signature]</i>	10-27-14	<i>[Signature]</i>	3-19-15
John K... HOLZMÄCHER	SRO RCO	<i>[Signature]</i>	10-30-14	<i>[Signature]</i>	3-19-15
TIMOTHY J. MILLER	RCO	<i>[Signature]</i>	11-4-14	<i>[Signature]</i>	3-19-15
Clark L. Ben	RCO	<i>[Signature]</i>	11-4-14	<i>[Signature]</i>	3/19/15
John G. Boney	NOS	<i>[Signature]</i>	11/5/14	<i>[Signature]</i>	3/19/15
Michael G. Crakea	Instructor	<i>[Signature]</i>	11/22/14	⊙	
Timothy Hutchinson	RCO	<i>[Signature]</i>	11/24/14	<i>[Signature]</i>	3/19/15
Anthony Dakis	RCO	<i>[Signature]</i>	12-8-14	⊙	
NOTES:		<i>[Signature]</i>	12-8-14	<i>[Signature]</i>	3/19/15

⊙ E-mail response attached 3/23/15

Mann, James

From: Pollak, Frederick
Sent: Saturday, March 21, 2015 6:44 PM
To: Mann, James
Subject: RE: HLC-22 Security Agreement closure Reminder

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Fred

"We are all Leaders of Change"

From: Mann, James
Sent: Thursday, March 19, 2015 7:27 AM
To: Benton, Terry; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Hutchinson, Tim; Oakes, Anthony; Pike, Charlie; Byford, David; Phillips, D A; Ryley, W.A.Skip; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Byrd, Desiree; Rasmus, Paul; Tinti, John; Kudo, Timothy; Martin, Christopher R; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC-22 Security Agreement closure Reminder

Team

The exam for HLC-22 is now complete please take a moment and respond to my previous email regarding closure of the security agreement.

I will make arrangements to collect your badge as soon as possible.

Thank You for your support.

James Mann

Mann, James

From: Finley, Jeffrey
Sent: Wednesday, March 25, 2015 6:08 PM
To: Mann, James

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Sorry about the tardiness.

V/R
Jeff

Mann, James

From: Gray, Ryan
Sent: Thursday, March 19, 2015 7:29 AM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

James,

Regarding the NRC Exam Security Agreement for HLC-22:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Ryan Gray

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

The exam security badges should be returned to NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) as soon as possible following your sign off of the security agreement.

Mann, James

From: Abernethy, J.G.Jeff
Sent: Saturday, March 21, 2015 7:40 PM
To: Mann, James; Farnsworth, P.F.Paul
Subject: NRC EXAM security

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Jeff Abernethy

Mann, James

From: Bushman, C.Craig
Sent: Sunday, March 22, 2015 1:37 PM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Craig Bushman

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

The exam security badges should be returned to NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) as soon as possible following your sign off of the security agreement.

V/R
James Mann

Mann, James

From: Brady, John
Sent: Thursday, March 19, 2015 10:56 AM
To: Mann, James
Subject: RE: HLC-22 Security Agreement closure Reminder

Jim,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

John G. Brady
Nuclear Oversight
St. Lucie Plant
772-467-7656

From: Mann, James
Sent: Thursday, March 19, 2015 7:27 AM
To: Benton, Terry; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Hutchinson, Tim; Oakes, Anthony; Pike, Charlie; Byford, David; Phillips, D A; Ryley, W.A.Skip; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Byrd, Desiree; Rasmus, Paul; Tinti, John; Kudo, Timothy; Martin, Christopher R; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC-22 Security Agreement closure Reminder

Team

The exam for HLC-22 is now complete please take a moment and respond to my previous email regarding closure of the security agreement.

I will make arrangements to collect your badge as soon as possible.

Thank You for your support.

James Mann

Mann, James

From: Hutchinson, Tim
Sent: Thursday, March 19, 2015 4:42 PM
To: Mann, James
Subject: RE: HLC-22 Security Agreement closure Reminder

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

From: Mann, James
Sent: Thursday, March 19, 2015 7:26 AM
To: Benton, Terry; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Hutchinson, Tim; Oakes, Anthony; Pike, Charlie; Byford, David; Phillips, D A; Ryley, W.A.Skip; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Byrd, Desiree; Rasmus, Paul; Tinti, John; Kudo, Timothy; Martin, Christopher R; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC-22 Security Agreement closure Reminder

Team

The exam for HLC-22 is now complete please take a moment and respond to my previous email regarding closure of the security agreement.

I will make arrangements to collect your badge as soon as possible.

Thank You for your support.

James Mann

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 3/2/15 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 (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). 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 3/2 - 3/13/15. 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. Fred Pollak	SRO	<i>[Signature]</i>	10/22/14		
2. Jeff Finlay	RCO	<i>[Signature]</i>	10/22/14		
3. Paul Gray	SRO	<i>[Signature]</i>	10/22/14		
4. Jeff Abernethy	SRO	<i>[Signature]</i>	10/22/14		
5. Roger Sherwood	SRO	<i>[Signature]</i>	10/27/14		
6. Craig Bushman	SRO	<i>[Signature]</i>	10/27/14		
7. Chescha Swartz	RCO	<i>[Signature]</i>	10/27/14		
8. Julia Klock	SRO	<i>[Signature]</i>	11-4-14		
9. HOLZMACHER	RCO	<i>[Signature]</i>	11-4-14		
10. Timothy J. Maccell	SRO	<i>[Signature]</i>	11-4-14		
11. Chuck L. Ben	RCO	<i>[Signature]</i>	11/5/14		
12. FRANK GIANNONE	ITN ADMIN	<i>[Signature]</i>	12/1/14		
13.					
14.					
15.					

NOTES:

① E-mail Response Attached. 3/23/15

Mann, James

From: Giannone, Francis John <Francis.Giannone@duke-energy.com>
Sent: Thursday, March 19, 2015 7:30 AM
To: Mann, James
Subject: RE: HLC-22 Security Agreement closure Reminder

This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email.

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations. Please sign me off the security agreement.

Hope the results went well!

Thanks,

Frank Giannone
Operations Training Manager
Robinson Nuclear Plant
843-857-1405



From: Mann, James [<mailto:James.Mann@fpl.com>]

Sent: Thursday, March 19, 2015 7:27 AM

To: Benton, Terry; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Hutchinson, Tim; Oakes, Anthony; Pike, Charlie; Byford, David; Phillips, D A; Ryley, W.A.Skip; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Byrd, Desiree; Rasmus, Paul; Tinti, John; Kudo, Timothy; Martin, Christopher R; 'jgarsen@wtsiconsulting.com'; Giannone, Francis John

Subject: HLC-22 Security Agreement closure Reminder

*** Exercise caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***

Team

The exam for HLC-22 is now complete please take a moment and respond to my previous email regarding closure of the security agreement.

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of 3/2/15 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 (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). 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 3/2/15. 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. MICHAEL BAUGHMAN	T LIND MGR	[Signature]	12/10/14	[Signature]	3/15/15	
2. CHARLES PINE	UNIT SUPERVISOR	[Signature]	12/16/14	[Signature]		
3. STEVE MEARLE	SHIFT MANAGER	[Signature]	12/16/14	[Signature]		
4. DAVID BYFORD	RCD	[Signature]	12/16/14	[Signature]	3/19/15	
5. DANIS L. (ONS)	RCO	[Signature]	12/16/14	[Signature]		
6. DENNIS PHILLIPS	RCD	[Signature]	12/20/14	[Signature]		
7. TROY SPILLMAN	ADM	[Signature]	1/6/15	[Signature]	3/10/15	
8. Winston Hickey	US	[Signature]	1/6/15	[Signature]	3/19/15	
9. LOM FIELDS	U.S.	[Signature]	1-7-15	[Signature]		
10. DAVE FIELDS	US	[Signature]	1/7/15	[Signature]		
11. WESS TEXCOLE	SLO/US/SM	[Signature]	1/8/15	[Signature]		
12. ERIC MURRAY	Contingency Supv DAEC	[Signature]	1/2/15	[Signature]		
13. Jethu Hiywa	FM	[Signature]	1/2/15	[Signature]	3/19/15	
14. Ross Muncie	Training Mgr / Oversight	[Signature]	1/2/15	[Signature]		
15. Reese Hillen	Senior Reactor Operator	[Signature]	2/2/15	[Signature]	3/19/15	
NOTE: Dennis Embury	Simulator SRO	[Signature]	2/2/15	[Signature]	3/19/15	

① E-mail response attached 3/23/15

Mann, James

From: Pike, Charlie
Sent: Monday, March 23, 2015 3:45 AM
To: Mann, James
Cc: Merrill, Steve
Subject: RE: HLC-22 Security Agreement closure Reminder

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Thank You
Charlie Pike

From: Mann, James
Sent: Thursday, March 19, 2015 7:27 AM
To: Benton, Terry; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Hutchinson, Tim; Oakes, Anthony; Pike, Charlie; Byford, David; Phillips, D A; Ryley, W.A.Skip; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Byrd, Desiree; Rasmus, Paul; Tinti, John; Kudo, Timothy; Martin, Christopher R; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC-22 Security Agreement closure Reminder

Team

The exam for HLC-22 is now complete please take a moment and respond to my previous email regarding closure of the security agreement.

I will make arrangements to collect your badge as soon as possible.

Thank You for your support.

James Mann

Mann, James

From: Merrill, Steve
Sent: Thursday, March 19, 2015 4:23 AM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

V/R,

Steve Merrill

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

The exam security badges should be returned to NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) as soon as possible following your sign off of the security agreement.

Mann, James

From: Card, David
Sent: Thursday, March 19, 2015 5:46 AM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

Good day, James.

I'm working Mids; so I'll be hard pressed to make it to physically sign off the agreement. Per your instructions below, I acknowledge and confirm the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

I'll strive to return the badge as soon as I'm able; possibly tomorrow morning (3/20/15) after my last Mid. In the meantime, is it safe to assume I can remove it from my person?

Many thanks!

Respectfully,
David

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I

Mann, James

From: Phillips, D A
Sent: Thursday, March 19, 2015 9:09 PM
To: Mann, James
Subject: RE: HLC-22 Security Agreement closure Reminder

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

From: Mann, James
Sent: Thursday, March 19, 2015 7:27 AM
To: Benton, Terry; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Hutchinson, Tim; Oakes, Anthony; Pike, Charlie; Byford, David; Phillips, D A; Ryley, W.A.Skip; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Byrd, Desiree; Rasmus, Paul; Tinti, John; Kudo, Timothy; Martin, Christopher R; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC-22 Security Agreement closure Reminder

Team

The exam for HLC-22 is now complete please take a moment and respond to my previous email regarding closure of the security agreement.

I will make arrangements to collect your badge as soon as possible.

Thank You for your support.

James Mann

Mann, James

From: Brown, T.S.Tom
Sent: Wednesday, March 18, 2015 5:37 PM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Tom

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

The exam security badges should be returned to NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) as soon as possible following your sign off of the security agreement.

V/R
James Mann

Farnsworth, P.F.Paul

From: Fields, Dave
Sent: Thursday, March 19, 2015 4:11 AM
To: Mann, James
Cc: Farnsworth, P.F.Paul
Subject: RE: HLC 22 Security Agreement Closure

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Dave Fields

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

The exam security badges should be returned to NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) as soon as possible following your sign off of the security agreement.

Mann, James

From: Rexrode, Wess
Sent: Thursday, March 19, 2015 7:31 AM
To: Mann, James
Subject: HLC 22 Security Agreement Closure

Importance: High

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Wess Rexrode

P.S. Today I am the unit 2 Unit Supervisor.

Mann, James

From: Murray, Eric
Sent: Monday, March 23, 2015 4:03 PM
To: Mann, James
Subject: RE: PSL Security Agreement

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Eric Murray
Operations Continuing Training Supervisor
NextEra Energy Duane Arnold
3277 DAEC Road
Palo, IA 52324
W: (319)851-7203
Cell: (319)350-5401



From: Mann, James
Sent: Monday, March 23, 2015 11:55 AM
To: Murray, Eric
Subject: PSL Security Agreement

Eric
You are our last required signature for the closeout of our security agreement.

Please copy and paste the paragraph below with your name under it acknowledging its contents in a reply to me and that will serve as your close out of the agreement.

Thank You
James

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Mann, James

From: Minear, Ron
Sent: Monday, March 23, 2015 6:20 AM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

Ron Minear

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

The exam security badges should be returned to NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) as soon as possible following your sign off of the security agreement.

V/R
James Mann

Mann, James

From: Kilian, Reese
Sent: Friday, March 20, 2015 12:52 AM
To: Mann, James
Subject: RE: HLC-22 Security Agreement closure Reminder

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

V/R,
Reese Kilian

From: Mann, James
Sent: Thursday, March 19, 2015 7:27 AM
To: Benton, Terry; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Hutchinson, Tim; Oakes, Anthony; Pike, Charlie; Byford, David; Phillips, D A; Ryley, W.A.Skip; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Byrd, Desiree; Rasmus, Paul; Tinti, John; Kudo, Timothy; Martin, Christopher R; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC-22 Security Agreement closure Reminder

Team

The exam for HLC-22 is now complete please take a moment and respond to my previous email regarding closure of the security agreement.

I will make arrangements to collect your badge as soon as possible.

Thank You for your support.

James Mann

Mann, James

From: Rasmus, Paul
Sent: Thursday, March 19, 2015 7:28 AM
To: Mann, James; Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: RE: HLC 22 Security Agreement Closure

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

V/R,
Paul Rasmus

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

Mann, James

From: Tinti, John
Sent: Thursday, March 19, 2015 8:33 AM
To: Mann, James
Subject: Re: HLC 22 Security Agreement Closure

James,

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

John

On Mar 17, 2015, at 3:02 PM, Mann, James <James.Mann@fpl.com> wrote:

performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

Mann, James

From: Kudo, Timothy
Sent: Friday, March 20, 2015 6:08 AM
To: Mann, James
Subject: RE: HLC 22 Security Agreement Closure

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

V/R,
Tim Kudo

From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
Subject: HLC 22 Security Agreement Closure

Team

If you receiving this email then you are on the security agreement for HLC-22's NRC exam.

The NRC exam for HLC-22 will be complete by the end of business Wednesday March 18, 2015. Please make arrangements to come by the NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) Thursday March 19th, 2015 0630- 1530 to sign off the security agreement.

If you are unable to physically sign off the agreement on Thursday March 19th 2015 please reply to this email (to me) confirming the following:

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the weeks of March 2, 2015 through March 18, 2015. From the date that I entered into this security agreement until the completion of the examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations.

IF YOU ARE GOING TO RESPOND BY EMAIL, PLEASE DO SO AFTER MARCH 18TH.

The exam security badges should be returned to NRC exam room (2nd floor of the NTC by the south break room, phone ext: 3339) as soon as possible following your sign off of the security agreement.

V/R
James Mann

Owens, John

From: Martin, Christopher R
Sent: Monday, March 23, 2015 7:06 AM
To: Mann, James
Cc: Owens, John; Baughman, Michael
Subject: RE: HLC 22 Security Agreement Closure

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From: Mann, James
Sent: Tuesday, March 17, 2015 3:02 PM
To: Farnsworth, P.F.Paul; Benton, Terry; Owens, John; Sizemore, Charles; Goodwin, Amy; Breen, Jack; Myerez, David; Oliver, C.D.Chuck; Chang, Wes; Baird, Richard; Watson, Reid; Pollak, Frederick; Finley, Jeffrey; Gray, Ryan; Abernethy, J.G.Jeff; Sherwood, Roger; Bushman, C.Craig; De.La.Guardia, C.S.Carlos; Klauck, J.M.John; Holzmacher, G.H.Hank; Miller, Timothy J; Zen, Clark; Brady, John; Croteau, Michael G; Hutchinson, Tim; Oakes, Anthony; Baughman, Michael; Pike, Charlie; Merrill, Steve; Byford, David; Card, David; Phillips, D A; Spillman, Troy; Ryley, W.A.Skip; Brown, T.S.Tom; Fields, Dave; Rexrode, Wess; Murray, Eric; Hlywa, John; Minear, Ron; Kilian, Reese; Emborsky, Dennis; Carpenter, David; Byrd, Desiree; Weeks, Jay; Rasmus, Paul; Daughtry, Walt; Tinti, John; Kudo, Timothy; Martin, Christopher R; Feightner, Erik; Gatto, Edward; Nichols, Brian; Scheidegger, Michael; 'jgarsen@wtsiconsulting.com'; 'Francis.giannone@duke-energy.com'
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V/R
James Mann

Facility: St. LucieDate of Examination: 3/2/2015Examination Level: RO SRO Operating Test Number: HLC 22 NRC

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	N, S	A1 RO: 2B EDG Inoperable – Evaluate Opposite Train Components
	N, R	A1 SRO: 2B EDG Inoperable – Evaluate Opposite Train Components AND Evaluate Technical Specifications
Conduct of Operations	N, R	A2 RO: Perform RCS Inventory Balance
	N, R	A2 SRO: Perform RCS Inventory Balance and evaluate Technical Specifications
Equipment Control	N, R	A3: Perform Borated Water Source Surveillance for Mode 1 – Unit 2
Radiation Control	M, R	A4 RO: Determine Exposure Limits Under Normal Conditions
	R	A4 SRO: Determine Radiation Exposure Limits under Emergency Conditions
Emergency Procedures/Plan	D, R	A5 SRO: Implement EPIP for SGTR/LOOP (St. Lucie Bank JPM 0821138T)

NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when all 5 are required.

* Type Codes & Criteria:
 (C)ontrol room, (S)imulator, or Class(R)oom
 (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs & RO retakes)
 (N)ew or (M)odified from bank (≥ 1)
 (P)revious 2 exams (≤ 1 ; randomly selected)

ADM. JPM SUMMARY DESCRIPTION

A1 RO: 2B EDG Inoperable – Evaluate Opposite Train Components

(G2.1.31) Ability to locate control room switches, controls, and indications, and to determine that they correctly reflect the desired plant lineup. 4.6/4.3

A suspect relay on the 2B Emergency Diesel Generator leads the crew to evaluate the operability of the A Train safety-related equipment. During performance of 2-OSP-59.01B Attachment 1, Operability Checklist Prior to Removing 2B EDG from Service, the Desk RCO should recognize that multiple pieces of equipment that are required to be operable with the 2B Emergency Diesel Generator out of service, are not available. The Desk RCO reports this to the Unit Supervisor.

A1 SRO: 2B EDG Inoperable – Evaluate Opposite Train Components AND Evaluate Technical Specifications

(G2.1.31) Ability to locate control room switches, controls, and indications, and to determine that they correctly reflect the desired plant lineup. 4.6/4.3

A suspect relay on the 2B Emergency Diesel Generator leads the crew to evaluate the operability of the A Train safety-related equipment. The Desk RCO reports that 2C Auxiliary Feedwater Pump is cleared for maintenance and is not available. The Unit Supervisor must review the completed Attachment 1, Operability Checklist Prior to Removing 2B EDG from Service, from 2-OSP-59.01B, 2B Emergency Diesel Generator Monthly Surveillance, and evaluate any Tech Spec impact (3.7.1.2 and 3.8.1.1.b).

A2 RO: Perform RCS Inventory Balance

(G2.1.7) Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation. 4.4/4.7

The crew suspects unusually high RCS leakage. The Unit Supervisor has entered 2-AOP-01.08, RCS Leakage Abnormal Operation. The Unit Supervisor directs the Desk RCO to perform a one hour manual RCS leak rate determination per 2-OSP-01.03, Reactor Coolant System Inventory Balance, Attachment 4, Manual Leak Rate Calculation. The candidate should determine that Identified Leakage is within Tech Spec limits and Unidentified Leakage is NOT within Tech Spec limits.

A2 SRO: Perform RCS Inventory Balance and evaluate Technical Specifications

(G2.1.7) Ability to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior, and instrument interpretation. 4.4/4.7

The crew suspects unusually high RCS leakage. The Unit Supervisor has entered 2-AOP-01.08, RCS Leakage Abnormal Operation. The Unit Supervisor directs the Desk RCO to perform a one hour manual RCS leak rate determination per 2-OSP-01.03, Reactor Coolant System Inventory Balance, Attachment 4, Manual Leak Rate Calculation. The SRO candidate must perform the leak rate calculation, determine that Identified Leakage is within Tech Spec limits and Unidentified Leakage is in excess of Tech Spec limits, and determine any required actions based on the results of the leak rate calculation, including any related time constraints.

A3 RO/SRO: Perform Borated Water Source Surveillance for Mode 1 – Unit 2
(G2.2.12) Knowledge of surveillance procedures. 3.7/4.1

A routine surveillance is due on the current shift. The candidate is assigned to perform 2-OSP-02.07, Boration Flowpath and Sources. The candidate should determine that the level in one borated water source, 2B Boric Acid Makeup Tank, is low. The candidate should also determine that sufficient borated water sources are available with the combined contents of the Refueling Water Tank and the 2A Boric Acid Makeup Tank.

A4 RO: Determine Exposure Limits Under Normal Conditions
(G2.3.4) Knowledge of radiation exposure limits under normal or emergency conditions. 3.2/3.7

Unit 2 is in a refueling outage and refueling equipment preparations are under way. The Refueling Machine Hoist Box will need to be rebuilt. The Applicant will be required to determine the dose received, the approvals required and which worker(s) will be allowed to perform the task.

A4 SRO: Determine Radiation Exposure Limits under Emergency Conditions
(G2.3.4) Knowledge of radiation exposure limits under normal or emergency conditions. 3.2/3.7

During a LOCA event, a 10 gpm leak has been identified on the suction of 2A Charging Pump. The first re-entry team was unsuccessful at isolating the leak. The second re-entry team is prepared to make repairs and close the valve. The candidate must approve the entry, taking into account the local dose rates and current annual accumulated dose of the worker. The candidate should correctly calculate estimated dose for the worker, identify the applicable dose limits (5 Rem TEDE and 50 Rem CDE), and conclude that the worker CANNOT perform the work due to the potential for exceeding the identified TEDE limit.

A5 SRO: Implement EPIP for SGTR/LOOP (SRO ONLY)
(G2.4.30) Knowledge of events related to system operation/status that must be reported to | internal organizations or external agencies, such as the State, the NRC, or the transmission system operator. 2.7/4.1

Unit 2 has just been manually tripped from 100% power due to a steam generator tube rupture in the 2A SG. Letdown has been isolated and all three charging pumps are running. Pressurizer level is dropping and secondary radiation is rising. Following the trip, a Loss of Offsite Power occurred and ADV's must be used for RCS Heat Removal since SBCS is now unavailable. SIAS has actuated.

The candidate is tasked with:

- Classifying the event per EPIP-01, "Classification of Emergencies" and then, if required
- Fill out the Florida Nuclear Plant Emergency Notification Form and notify the State and County agencies per EPIP-08, "Off-Site Notifications and Protective Action Recommendations."

These actions are **TIME CRITICAL**.

SIMULATOR

S-1: Verify CSAS- Unit 2

026A4.01 Ability to manually operate and/or monitor in the control room: CSS controls. 4.5/4.3

A LOCA is in progress on Unit 2. The US directs that Step 12 of EOP-03 be performed (Verify CSAS signal). Both trains of CSAS must be manually actuated and other components must be manually operated IAW a table in 2-EOP-99 to complete the task. This JPM was modified from a PSL bank JPM. The guidance in EOP 3 has been revised / reworded to better describe contingency actions for ESFAS actuations that are faulted. This is an alternate path JPM. **All candidates will perform this JPM.**

S-2 Withdraw Shutdown Group CEAs in preparation for reactor startup –Unit 2

001A2.11 Ability to (a) predict the impacts of situations requiring a reactor trip on the CRDS- and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations. situations requiring a reactor trip. 4.4/4.7

Unit 2 is starting up after a 10 day forced outage following repairs to the main generator. 2-GOP-302, "Reactor Plant Startup-Mode 3 To Mode 2 is in progress. Shutdown bank "A" has been withdrawn to the upper electrical limit. The Operating crew is at step 4.3.1.5 with Shutdown Bank "B" having been withdrawn 37 inches. As CEA Shutdown bank " B" is withdrawn, CEA #40 will stop moving with the rest of the group at 42 inches. 2-GOP-302 directs CEA movement to stop if a deviation between CEAs in a group exceeds 6 inches and enter 2-AOP-66.01, "Dropped or Misaligned CEA Abnormal Operation". After the deviation occurs and the CEA withdraw switch is released, Bank "B" CEAs will to continue to move outward. Efforts to stop the movement are not successful. The candidate must recognize that conditions for a manual reactor trip are met per 2-AOP-66.01. After the plant is tripped, CEA#40 will not fully insert into the core so Emergency Boration must be established (Reactivity Control – EOP-01) either from memory or using 2-AOP-02.02, "Emergency Boration". **All candidates will perform this JPM.**

S-3 Respond to a CCW Header Rupture-Unit 2.

008A2.02 Ability to (a) predict the impacts of the following malfunctions or operations on the CCWS, and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: High / Low CCW surge tank level. 3.2/3.5

The Unit will be in Mode 3, NOP, NOT. A confirmed CCW header rupture has just occurred and the US has directed the RCO to carry out the actions of 2-AOP-14.01 Component Cooling Water Abnormal Operation to perform applicable steps for a ruptured CCW header. Annunciator LB-10 will clear indicating the rupture is in the 'A' header. When the candidate performs steps to restore CCW to the "N" header from the "B" header HCV-14-10 will not open. This will require the RCP's to be stopped within 10 minutes. This JPM is time critical.

This is an alternate path JPM since the candidate must exit from the actions of responding to a ruptured CCW header to the actions for loss of CCW to the RCPS's. **All candidates will perform this JPM.**

S-4 Manually actuate AFAS, Unit 2

035A2.01 Ability to predict the impacts of the following malfunctions or operations on the SG and based on these predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: faulted or ruptured S/Gs. 4.5/4.6

Unit 2 has experienced a SGTR on the 2B SG. The 2B SG has been isolated and AFW flow to the 2A SG has isolated on an AFAS lockout due to ΔP between the 2A and 2B SG pressure. AFAS-1 will be manually initiated. Upon manual initiation, MV-09-11 and MV-09-9 fail to open. When the applicant opens either valve it will fail closed 5 seconds later. (NOTE: both valves have this failure in but when the first valve selected is placed to open it will clear the fault on the other valve, allowing the 2A OR the 2C AFW pump to feed the 2A SG). This is an alternate path JPM in that the initial cue requires the candidate to evaluate a caution in EOP-04 and manually initiate AFAS-1 to restore AFW to the 2A SG. Following that action and the MOV failures, the candidate must refer to an Ops Hard Card for guidance on manually opening the faulted AFW valves and establishing AFW flow because the 2A SG levels are lowering and not meeting the RCS Heat Removal safety function of EOP-04. **ONLY ROs and SRO-Is will perform this JPM.**

S-5 Respond to Abnormal Pressure Control - PCV-1100E Fails Open – Unit 2

010 A2.02 Ability to (a) predict the impacts of a spray valve failure on the PZR PCS; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of a spray valve failures. 3.9/3.9

The Unit is at power when PCV-1100E, Pressurizer spray valve failed open. The valve cannot be closed from the Control Room. The success path is to trip the Reactor and stop the 2B2 Reactor Coolant pump to terminate the depressurization. This is an alternate path JPM. **ONLY ROs and SRO-Is will perform this JPM.**

S-6 Respond to Control Room OAI radiation alarms, Unit 2

072A3.01 Ability to monitor automatic operation of the ARM system including: Changes in ventilation alignment. 2.9/3.1

Unit 1 is experiencing a LBLOCA with a breach in Containment integrity. As a result of this release, Unit 2 Control Room has gone on ventilation recirc due to high radiation in the outside air intakes. Compliance with the procedure requires verification of the ventilation lineup IAW 2-AOP-25.02, "Ventilation Systems", Appendix B. As Appendix B is being followed, numerous damper failures must be noted and corrective actions must be taken. **ONLY ROs and SRO-Is will perform this JPM.**

UNIT 1 CONTROL ROOM

C-1 – Pump ECCS Area Sumps to RDT Post Loca – Unit 1

006K4.08 Knowledge of ECCS design feature(s) and/or interlock(s) which provide for the following: Recirculation flowpath of reactor building sump. 3.4/3.6

Unit 1 has experienced a LOCA and RAS has occurred with all normal post-trip power available. The US directs the desk RO to align the ECCS sumps to the Reactor Drain Tank in accordance with 1-EOP-03, step 40. **ONLY ROs and SRO-Is will perform this JPM.**

SIMULATOR

S-7 – Energize A3 4.16KV bus from Unit 1 SBO cross tie breaker- Unit 2

062A2.05 Ability to (a) predict the impacts of the following malfunctions or operations on the ac distribution system; and (b) based on those predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Methods for energizing a dead bus. 2.9/3.3

Unit 2 is in a station blackout and Unit 1 has both emergency buses being supplied by their Diesel Generators. Direction is given to cross tie the 1AB and 2AB 4.16KV Bus IAW 1-EOP-99, Appendix V, "Receiving AC Power from Unit 1 using the SBO Crosstie". Table 7 has been completed for Unit 2. **Only the RO candidates will perform this JPM.**

IN-PLANT

P-1 Alternate Charging Flowpath to RCS Through the "A" HPSI Header – Unit2

006A2.02 Ability to predict the impacts of the following malfunctions or operations on the ECCS and based on these predictions, use procedures to correct, control, or mitigate the consequences of those malfunctions or operations: Loss of flow path. 3.9/4.3

The Charging Header has developed a severe leak down stream of V2523, "Charging pump Discharge at Pen# 27 Isolation valve". The normal Charging flow path is unavailable. There is NO fire event involved. Perform the steps of 2-AOP-02.03, "Charging and Letdown" Attachment 2 to align the alternate charging flow path to the RCS using the "A" HPSI Header. **All candidates will perform this JPM.**

(Radiation Controlled Area JPM)

P-2 Return Static Inverter 2A to Service – Unit 2 (0821211)

062A3.04 Ability to monitor automatic operation of the ac distribution system, including: Operation of inverter (e.g., precharging synchronizing light, static transfer). 2.7/2.9

The 2MA/2MA-1 Instrument Bus is currently on its alternate source of power due to an inverter failure. EM has completed repairs to the 2A Static Inverter. The candidate is to perform actions to return the inverter to service. **All candidates will perform this JPM.**

P-3 Align Unit 2 CST to Supply the 1A AFW Pump (0821062)

061A1.03 Ability to predict and/or monitor changes in parameters (to prevent exceeding design limits) associated with operating the AFW controls including: Interactions when multi unit systems are cross tied 3.1/3.6

Unit 1 CST is not available due to tornado damage. Direction will be given to align the Unit 2 CST to the suction of the Unit 1, 1A Auxiliary feedwater pump IAW 1-AOP-09.02, "Auxiliary Feedwater," Attachment 5. **ONLY ROs and SRO-Is will perform this JPM.**

Facility: St.Lucie		Date of Examination: 3/2/2015		Operating Test Number: HLC 22		
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).			P	B	CB
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.			P	B	CB
c.	The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)			P	B	CB
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.			P	B	CB
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.			P	B	CB
2. Walk-Through Criteria				-	-	-
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> • initial conditions • initiating cues • references and tools, including associated procedures • reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time-critical by the facility licensee • operationally important 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 of steps, if applicable 			P	B	CB
b.	Ensure that any changes from the previously approved systems and administrative walk-through outlines (Forms ES-301-1 and 2) have not caused the test to deviate from any of the acceptance criteria (e.g., item distribution, bank use, repetition from the last 2 NRC examinations) specified on those forms and Form ES-201-2.			P	B	CB
3. Simulator Criteria				-	-	-
The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.				P	B	CB
	Printed Name / Signature			Date		
a.	Author	Paul Farnsworth / <u>Paul Farnsworth</u>		2/20/2015		
b.	Facility Reviewer(*)	Terry Benton / <u>Terry Benton</u>		2/20/2015		
c.	NRC Chief Examiner (#)	Daniel M. Bacon / <u>Daniel M. Bacon</u>		2/26/2015		
d.	NRC Supervisor	Eugene Guthrie / <u>Eugene Guthrie</u>		2/26/2015		
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.						

Facility: St.Lucie		Date of Exam:3/2/15		Scenario Numbers: 1/2/4/5/6		Operating Test No.: HLC 22	
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.	JK	B	ck			
2.	The scenarios consist mostly of related events.	JK	B	ck			
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) 	JK	B	ck			
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.	JK	B	ck			
5.	The events are valid with regard to physics and thermodynamics.	JK	B	ck			
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	JK	B	ck			
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.	JK	B	ck			
8.	The simulator modeling is not altered.	JK	B	ck			
9.	The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies or deviations from the referenced plant have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.	JK	B	ck			
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.5 of ES-301.	JK	B	ck			
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	JK	B	ck			
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).	JK	B	ck			
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	JK	B	ck			
Target Quantitative Attributes (Per Scenario; See Section D.5.d)		Actual Attributes					
1.	Total malfunctions (5-8)	6/6/8/6/7	JK	B	ck		
2.	Malfunctions after EOP entry (1-2)	2/2/3/1/2	JK	B	ck		
3.	Abnormal events (2-4)	3/3/4/5/5	JK	B	ck		
4.	Major transients (1-2)	1/1/1/1/1	JK	B	ck		
5.	EOPs entered/requiring substantive actions (1-2)	1/1/1/1/1	JK	B	ck		
6.	EOP contingencies requiring substantive actions (0-2)	0/0/1/0/0	JK	B	ck		
7.	Critical tasks (2-3)	2/3/2/2/3	JK	B	ck		

Facility:		St. Lucie		Date of Exam:		3/2/15		Operating Test No.:		NRC											
A P P L I C A N T	E V E N T T Y P E	Scenarios														T O T A L			M I N I M U M		
		1 (100%)			2 (30%)			4 (45%)			5 (10-12%)										
		C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N										
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	R	I	U					
SROU-1	RX														0	1	1	0			
	NOR	2								1					2	1	1	1			
	I/C	3, 4, 5, 7, 8								3, 5, 7					8	4	4	2			
	MAJ	6								6					2	2	2	1			
	TS	1, 4													2	0	2	2			
RO-1	RX									1					1	1	1	0			
	NOR			2											1	1	1	1			
	I/C			5, 7						4, 6, 7					5	4	4	2			
	MAJ			6						6					2	2	2	1			
	TS														0	0	2	2			
RO-2	RX		2												1	1	1	0			
	NOR							1						1	2	1	1	1			
	I/C		3, 4, 8					3, 6						5, 6	7	4	4	2			
	MAJ		6					5						7	3	2	2	1			
	TS														0	0	2	2			
SROU-2	RX														0	1	1	0			
	NOR	2												1	2	1	1	1			
	I/C	3, 4, 5, 7, 8												5, 6	7	4	4	2			
	MAJ	6												7	2	2	2	1			
	TS	1, 4													2	0	2	2			
RO-3	RX												1		1	1	1	0			
	NOR			2											1	1	1	1			
	I/C			5, 7									3, 4, 8		5	4	4	2			
	MAJ			6									7		2	2	2	1			
	TS														0	0	2	2			
RO-4	RX												1		1	1	1	0			
	NOR									1					1	1	1	1			
	I/C									3, 5, 7			3, 4, 8		6	4	4	2			
	MAJ									6			7		2	2	2	1			
	TS														0	0	2	2			

Facility:		St. Lucie		Date of Exam: 3/2/15		Operating Test No.:		NRC										
A P P L I C A N T	E V E N T T Y P E	Scenarios													T O T A L	M I N I M U M		
		1 (100%)			2 (30%)			4 (45%)			5 (10-12%)							
		C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N							
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P					
SROU-3	RX													0	1	1	0	
	NOR							1					1	2	1	1	1	
	I/C							3, 4, 5, 6, 7					5, 6	7	4	4	2	
	MAJ							6					7	2	2	2	1	
	TS							2, 3, 4, 5						4	0	2	2	
RO-5	RX								1					1	1	1	0	
	NOR							1						1	1	1	1	
	I/C							3, 6		4, 6, 7				5	4	4	2	
	MAJ							5		6				2	2	2	1	
	TS													0	0	2	2	
RO-6	RX						1							1	1	1	0	
	NOR											1		1	1	1	1	
	I/C							4, 7				3, 5, 7		5	4	4	2	
	MAJ							5				6		2	2	2	1	
	TS													0	0	2	2	
SROU-4	RX													0	1	1	0	
	NOR						1							2	1	1	1	
	I/C						3, 4, 6, 7							9	4	4	2	
	MAJ						5							2	2	2	1	
	TS						2, 4							6	0	2	2	
SROI-1	RX		2											1	1	1	0	
	NOR													1	1	1	1	
	I/C		3, 4, 8											8	4	4	2	
	MAJ		6											2	2	2	1	
	TS													4	0	2	2	

Facility:		St. Lucie		Date of Exam: 3/2/15									Operating Test No.:		NRC		
A P P L I C A N T	E V E N T T Y P E	Scenarios															
		2 (30%)			4 (45%)			5 (10-12%)			1 (100%)			T O T A L	M I N I M U M		
		C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N						
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P		R	I	U
SROI-3	RX		1										1	1	1	0	
	NOR							1					2	2	1	1	1
	I/C		4, 7					3, 4, 5, 6, 8					5, 7	9	4	4	2
	MAJ		5					7					6	3	2	2	1
	TS							2, 3						2	0	2	2
SROI-4	RX											2		1	1	1	0
	NOR							1						1	1	1	1
	I/C							3, 4, 5, 6, 8				3, 4, 8		8	4	4	2
	MAJ							7				6		2	2	2	1
	TS							2, 3						2	0	2	2
SROI-5	RX					1								1	1	1	0
	NOR							1						1	1	1	1
	I/C					4, 6, 7		3, 4, 5, 6, 8						8	4	4	2
	MAJ					6		7						2	2	2	1
	TS							2, 3						2	0	2	2
SROI-2	RX								1					1	1	1	0
	NOR	1										2		2	1	1	1
	I/C	3, 4, 6, 7							3, 4, 8			3, 4, 5, 7, 8		12	4	4	2
	MAJ	5							7			6		3	2	2	1
	TS	2, 4										1, 4		4	0	2	2

Facility:		St. Lucie		Date of Exam:		3/2/15		Operating Test No.:		NRC		Scenarios					
A P P L I C A N T	E V E N T T Y P E	6 (5x10-4) Spare												T O T A L	M I N I M U M		
		C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N			C R E W P O S I T I O N						
		S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P	S R O	A T C	B O P		R	I	U
		SRO	RX														0
NOR	1													1	1	1	1
I/C	2, 3, 4, 6, 7, 8													6	4	4	2
MAJ	5													1	2	2	1
TS	2, 3													2	0	2	2
ATC	RX		1											1	1	1	0
	NOR													0	1	1	1
	I/C		3, 4, 6, 7											4	4	4	2
	MAJ		5											1	2	2	1
	TS													0	0	2	2
BOP	RX													0	1	1	0
	NOR			1										1	1	1	1
	I/C			2, 3, 8										3	4	4	2
	MAJ			5										1	2	2	1
	TS													0	0	2	2

Instructions:

- Circle the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must service in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions; Instant SROs must serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunction and one major transient in the ATC position. If an instant SRO additionally serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.
- Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
- 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 requirements specified for the applicant's license level in the right-hand columns.

Proposed Schedule

SRO / ATC / BOP

Scenario 1

Mon.

U₁ I₁ R₁

I₂ R₂ I₃

U₂ I₄ R₃

Scenario 4

Tues.

U₃ I₅ R₄

U₄ R₅ R₆

I₁ R₁ U₁

Scenario 5

Wed.

I₃ I₂ R₂

I₄ R₃ U₂

I₅ R₄ U₃

Scenario 2

Thurs

U₄ R₆ R₅

I₂ I₃ R₂

15 Applicants

5 SROI

4 SROU

6 RO

Scenarios selected for this checklist were: 1, 4, 5, 2, and 6 (spare)

Facility:	Date of Examination:	Operating Test No.:										
Competencies	APPLICANTS											
	RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U 1	RO 1 <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	RO 2 <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U 2								
	SCENARIO			SCENARIO			SCENARIO			SCENARIO		
	1 US	4 BOP		1 BOP	4 ATC		1 ATC	2 BOP	5 BOP	1 US		
Interpret/Diagnose Events and Conditions	3,4,5	3,5,6 7,8		5,7	3,4,6 7,8		3,4,6 8	3,5,6 6,8		3,4,5		
Comply With and Use Procedures (1)	2,3,4 5	1,5,7 8		2,5	1,4,6		2,3,4	1,2,3 5,6	1,2,5	2,3,4 5		
Operate Control Boards (2)		3,5,7		5,7	4,6		3,4,8	1,3,5 6	5,6			
Communicate and Interact	2,3,4 5,6,7 8	1,3,5 7,8		2,5,6 7	1,2,4 6,7,8		2,3,4 6,8	1,3,5 6	1,5,6 7	2,3,4 5,6,7 8		
Demonstrate Supervisory Ability (3)	2,3,5 6									2,3,5 6		
Comply With and Use Tech. Specs. (3)	1,4									1,4		
Notes:												
(1) Includes Technical Specification compliance for an RO.												
(2) Optional for an SRO-U.												
(3) Only applicable to SROs.												

Instructions:

Check the applicants' license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

Facility: St.Lucie	Date of Examination: 3/2/15	Operating Test No.: HLC 22												
Competencies	APPLICANTS													
	RO 3 SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>			RO 4 SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>			RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U 3			RO 5 SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>				
	SCENARIO			SCENARIO			SCENARIO			SCENARIO				
	1 BOP	5 ATC		4 BOP	5 ATC		5 BOP	4 US		4 ATC	2 BOP			
Interpret/Diagnose Events and Conditions			5,7 3,4,8			3,5,6 3,4,8 7,8			6,8 3,4, 6,7 8			3,4,6 3,5,6 7,8		
Comply With and Use Procedures (1)			2,5 1,3,4			1,5,7 1,3,4 8			1,2,5 1,5, 7,8			1,4,6 1,2,3 5,6		
Operate Control Boards (2)			5,7 3,4,8			3,5,7 3,4,8			5,6			4,6 1,3,5 6		
Communicate and Interact			2,5,6 1,3,4 7 7,8			1,3,5 1,3,4 7,8 7,8			1,5,6 1,3 7 4,5 6,7 8			1,2,4 1,3,5 6,7,8 6		
Demonstrate Supervisory Ability (3)									1,3 4,5 6,7 8					
Comply With and Use Tech. Specs. (3)									2,3 4					
Notes: (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.														

Instructions:

Check the applicants' license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

Facility:	Date of Examination:	Operating Test No.:										
Competencies	APPLICANTS											
	RO <input type="checkbox"/> 6 SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/>	RO <input type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U 4	RO <input type="checkbox"/> SRO-I 1 SRO-U <input type="checkbox"/>	RO <input type="checkbox"/> SRO-I 2 SRO-U <input type="checkbox"/>								
	SCENARIO			SCENARIO			SCENARIO			SCENARIO		
	4 BOP	2 ATC		2 US	4 US		1 ATC	4 US		1 US	5 ATC	2 US
	3,5,6 7,8	4,7		4,5,6 7,8	3,4,6 7,8		3,4,6 8	3,4 6,7 8		3,4,5	3,4,8	4,5 6
1,5,7 8	1,4		1,2,3 4,5	1,5,7 8		2,3,4	1,5 7,8		2,3,4 5	1,3,4	1,2 3,4 5	
3,5,7	4,7					3,4,8				3,4,8		
1,3,5 7,8	1,4,5 7		1,3,4 5,6,7	1,3,4 5,6,7 8		2,3,4 6,8	1,3 4,5 6,7 8		2,3,4 5,6,7 8	1,3,4 7,8	1,3 4,5 6,7	
			1,3,4 5,6,7	1,3,4 5,6,7 8			1,3 4,5 6,7 8		2,3,5 6		1,3 4,5 6,7	
2,4			2,4	2,3,4			2,3 4		1,4		2,4	
Notes:												
(1) Includes Technical Specification compliance for an RO.												
(2) Optional for an SRO-U.												
(3) Only applicable to SROs.												

Instructions:

Check the applicants' license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

Facility:	Date of Examination:	Operating Test No.:											
Competencies	APPLICANTS												
	RO <input type="checkbox"/>	RO <input type="checkbox"/>	RO <input type="checkbox"/>	RO <input type="checkbox"/>									
	SRO-I 3	SRO-I 4	SRO-I 5	SRO-I <input type="checkbox"/>									
	SRO-U <input type="checkbox"/>	SRO-U <input type="checkbox"/>	SRO-U <input type="checkbox"/>	SRO-U <input type="checkbox"/>									
	SCENARIO			SCENARIO			SCENARIO			SCENARIO			
	5	2	1	5	1		5	4					
	US	ATC	BOP	US	ATC		US	ATC					
Interpret/Diagnose Events and Conditions	4,5,6	4,7	5,7	4,5,6	3,4,6 8		4,5 6	3,4 6,7 8					
Comply With and Use Procedures (1)	1,2,3 4,5	1,4	2,5	1,2,3 4,5	2,3,4		1,2 3,4 5	1,4 6					
Operate Control Boards (2)		4,7	5,7		3,4,8			4,6					
Communicate and Interact	1-8	1,4,5 7	2,5,6 7	1-8	2,3,4 6,8		1-8	1,2 4,6 7,8					
Demonstrate Supervisory Ability (3)	1,3,4 5,6,7			1,3,4 5,6,7			1,3 4,5 6,7						
Comply With and Use Tech. Specs. (3)	2,4			2,4			2,4						
Notes: (1) Includes Technical Specification compliance for an RO. (2) Optional for an SRO-U. (3) Only applicable to SROs.													

Instructions:

Check the applicants' license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

Facility: ST LUCIE		Date of Exam: MARCH 2015																
Tier	Group	RO K/A Category Points											SRO-Only Points					
		K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G *	Total	A2	G*	Total		
1. Emergency & Abnormal Plant Evolutions	1	3	3	3	N/A			3	3	N/A			3	18	3	3	6	
	2	1	2	1	N/A			1	2	N/A			2	9	2	2	4	
	Tier Totals	4	5	4	N/A			4	5	N/A			5	27	5	5	10	
2. Plant Systems	1	2	2	3	3	2	2	3	3	2	3	3	28	3	2	5		
	2	1	1	1	1	1	1	1	1	1	1	0	10	0	1	2	3	
	Tier Totals	3	3	4	4	3	3	4	4	3	4	3	38	4	4	8		
3. Generic Knowledge and Abilities Categories				1		2		3		4		10		1	2	3	4	7
				2		3		2		3				2	2	1	2	

- Note:**
- Ensure that at least two topics from every applicable K/A category are sampled within each tier of the RO and SRO-only outlines (i.e., except for one category in Tier 3 of the SRO-only outline, the "Tier Totals" in each K/A category shall not be less than two).
 - The point total for each group and tier in the proposed outline must match that specified in the table. The final point total for each group and tier may deviate by ±1 from that specified in the table based on NRC revisions. The final RO exam must total 75 points and the SRO-only exam must total 25 points.
 - Systems/evolutions within each group are identified on the associated outline; systems or evolutions that do not apply at the facility should be deleted and justified; operationally important, site-specific systems/evolutions that are not included on the outline should be added. Refer to Section D.1.b of ES-401 for guidance regarding the elimination of inappropriate K/A statements.
 - Select topics from as many systems and evolutions as possible; sample every system or evolution in the group before selecting a second topic for any system or evolution.
 - Absent a plant-specific priority, only those K/As having an importance rating (IR) of 2.5 or higher shall be selected. Use the RO and SRO ratings for the RO and SRO-only portions, respectively.
 - Select SRO topics for Tiers 1 and 2 from the shaded systems and K/A categories.
 - * The generic (G) K/As in Tiers 1 and 2 shall be selected from Section 2 of the K/A Catalog, but the topics must be relevant to the applicable evolution or system. Refer to Section D.1.b of ES-401 for the applicable K/As.
 - On the following pages, enter the K/A numbers, a brief description of each topic, the topics' importance ratings (IRs) for the applicable license level, and the point totals (#) for each system and category. Enter the group and tier totals for each category in the table above; if fuel handling equipment is sampled in other than Category A2 or G* on the SRO-only exam, enter it on the left side of Column A2 for Tier 2, Group 2 (Note #1 does not apply). Use duplicate pages for RO and SRO-only exams.
 - For Tier 3, select topics from Section 2 of the K/A catalog, and enter the K/A numbers, descriptions, IRs, and point totals (#) on Form ES-401-3. Limit SRO selections to K/As that are linked to 10 CFR 55.43.

KA NAME / SAFETY FUNCTION: IR K1 K2 K3 K4 K5 K6 A1 A2 A3 A4 G TOPIC:

RO SRO

008AK2.02	Pressurizer Vapor Space Accident / 3	2.7	2.7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sensors and detectors
009EG2.4.50	Small Break LOCA / 3	4.2	4.0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to verify system alarm setpoints and operate controls identified in the alarm response manual.
011EA1.09 011EA1.11	Large Break LOCA / 3	4.2 4.2	4.2 4.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Core-flood tank initiation Long-term cooling of core
015AA2.01	RCP Malfunctions / 4	3	3.5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cause of RCP failure
022AK3.07	Loss of Rx Coolant Makeup / 2	3	3.2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Isolating charging
025AK1.01	Loss of RHR System / 4	3.9	4.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loss of RHRs during all modes of operation
026AK3.02	Loss of Component Cooling Water / 8	3.6	3.9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The automatic actions (alignments) within the CCWS resulting from the actuation of the ESFAS
027AA2.15	Pressurizer Pressure Control System Malfunction / 3	3.7	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Actions to be taken if PZR pressure instrument fails high
029EK1.01	ATWS / 1	2.8	3.1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Reactor nucleonics and thermo-hydraulics behavior
038EG2.4.20	Steam Gen. Tube Rupture / 3	3.8	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of operational implications of EOP warnings, cautions and notes.
054AK3.03	Loss of Main Feedwater / 4	3.8	4.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Manual control of AFW flow control valves

KA NAME / SAFETY FUNCTION: IR K1 K2 K3 K4 K5 K6 A1 A2 A3 A4 G TOPIC:

	RO	SRO	
055EK1.02	4.1	4.4	Station Blackout / 6 Natural circulation cooling
056AA1.18	3.2	3.2	Loss of Off-site Power / 6 Control room normal ventilation supply fan
057AA2.05	3.5	3.8	Loss of Vital AC Inst. Bus / 6 S/G pressure and level meters
058AA1.01	3.4	3.5	Loss of DC Power / 6 Cross-tie of the affected dc bus with the alternate supply
062AG2.1.23	4.3	4.4	Loss of Nuclear Svc Water / 4 Ability to perform specific system and integrated plant procedures during all modes of plant operation.
CE02EK2.1	3.3	3.7	Reactor Trip - Stabilization - Recovery / 1 Components and functions of control and safety systems, including instrumentation, signals, interlocks, failure modes, and automatic and manual features.
CE05EK2.2	3.7	4.2	Steam Line Rupture - Excessive Heat Transfer / 4 Facility's heat removal systems, including primary coolant, emergency coolant, the decay heat removal systems, and relations between the proper operation of these systems to the operation of the facility.

KA NAME / SAFETY FUNCTION: IR

K1 K2 K3 K4 K5 K6 A1 A2 A3 A4 G

TOPIC:

RO SRO

064K6.08 Emergency Diesel Generator 3.2 3.3 Fuel oil storage tanks

073A1.01 Process Radiation Monitoring 3.2 3.5 Radiation levels

076K1.07 Service Water 2.5 2.3 Secondary closed cooling water

078A4.01 Instrument Air 3.1 3.1 Pressure gauges

078G2.4.8 Instrument Air 3.8 4.5 Knowledge of how abnormal operating procedures are used in conjunction with EOPs.

103A4.06 Containment 2.7 2.9 Operation of the containment personnel airlock door

KA NAME / SAFETY FUNCTION: IR K1 K2 K3 K4 K5 K6 A1 A2 A3 A4 G

TOPIC:

RO SRO

G2.1.42	Conduct of operations	2.5	3.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of new and spent fuel movement procedures
G2.1.45	Conduct of operations	4.3	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to identify and interpret diverse indications to validate the response of another indication
G2.2.1	Equipment Control	4.5	4.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to perform pre-startup procedures for the facility, including operating those controls associated with plant equipment that could affect reactivity.
G2.2.13	Equipment Control	4.1	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of tagging and clearance procedures.
G2.2.23	Equipment Control	3.1	4.6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to track Technical Specification limiting conditions for operations.
G2.3.12	Radiation Control	3.2	3.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of radiological safety principles pertaining to licensed operator duties
G2.3.5	Radiation Control	2.9	2.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to use radiation monitoring systems
G2.4.17	Emergency Procedures/Plans	3.9	4.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of EOP terms and definitions.
G2.4.47	Emergency Procedures/Plans	4.2	4.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to diagnose and recognize trends in an accurate and timely manner utilizing the appropriate control room reference material.
G2.4.6	Emergency Procedures/Plans	3.7	4.7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge symptom based EOP mitigation strategies.

KA	NAME / SAFETY FUNCTION:	IR	K1	K2	K3	K4	K5	K6	A1	A2	A3	A4	G	TOPIC:
004AG2.1.02	Continuous-Eod Withdrawal / 8	4.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ability to explain and apply all system limits and precautions to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior and instrument interpretation
003G2.1.7	Dropped Control Rod / 1	4.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
068AA2.08	Control Room Evac. / 8	4.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
068A2.09		4.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Saturation Margin
076AG2.2.25	High Reactor Coolant Activity / 9	3.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Knowledge of the bases in Technical Specifications for limiting conditions for operations and safety limits.
CA13AA2.2	Natural Circ. / 4	2.9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Adherence to appropriate procedures and operation within the limitations in the facility's license and amendments.

RO SRO

Ability to explain and apply all system limits and precautions to evaluate plant performance and make operational judgments based on operating characteristics, reactor behavior and instrument interpretation

Saturation Margin

Tier / Group	Randomly Selected K/A	Reason for Rejection
1/1 Q#3	011EA1.09 Changed to 011EA1.11	Unable to write a discriminatory question – please substitute another KA. This KA is for the Large Break LOCA and per the CEN for Large Break LOCA's, the SIT's are a passive system that inject when RCS pressure lowers below that of the SIT's (usually maintained at 250 psi on U-1 and 650 psi on U-2). No other action is mentioned in the EOP for LOCA regarding operating or monitoring the SIT's. <i>Utility agreed to the change.</i>
1/1 Q#4	015AA2.01 Leave As Is	Came up with a question but want to make sure I understand the KA. Does the RCP malfunction have to lead to the RCP being secured (or ALL RCP's) or can it just be a malfunction that degrades the RCP operation? <i>NRC response was that the KA could apply to a malfunction that causes RCP performance degradation or to a failure of the RCP leading to RCP trip.</i>
1/1 Q#9	029EK1.01 Leave As Is	Came up with a question but this is a tough KA to write a discriminatory question to and match the KA. We might need to look at changing the KA after you review our question or get some insight from you on where to go with this KA. <i>NRC suggested that the question could include aspects of the SG thermodynamic response to a total loss of feedwater. Utility agreed to explore that idea for the question.</i>
1/2 Q#21	028AA1.01 Changed to 028AA1.08	No RPS Pzr level trip at PSL. <i>Utility agreed to the change.</i>
1/2 Q#22	036AK1.03 Leave As IS	Fuel Handling Accident – don't really monitor for indications of criticality per the Accidents Of New or Spent Fuel AOP. However, during normal ops fuel reload, indications of approach to criticality is monitored and there are required actions if indications of criticality are present. I want to make sure I understand the intent of the KA. I can come up with a Fuel Handling Accident question but not sure about monitoring approach to criticality part (match the KA). <i>NRC clarified the KA. It is acceptable to view the KA topic as a Fuel Handling "incident" that could occur during a core reload where a Normal Operating procedure would be the reference for the question and not be restricted to those events defined in the PSL AOP for Accidents Involving New or Spent Fuel.</i>

1/2 Q#24	067AA2.08 Leave As Is	Need clarification on what “limits of the affected area” mean. Is it asking to be able to distinguish between fire zones – physical boundaries?? NRC provided clarification that the KA could include, for example, the ability to interpret/distinguish between specific fire zones and the types of fire suppression systems that the fire zones utilize.
1/2 Q#25	069AA2.02 Leave As Is	Came up with a question but I’m not sure what is meant by “verification of automatic...” part of the KA? NRC wanted to include CIS automatic actions in the question. Utility agreed to include auto actions of the Cont. Purge system as well as manual actions taken by the Containment Closure crew for example. Question will be further evaluated for level of difficulty.
1/2 Q#26	076AK3.06 Leave As Is	No high RCS activity actions in EOP at PSL (only AOP’s). KA states EOP. NRC understood the concern. It will be acceptable to use the High RCS Activity AOP as the technical reference for the question.
2/1 Q#31	005K3.06 Changed to 005K3.01	Unable to write a discriminatory question about what would be the effect of a loss of SDC on the Containment Spray system Utility agreed to the change.
2/1 Q#33	007K5.02 Leave As Is	Unable to write a discriminatory question about the evolution of forming a bubble in the pressurizer and relating it to the QT? NRC will allow the initial conditions of the question to include that the Pzr was taken solid in preparation to draw bubble. Subsequently, for example, PORV/Pzr Safety develops a leak (due to Pzr being solid then experiences a pressure transient) which discharges to the Quench Tank.
2/1 Q#37	012A2.03 Changed to 012A2.06	Unable to write a discriminatory question to satisfy both parts of the A2 ability statement (resulting from an incorrect operator action taken) Utility agreed to the change.
2/1 Q#40	022K4.03 Leave As Is	No CIS signal to Containment Coolers (specifically affecting CCW). ESF (SIAS) signal only provides start signals to the coolers. NRC agreed to allow the question to apply to a SIAS signal vice CIS signal.
2/1 Q#54	078G2.4.8 Leave As Is	No technical reference of the Instr Air AOP in any EOP at PSL. However, there is guidance in EOP-99 (that is referenced in EOP’s) on how to restore instrument air under certain conditions. NRC agreed to allow the question to implement EOP-99 appdx H guidance vice Instrument Air AOP.

2/2 Q#58	027A2.01 Changed to 029A2.03	Unable to write a discriminatory question about high temperature of Iodine Removal filter system used at PSL (HVE-1 & 2). Not designed for accident conditions. A2 ability statement to meet also. The only other Iodine removal system at PSL (non-fan) is NaOH or Hydrazine. Utility agreed to the change. The question could be based on the required valve line up to initiate/start a Containment "Mini" Purge for example.
2/2 Q#60	034A3.01 Leave As Is	Fuel Handling Equipment knowledge for RCO's 1 st one – how much detail to ask? NRC agreed to allow the question to be on basic Fuel Handling Machine operations (travel limits).
2/2 Q#65	075K2.03 Leave As Is	ICW supplies lube water to the CWP's at PSL. That's really the only interrelationship the two systems have. Is the knowledge statement asking for power supplies for the ICW pumps? Need clarification. NRC provided clarification and will allow the question to be based on ICW pp start logic, for example, with LOOP/EDG response and also include the standby ICW pp auto start logic.
SRO 1/2 Q#77	025AG2.2.40 Changed to 025AG2.2.18 Kept original KA 025AG2.2.40	None of the Tech Specs at PSL for a Loss of SDC accident had > 1hr TSAS (doesn't meet SRO criteria). Utility agreed to the change. The utility found a Tech Spec to satisfy the original KA.
SRO 1/2 Q#82	001AG2.1.32 Changed to 003AG2.1.32 Changed again to 003G2.1.7	Unable to write a discriminatory question about procedure limits and precautions related to continuous rod withdrawal. PSL CEA's are operated in manual. CEA AOP immediate actions (RO knowledge) do address abnormal CEA abnormal movement (trip unit). Utility agreed to the change. PSL AOP's do not have a section that contains limits and precautions. PSL NOP's do have a limit and precaution section but an NOP wouldn't be entered for a dropped CEA. Utility agreed to the change
SRO 1/2 Q#83	068AA2.08 Changed to 068AA2.09	Unable to write a discriminatory question about SG pressure during CR evacuation. Can't figure out an SRO only aspect of SG pressure KA discussion was tabled for further evaluation. 068AA2.09 (Saturation Margin).
SRO 2/1 Q#86	008A2.07 Changed to 008A2.05	No auto start feature for CCW pumps based on flow rate at PSL Utility agreed to the change.

<p>SRO 3 Q#98</p>	<p>G2.3.6 Changed to G2.3.14</p>	<p>Ability to Approve Release Permits. There is a question on the audit exam related to a gas release and there is an audit JPM on approving a liquid release. Not sure about overlap on exams. Also noted that there are 7 K/A's in the sample plan that deal specifically with radiation levels / radiation control / radiation monitoring.</p> <p>Utility agreed to change. NRC suggested, for example, writing the question about areas where access to would be restricted or impacted severely due to radiological concerns following an accident. Utility will work on question but may need to re-evaluate for KA match.</p>
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75 DAY SUBMITTAL

Facility: St. Lucie		Date of Exam: 3/2/2015		Exam Level: RO X SRO X	
Item Description	Initial				
	a	b*	c*		
1. Questions and answers are technically accurate and applicable to the facility.	PJ	B	ck		
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	PJ	B	ck		
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	PJ	B	ck		
4. The sampling process was random and systematic (If more than 4 RO or 2 SRO questions were repeated from the last 2 NRC licensing exams, consult the NRR OL program office).			ck		
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input type="checkbox"/> the audit exam was systematically and randomly developed; or <input checked="" type="checkbox"/> the audit exam was completed before the license exam was started; or <input type="checkbox"/> the examinations were developed independently; or <input type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)	PJ	B	ck		
6. Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.	Bank	Modified	New		
	10/3 15%/12%	22/3 28%/12%	43/19 57%/76%		
7. Between 50 and 60 percent of the questions on the RO exam are written at the comprehension/analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right.	Memory	C/A			
	34/8 45%/32%	41/17 55%/68%			
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	PJ	B	ck		
9. Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the tier to which they are assigned; deviations are justified.	PJ	B	ck		
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	PJ	B	ck		
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with the value on the cover sheet.	PJ	B	ck		
Printed Name / Signature a. Author <u>Paul Farnsworth</u> b. Facility Reviewer (*) <u>Terry Benton</u> c. NRC Chief Examiner (#) <u>Daniel M. Bacon</u> d. NRC Regional Supervisor <u>GERALD J. McLaughlin</u>			Date 3/10/2015 3/10/2015 3/11/2015 3/4/2015		
Note: * The facility reviewer's initials/signature are not applicable for NRC-developed examinations. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.					

ST. LUCIE 2015-301 45 Day Review RO and SRO (Final PW Protected 1-29) RSB and DL Rev 01

ES-401, Rev. 9

Written Examination Review Worksheet

Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

GENERIC COMMENTS:

- When using punctuation, if you use quotes for a procedure name or valve name, if you start the name for example, AOP-69.01. "Inadvertent ESFAS Actuation," was entered. There should be a comma inside the end of the quotes. See as typed above. Consistency between all questions is utmost important. **Incorporated comment**
- What is the WESTRONICS Exam Bank? **An external exam bank that has questions from previous NRC exams (all regions) by vendor .It has question search capabilities by K/A number**
-

Instructions	
[Refer to Section D of ES-401 and 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:
<input type="checkbox"/>	The stem lacks sufficient focus to elicit the correct answer (e.g., unclear intent, more information is needed, or too much needless information).
<input type="checkbox"/>	The stem or distractors contain cues (i.e., clues, specific determiners, phrasing, length, etc).
<input type="checkbox"/>	The answer choices are a collection of unrelated true/false statements.
<input type="checkbox"/>	The distractors are not credible; single implausible distractors should be repaired, more than one is unacceptable.
<input type="checkbox"/>	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:
<input type="checkbox"/>	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).
<input type="checkbox"/>	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).
<input type="checkbox"/>	The question contains data with an unrealistic level of accuracy or inconsistent units (e.g., panel meter in percent with question in gallons).
<input type="checkbox"/>	The question requires reverse logic or application compared to the job requirements.
5.	<u>Check questions that are sampled</u> for conformance with the approved K/A and those that are <i>designated SRO-only</i> (K/A and license level mismatches are unacceptable).
6.	Based on the reviewer's judgment, is the question as written (U)nsatisfactory (requiring repair or replacement), in need of (E)ditorial enhancement, or (S)atisfactory?
7.	At a minimum, explain any "U" ratings (e.g., 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. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
1	H	2-3												S	APE008AK2.02 , Bank 3818, Comprehension 1. KA appears to match.

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															2. Unit 1 3. Question appears to be ok. No problems with question. No further action taken Question is Satisfactory. DB 3/11/15
2	H	2												E	EPE009EG2.4.50, NEW, Analysis 1. KA appears to match. 2. Unit 1, 3. Need to add the noun name for Procedure in first bullet. EP-01. In quotes. 4. Not sure that I understand why Secure one pump in each loop is plausible for distractors A and C. Would it be more plausible to verify that at least one pump in each loop is stopped? Not sure that is better. 5. During question review explain why this is plausible. 6. Is this information that an RO applicant is expected to know from memory without procedures? Discuss with licensee OPS MGT to ensure this is a fair question. It appears that this should have had both trains operate and only one did. The applicant should know which train actuated. And a loss of CCW should have occurred. 7. Discuss with fixing distractors A and C. Incorporated comment # 3. Comment # 4&5, See distracter analysis for selection "A" Discuss with NRC Delete fourth bullet and below from question. Add a bullet after the first bullet stating that the crew has completed SF 5 (Core Heat Removal). Ask if SI has or has not occurred. The ask what is the required status of RCPs (all secured or 1 secured in each loop) dri 2/18/15. Incorporated NRC comments. Pf 2/25 sig mod Question is Satisfactory. DB 3/11/15

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
3	F	2-3													S	<p>EPE 011EA 1.1, Modified, Memory</p> <ol style="list-style-type: none"> Do not have the previous question so cannot evaluate the modified determination of this question. #2140 Unit 2 KA appears to match. Not sure that first part of distractors C and D are plausible. Without knowing very much about the procedure an RO should be able to determine that this is a Large break LOCA and the HPII system is not doing much as far as the helping with the LARGE break. Discuss with licensee why they believe this is plausible. This may be suitable based on the discuss I had with PF this afternoon. Recirculation Actuation Signal, 4 feet or 6 foot unit depending. <p>Appears to be ok. Re-formatted Question is Satisfactory. DB 3/11/15</p>
4	H	1-2													U	<p>APE015AA2.01, Modified 4338, COMP</p> <ol style="list-style-type: none"> KA appears to NOT match. This KA is about RCP flow and the RCP failure on how it effects RC flow. The question is about SEAL FLOW not RC flow. Discuss with licensee to understand why this was evaluated this way. Unit 2, This question while is somewhat modified, it still is basically the same question. I think the basics of the original question is still here and have not been modified. I would not consider that this question is modified. The level of difficulty went from a 2-3 to a 1-2 level of difficulty. <p>Needs to be fixed.</p>

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
																<p>Refer to ES-401-4. Enhanced question to include 2 or 3 seal failures and required action for securing pump</p> <p>Change C to "Only ONE" . Then rearrange answers so A is 1 seal, B and C are 2 seals, and D is 3 seals. Drl 2/18/15</p> <p>Incorporated NRC comments. Pf 2/25 sig mod</p> <p>Question is Satisfactory. DB 3/11/15</p>
5	H	3-4												E	<p>APE022AK3.07, NEW, COMP</p> <ol style="list-style-type: none"> KA appears to match. Unit 1. Should the sentence with the SNPO be split. The way it is written it appears that the SNPO is providing the RTGB readings and that is not true. Have licensee look at this and determine if this is ok. Or not. Are the RO applicants or in fact the SRO applicants expected to know from memory what the annunciators M7 and M28 are? This does not seem to be fair. Have licensee ensure that the OPS rep or OPS MGR looks at this to see if they agree. If they do then ok but seems kind of overboard. Need to add to procedure AOP02.03 its official noun name. Need to have the licensee explain the answer for this question. This is very difficult and cannot figure out with the explanation. WHAT ACTUAL reference will be provided? If the plant print is going to be part of the handout that should be ok but have to have the licensee actually show us what they are actually going to use. Is this question answerable with the nojk <p>Discuss this with the licensee. May have to replace it.</p> <p>Discuss with NRC. Minor revision to question and editorial changes were made.</p>	

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ES-401, Rev. 9

Written Examination Review Worksheet

Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
																Why is a reference required? An RO should be able to figure this out without it. drl 2/18/15 Need to discuss removal of reference recommendation. No other changes made Pf 2/25 Question is Satisfactory. DB 3/11/15
6	H	2-3												S	APE025AK1.01, NEW, Comp 1. KA appears to match. 2. Unit 1 , 3. Do the applicants have to interpolate between the 90 and 100 degree table. This was not done, if it were what would the number be in that situation? If that ok to do or not? Discuss with licensee to ensure we have the correct answer. What makes using 100 degrees ok and not 90 or interpolation? Is there a correct answer if someone does interpolate. Discuss with licensee methodology. 4. Is the answer correct? Not sure it is. 5. How long does this question take to answer? Is this within the time frame for the written examination? Ask licensee to ensure this is reasonable time to answer as well as: 6. Is this a JPM or a question? Discuss items above. Editorial changes made – discuss with NRC This question is fine. Drl 2/18/15 Question is Satisfactory. DB 3/11/15	
7	H	3												S	APE026AK3.02, Modified Bank 1962, Comp 1. KA appears to match 2. Unit 1 . 3. Consistency with use of periods for bulleted items. 4. Parenthesis incorporates periods etc.	

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															5. Use of periods in distractors, be consistent. 6. The stem of the question asks what is the configuration. This is what only the A distractor answers. The other three has a due to associated with the configuration. The stem needs to be adjusted to include a WHY for the answer and then distractor A needs to be changed to add a reason WHY. Discuss with licensee to ensure they understand the comments. 7. Looks like it meets the modified requirements. Needs to be fixed. Editorial changes made. Added reason to distracter"A" This question is fine. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
8	H	2-3												S	APE027AA2.15, Modified 1834, Comp. 1. KA appears to match. 2. Unit 1 3. Consistent use of periods in bulleted items 4. Incorporate in parenthesis punctuation. 5. In the second part of the question where "ACTUAL" is written, should this be in caps, underlined, bolded or something to ensure that the applicant does NOT glance over the word Actual? Ask licensee if this is necessary. If it is then lets ensure that the applicant will not miss this questions because they read it incorrectly. Ask licensee if necessary. 6. What actual position would 1110Y actually be in? is there an out of service position? Ask licensee to see if there is another position Discuss with licensee above items. If needs to be fixed then do so. Editorial changes made. Addressed comment # 3 & 5. This question is fine. Drl 2/18/15

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Written Examination Review Worksheet

Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															Question is Satisfactory. DB 3/11/15
9	H	2-3												S	APE029 EK1.01, NEW, COMP 1. KA appears to match. 2. Unit 1 3. Up until this point there are 7 Unit 1 questions as compared to 2 Unit 2 questions. Need to change some. 4. Teaching in the stem that when SG water level was low enough the reactor did not TRIP. This needs to be changed so that teaching is not present. 5. Question has two parts, however there is a second question that asks about reactor power. Need to clean up first and second questions. 6. ALSO, have to ensure that the applicants realize that there is a 5 minute wait then describe reactor power. 7. Otherwise appears to be ok. Discuss with licensee. Removed teaching from stem and made editorial changes This question is fine. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
10	H	2-3												E	EPE038EG2.4.20, NEW, COMP 1. KA appears to matches. 2. Unit 1 3. Is the cool down and depressurization done with EOP-04 or some other procedure? IF so add that name and number. 4. Punctuation inside of quotes. 5. In the first sentence after the bullets, remove the word "the" prior to step. 6. Reword the following: "A NOTE that appears ..." To read, "There is a NOTE in Appendix K that identifies the indications that may be evident if voids are present in the Reactor Vessel

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Written Examination Review Worksheet

Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
																<p>Head. IAW this NOTE (note needs to be in all caps), The acronym IAW (in accordance with) does not need an additional "with" as in the question.</p> <p>7. ASK OPS Manager if this question, the way it is worded makes sense and if the RO applicants are expected to know this from memory?</p> <p>8. It appears that there are a lot of questions that the applicants may ask. RCP are they running, in accordance with lesson plan page 14 of 28 provided state they need to be off for an accurate level indication. I would imagine that RCPs are off at this time, are they?</p> <p>Discuss if this is RO knowledge of a procedure from memory.</p> <p>Reworded question stem per recommendation. Also fixed punctuation and made editorial changes</p> <p>Rewrite question below bullets. State "The crew is evaluation RCS void elimination per 1-EOP-99, Appendix K, "RCS Fill and Drain Method of Void Elimination." WOOTF is an indication that voids are present in the Reactor Vessel Head?"</p> <p>This is still essentially a series of T/F statements, but is otherwise a good question. drl 2/18/15</p> <p>Incorporated recommendations. Pf 2/25</p> <p>Question is Satisfactory. DB 3/11/15</p>
11	F	2													E	<p>054AK3.03, NEW, Memory</p> <ol style="list-style-type: none"> KA appears to match. Unit 1 This question can be re-written to place ALL the following at the top of the stem. "the 1A and 1B AFW pump header flow control valves..." This will shorten each distractor. Does the position the control room will perform the manual

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
																action for the AFW flow control valves be provided. This can be removed. This is telling the applicant that the valves are going to be manipulated on the RTGB. It is not necessary. 5. Add the last part of distractor D, about the 1 C AFW pump to distractor A. Discuss with licensee. Makes it more plausible. 6. 7. IS VAC correct or is it vAC? 8. Otherwise appears to be ok. Addressed comments # 3 & 4 and made editorial changes Answers as written are too convoluted. Make this a 2x2. The first part is that "A&B remain throttled" or "A& B require throttling closed". Second part is " C remains closed" or " C requires throttling closed". Drl 2/18/15 Incorporated recommendations. Pf 2/25 sig mod
12	F	2												S	EPE055EK1.02, NEW, Memory 1. KA appears to match the question. 2. Unit 1 3. The stem of the question has, I believe a spurious AND in it. Should there be an AND after CET? Repositioned ok as is. 4. Is it necessary to identify by defining the abnormal temperature difference as >20 deg F. Between Thot and REP CET? Ask licensee. This is keying the applicants as to the definition of this parameter. I do not believe this is necessary. Where is this identified in the procedure? If it is not, then the > 20 deg F should not be there. Discuss with licensee. Removed 5. From the documentation provided, it seems that a difference of 10 deg. F would be sufficient to meet this requirement. Identified in 4 above. I didn't look at the procedure so I am not sure how old these are. Removal of temperature is requested. 6. Otherwise appears to be ok.	

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
14	F	2-3													S	APE057AA2.05, NEW, Memory 1. KA appears to MATCH 2. Unit 1 3. Nomenclature, use parenthesis around ...“Vital Instrument Inverter” occurs.” 4. For ease of reading separate both fill in the blank statements with a 1 and 2. Otherwise appears to be ok. Addressed comments # 3 & 4 Question is fine. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
15	H	3													S	APE058AA1.01, NEW, COMP 1. KA appears to match. 2. Unit 1 3. EOP-1 needs a noun name. 4. Use simple electrical diagram to explain how this line-up works. 5. From the material I cannot figure out what the lineup is supposed to be. Have licensee explain with system drawings. 6. Are the applicants expected to remember the 10 minutes? Ensure that the OPS MGR agrees with having this knowledge memorized. Not sure this is required knowledge. Discuss with licensee. Appears to be ok. Made editorial changes and fixed punctuation Question is Satisfactory. DB 3/11/15
16	H	3													U	APE062Ab2.1.23, Modified 2045, COMP.

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															<ol style="list-style-type: none"> 1. KA appears to match 2. Unit 2. 3. Why is it necessary to state the header is depressurized? This seems to be teaching as well as pointing the applicant to the water hammer answer. Ask licensee why this is necessary. 4. IS the information concerning the TS with two pumps on the DG information that the RO is required to know? It seems that it is not. I would believe that this information is below the line and greater than an hour TS. If this is true, why would an RO have to know this?s Discuss with licensee plausibility of RO knowledge. 5. 2B3 (4.16 kVAC) determine if you want to change the way this is written based on previous electrical questions. 6. Is the differential current lockout an 86 trip or something like that? Ask licensee. 7. The question asks what is a consequence with starting the 2C ICW pump? Each of the distractor provides the answer along with the reason for each distractor. The question does not illicit the full answer provided in the distractor. This needs to be resolved. Discuss with license 8. I need to understand the electric line up to understand this better. Use simplified diagram of electric plant to show me. CE02EK2.01, Appears that # 5 needs to be fixed. Discuss with licensee. <p>Graded as unsat because of plausibility of TS knowledge requirements.</p> <p>Revised stem to add Appendix title and altered 2nd half of answer selections</p> <p>If the C ICW pump was started IAW procedures, as stated, then B and C are not plausible. Perhaps you could discuss aligning CCW pumps too and then instead of asking "the consequence associated with performing the action of starting the 2C ICW pump in this configuration", you could just ask about the consequence associated with being in this</p>

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
																configuration." Drl 2/18/15 Re-wrote question. Pf 2/25 sig mod Question is Satisfactory. DB 3/11/15
17	F	2-3												S		CE02EK2.01, Bank 4.137, Memory 1. KA appears to match 2. Unit 2 3. Should "is" be are in the second bullet. 4. What is the noun names for 2-EOP-2. Add to distractors D. Otherwise appears to be ok. Addressed comments # 3& 4 This question is fine. drl 2/18/15 Question is Satisfactory. DB 3/11/15
18	H	2-3												S		CE05EK2.2, NEW (used part of HLC HLC 21 # 78), COMP 1. KA appears to match 2. Unit 1 3. IS this a planned evolution? Plant shutdown? I cannot tell if it is or not. 4. In the first bullet, Reactor is defined as (Rx). This is not necessary because Rx is NOT used any place in the question. 5. As for the second part of the question, each part of the distractor has a common phrase of "After the 1 A SG dries out," this can be brought up to the top and have to read it only one time rather than 4 times in each distractor. So place this in the stem of the question. 6. Additionally, separate the stem into two questions with 1 and a 2 where 1 states: which of the following describes the expected plant response: and 2. After the 1A SG dries out, what are the operator action(s) Actually the statement of "Operate the 1B ADV at saturation

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
																pressure. _____ 7. MAYBE it would be better as a fill in the blank. Either way but it has to be changed. 8. Need to add to the distractors that identify the 525 to 535 each temperature needs to have the degree F symbol, NOT just the final number. With the changes it appears to be ok. Addressed all comments Question is OK. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
19	H	3												S	APE005AG2.4.45, Modified 4192, COMP. 1. KA appears to match. 2. Unit 2 3. What is being done, reactor startup? Add procedure they should be in. A reactor Start up is in progress, 4. It seems to me that to make distractors other than the answer that the stem should have information concerning that parameter. 5. How do we speak of PDIL if the plant is not at power? This does not appear to be plausible. Discuss with licensee to understand why this is considered plausible. D. Lanyi stated that this is plausible because 6. If you do not have parameters associated with the other alarms how do you know that the distractors are plausible? Discuss with licensee. 7. Not sure that Distractor B is plausible when would an auto rod inhibit Otherwise appears to be plausible. Discuss distractor A Added procedure reference and plant parameter	

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															Question is ok. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
20	F	2-3												S	APE024AK2.04, Modified 5961, Memory 1. KA appears to matches. 2. Unit 2. 3. Loss of offsite power, LOOP, Question 13 defines this as a LOOP. Should this be identified the same way? 4. IF an emergency boration was required, what operator actions would be required to establish a flow path? Can it be written this way to remove some of the extra non-required extraneous words? The first question should only be associated with the Start the 2C Chg pump and 1. This should flow on the same line, not a separate line. 5. The second question does not have anything to deal with the very first condition. Re-write to see how this looks. It has to be separate. 6. What about using the Unit 1 data for the second part of A and C for the 18 second load block? Discuss with licensee for the change. The 2 C Chg pump breaker would open and then re-close 18 seconds later." Or something like that. Discuss. Look at changes, Addressed comments # 3, 4 & 5. No further action taken Question is fine. drl 2/18/15 Question is Satisfactory. DB 3/11/15
21	H	2-3												S	APE028AA1.08, Modified 4194, COMP 1. KA appears to match. 2. Unit 2. 3. Place each distractor answer on a separate line. Easier to read. 4. IN the stem second question where it discusses "Level" position should the words Key and Switch be capitalized? This is the

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Written Examination Review Worksheet

Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															way it is written on 2-AOP-01.10. This is also written "B/U INTLK B/P Key" on step 5 and LEVEL is all caps. Page 38 of 39. 5. Therefore, LEVEL should be in caps. See page 38 of reference material provided. 6. What is the Convention for the use of ALL in distractors, CAPs all like ALL? Or is this not a convention? Otherwise appears ok. Addressed comments # 3, 4 & 5. No other actions taken The question is fine. drl 2/18/15 Question is Satisfactory. DB 3/11/15
22	H	2-3												E	APE036AK1.03, Modified 4406, COMP 1. KA appears to 2. Unit 2 3. What procedure are they using with this reload process? Is it necessary to identify what procedure being used? 4. During this process, would RE be the ones to report that counts had more than doubles? 10 cps to 24 cps? Would it not be the RO in the Control room? 5. Need punctuation after title of NOP-67.05, "Refueling Operation, "... this is a generic issue to have the appropriate punctuation used. 6. IS this RO required knowledge for Refueling? Ask OPS MGR to ensure it is. 7. This could be re-written to have two separate sentences. Which one of the following: a. Describes the existed condition (Expected or Unexpected) AND b. In accordance with 0-NOP-67.05, "Refueling Operation," for the stated conditions. What does the licensee think about this? Discuss

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															8. Would be easier to read, at least I think so. Procedure is in Question portion. Fixed punctuation. Did not address comment #7. Discuss with NRC As written, A and B are not plausible. Reword the question to ask what the procedure requires. Get rid of Expected and Unexpected. Drl 2/18/15 Incorporated recommendations. Pf2/25 sig mod Question is Satisfactory. DB 3/11/15
23	F	2-3												E	APE059AG2.4.35, NEW (HLC C20 NRC Q 22)(STATES this is ONE of FOUR from the last two exams), Memory 1. KA appears to match 2. UNIT 1 3. This question asks SUBSEQUENT steps! IS this something the OPS MRG agrees is RO testable material? Ask OPS MGR. 4. Add comma inside quotes after procedure noun name. "..... Liquid, " which one... 5. Put valve noun names in quotes and use correct punctuation. 6. Distractor C is not clear and potentially could be an additional correct answer. The way this is written it looks like the Waste pump can be stopped at the Local Control panel and then the valve has to be close, it does not read that the valve is on the Local Control panel. This is misleading. 7. Based on the answers, the procedure states local control BOX, nothing about the panel, is the pump stopped at the local control panel, meaning in the plant or the BOX. Let's be clear in what we mean based on the procedure and the lesson plan. Re-write this to be clear. Addressed comments #4, 5, 6 & 7. Discuss with NRC Question is fine. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
24	F	2												S	APE067AA2.08, NEW, Memory,

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															<ol style="list-style-type: none"> KA appears to match. UNIT 1 Is Distractor a TRUE statement for Unit 2? If it is not make it true for unit 2. Distractor A is not much different than B, they both automatically discharge. Maybe using for A, Usable links must melt for automatic discharge Then for B, what causes the actuation of the system, for automatic operation? Use that for the automatic discharge. Smoke particles with Ionization Heat detectors. Then use the same idea for C and D. <p>Unsat because it appears all the distractors have flaws. Reworded each answer selection for consistency and plausibility Question is fine. drl 2/18/15 Sig mod Question is Satisfactory. DB 3/11/15</p>
25	H	4-5						X						U	APE069A A2.02, NEW, Comprehension. <ol style="list-style-type: none"> KA appears to match. Unit 1 Looking at punctuation, all punctuation that follows words in quotes should be inside the quotes. Looking at the bullets for 4 bullets in the stem. Following valve," should be written like this. If this is not clear please let me know. I am asking for consistency. Is it necessary to identify the valves are upstream or downstream? Is this something the applicant should know from memory? Maybe not since the system is not really something used all the time. Discuss with the licensee.

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															5. If we use this question as is, the answer, D, needs a space or two starting with the word "However." 6. This question appears to have specific knowledge of TS requirements for containment isolation. TS 3.6.3.1, and TS 3.6.1.1 appear to have greater than 1 hours TS evaluation, 31 day and that is NOT RO knowledge. This question appears to be beyond the knowledge level of the RO position. Ask licensee if this is or is not a good evaluation. If it is, this warrants an evaluation of U. 01/28/2015 1. Discuss why this is basically the same. No changes made. Refer to ES-401-4. Discuss with NRC Remove 6 th bullet. Ask what is the required action per TS. A. None since V6554 is operable. B. V6555 needs to be closed only C. V6555 needs closed and de-energized D. V6554 needs closed but remains energized since it is still operable. Dri 2/18/15 Incorporated recommendations. Pf 2/25 sig mod Question is Satisfactory. DB 3/11/15
26	H	3				X								E/U	APE076AAK3.06, Modified 4160, Fundamental 1. KA appears to match 2. UNIT 1 3. Punctuation of bullets in the stem 4. Second bullet put hard return to have the entire procedure on the second line. 5. Put a 0 in front of the ".15" 6. There is a dash between DEQ Xenon-133 and NO dash between DEQ Iodine 131, add the dash to the bullet. 7. Put quotes around the noun name for Flash tank Divert Valve V6307 to Flash Tank. Why is it necessary to have RTGB-15 in

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Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															this distractor? 8. Distractor C is NOT plausible because the applicant know that there are NO 1 hour or less time requirements for this to occur. Since they do not exist it is NOT a number the RO is responsible for, therefore this is NOT plausible. 9. Distractor D, is the chemistry of the IX that such that it can remove gaseous I-131 from the RCS? Not sure this is plausible. Discuss this with licensee. Potentially unsat based on two implausible distractors. Addressed comments # 3, 4, 5, 6, 7 & 8. Need to discuss 9 with NRC Remove TS from answer C. Otherwise OK. Dri 2/18/15 Incorporated recommendations. Pf 2/25 Question is Satisfactory. DB 3/11/15
27	F	2-3												S	CA16AK2.1, Bank 1285, Memory, 1. KA appears to match 2. Unit 2 3. Question appears to be ok. Question is Satisfactory. DB 3/11/15
28	H	3												S	003K1.10, Modified 4055, Comp. 1. KA appears to match. 2. Unit 1 3. Start above question with "Based on the conditions above, which ONE of the following could result if one RCP is started. 4. Use of periods in each of distractors except D which does not have a period. Be consistent. 5. Is it necessary to identify what procedure the plant is following at this time? Discuss with licensee. Otherwise appears to be ok.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															<p>Addressed comments # 3, 4 & 5</p> <p>Question is OK. Drl 2/18/15</p> <p>Question is Satisfactory. DB 3/11/15</p>
29	H	2-3												S	<p>004K5.30, Modified (HLC 20 # 30), Comp</p> <ol style="list-style-type: none"> KA appears to match Unit 1 Generic, Place all noun names of procedures or valves in quotes and put commas and periods inside the quotes. In bullets 3 and 4, a comma is necessary in the quotes following the valve noun name. If not clear call and ask. In first sentence, HCV-3657. ... "were" should be "is." Suggest that we use "RCS temperature will" then use rise and lower. Vice rises and lowers. Discuss to see if this is ok to do or not. Please provide a system diagram to discuss the system operation. A simple diagram. <p>Appears ok with changes above</p> <p>Addressed comments # 3, 4, & 5</p> <p>Question is ok. Drl 2/18/15</p> <p>Question is Satisfactory. DB 3/11/15</p>
30	H	3												S	<p>005K2.01, Modified 2549, Comp</p> <ol style="list-style-type: none"> KA appears to match Unit 2 Meets modified requirements. Provide simple electrical diagram to see how this is laid out. Appears to be ok. <p>Appears to be ok</p> <p>Addressed comments # 3, 4 & 5</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only				
31	H	2-3													S	Question is Satisfactory. DB 3/11/15 005K3.01, NEW, COMP 1. KA appears to match 2. Unit 1 3. In the explanation there is an abbreviation AW, should this be IAW? 4. IS flow instrument FI-3306 the FE on the provided diagram after the flow exits the Heat IX and the bypass of the Heat IX? 5. This looks like it is ok as is Addressed comments # 3 & 4 Question is Satisfactory. DB 3/11/15	
32	H	3													S	006A2.12, Bank 4009, Comp 1. KA appears to 2. Unit 2 3. Quotes 4. Are the RO applicants expected to be able to pick what procedure the crew should be in? Make sure the OPS Mgr agrees with this. Discuss with them. 5. Have licensee use the reference material to show me how they came up with this answer. And explain if the RO applicants are expected to also know how to do this. 6. Otherwise appears to be ok, I just need to know how to do this. Addressed comment # 3. Will address comments 4 & 5 with NRC Question is fine. drl 2 2/18/15 Question is Satisfactory. DB 3/11/15	
33	H	3												X	S	007K5.02, New, Comprehension. 1. KA appears to NOT match. This question while a valid one does not appear to be what the KA is asking for. The KA asks for the method for forming a bubble in the PZR, and not the	

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															calculation of the temperature drop and thus the tail pipe temperature calculation. 2. Unit 1 3. Will the entire steam table be presented to the applicants? I would think it would need to be. Make sure with licensee. 4. Question needs to be a closer match to the actual KA. 01/28/2015 1. Question was not changed . What is going on with this? What am I missing? KA still does not match question. 2. Was expecting to see a totally new question. Discuss with licensee to see what I am misunderstanding. Refer to ES-401-4. No action taken CE agreed to minimal K/A match. Question is ok. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
34	H	2-3												S	008K3.01, Modified bank 4011, COMP 1. KA appears to match. 2. UNIT 1 3. Why is it necessary to identify that the LS-14 fails low and that caused the alarm? Why not just say that the annunciator comes in? Have licensee explain why it is necessary. If it is not necessary remove it from the stem. 4. NO system description provided how this system works. I need the licensee to teach me why and how this system works. I do no remember how this system is supposed to work and how unit 1 and Unit 2 are different. Please describe during exam review. Otherwise appears to be ok. Discuss comments with NRC

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															Question is ok. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
35	F	2				X								S	010K4.03, NEW (HLC 21 NRC Q38 changed to Unit 1), Memory 1. KA appears to match 2. UNIT 1 3. In the stem of the question, directly is not capitalized, please somehow signify the directly so the reader does not miss or confuse this with the other DIRECTLY in the question. WE want to make it clear as possible for the applicants. 4. Also signify the word "open" by using caps or underlining or bolding so the reader does not miss this expectation. 5. IS LOW RANGE the same as LTOP? The material provided does not discuss Low Range. 6. The actual answer for 1 is RPS high pressurizer pressure bistables. In the trip position. Need to change distractors A and C first part to this. 7. Not so sure I like the second answers for B and C. Why 8. This is the second repeat for 2 of 4 allowed repeat from the last two examinations. 9. The HLC 21 exam Q 38 was not provided. Should have this also to see what changed from Unit 2 to Unit 1. Addressed comments # 3, 4, 6. Will provide Q38 HLC 21 This question is ok. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
36	H	2-3												E/S	0112A1.01, NEW, COMP 1. KA appears to match. 2. UNIT 1 3. The question identifies that a Reference will be provided, however, the area where the reference is normally identified in the question form, states NA. So not sure what if any reference is going to be provided. Licensee to verify if there is a reference

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															provided. Otherwise appears to be ok. Added reference to question Is reference required. This looks like RO knowledge without a reference. Drl 2/18/15 Discuss with NRC. No changes made. Pf 2/25 Question is Satisfactory. DB 3/11/15
37	H	2-3												S	012A2.06, NEW, COMP 1. KA appears to match. 2. Unit 2 3. What procedure are they in to begin with? Is that necessary to have in the information? 4. Quotes around procedure names. 5. Wording for the 2 A differential Current alarm "Occurs!" Is this worded as the control room would say it? 6. Use of periods in each distractor, consistency 7. Rather than say STAY critical, would it be better should remain critical. Use "remain" or say should not have tripped. 8. What is the fundamental difference between the second part of distractors A and B. They look to me to be almost the same. If it is found they are the same, one of them needs to be changed. Otherwise it appears to be ok if A and B are truly different. Discuss with licensee to better understand. Addressed comments # 3, 4, 5, 6, 7. Discuss #8 with NRC Question is ok. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
38	H	3	X			X							X		013A2.01, Modified (HLC211 Q 43), COMP 1. KA appears to

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															2. Unit 2 3. Is it necessary to state that the 2B CS pump failed to start on the CSAS? 4. Separate each distractor into 2 lines. 5. How does the KA match with knowledge of the "basis" of the procedure? Also, why are we asking the RO a basis question, they are not required to know this. 6. Additionally, the way the question is worded the expectation is what does the crew have to do to meet the safety function or the reason why the safety function is met. This is not covered by asking what the basis is. Discuss with licensee. Evaluated as Unsat until discuss with licensee. Addressed comments # 3, 5, & 6. Discuss #6 with NRC Question is ok as revised. Dri 2/18/15 Question is Satisfactory. DB 3/11/15
39	H	3												S	014A4.01, Bank 5190, Comp. 1. KA appears to match 2. Unit 2 3. In the given conditions, should state a LOSP has occurred. We don't have to tell the applicants the Rx tripped because of this. They should know that from the first statement. 4. Otherwise appears to be ok. Addressed comment # 3 Question is Satisfactory. DB 3/11/15
40	F	2-3												S	022K4.03, New, Fundamental. 1. KA appears to match 2. Unit 2 3. Appears to be ok. Question is Satisfactory. DB 3/11/15

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
41	F	2-3													S	026A3.01, Bank 1850, Fundamental 1. KA appears to match 2. Unit 2 3. Does SE-07-3B need to be defined? 4. Add to the last bullet, started manually by the RCO. 5. Otherwise appears to be ok. Addressed comment # 3 & 4 Question is Satisfactory. DB 3/11/15
42	F	3													S	026G2.2.42, New, Memory 1. KA appears to matches 2. Unit 2 3. Add to the stem the noun name for 2-OSP-07.04A. 4. In the stem put the LCO like this LCO, "4.6.2.1." 5. Let's make sure and ask OPS MGT if the RO is required to Know from memory the surveillance requirements, ask again. 6. Otherwise appear to be ok. \ Addressed comment # 3, 4. Discuss # 5 with NRC Discuss with NRC. No changes made. Pf 2/25 Question is Satisfactory. DB 3/11/15
43	F	2-3													S	039G2.1.28, NEW, Memory 1. KA appears to match 2. Generic Unit 3. Appears to be ok. Question is Satisfactory. DB 3/11/15
44	H	2-3													S	059K3.04,Bank 1074 (HLC21 # 45, this is the 3 rd of the 4 allowable overlap questions allowed), COMP.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															<ol style="list-style-type: none"> KA appears to Unit 1 Is the applicant expected to assume that there is ONLY one MFP running to begin with? I think that should be stated if it is in fact true. Ask licensee to make sure there is no confusion concerning the initial plant conditions. I do not believe that distractor D is plausible. S/G level increases is plausible. The plant has experienced a loss of feed. No more feed and level starts to increase? I eliminated this because of that. Can we come up with another distractor, discuss with licensee. Otherwise appears to be ok. <p>Addressed comment # 4. At 60% power, 2 MFW pps are necessary Question is ok as revised. Drl 2/18/15 Question is Satisfactory. DB 3/11/15</p>
45	H	2-3												S	061K2.01, Significantly Modified 670 (HLC 21 Q 49), COMP <ol style="list-style-type: none"> Appears to Unit 2 Does the word "immediately" need to be in quotes or underlined so the applicants do not miss reading this. Ask licensee. Place a comma or use some kind of punctuation to separate the equipment and the power supply. It is hard to read, for me at least. If licensee thinks it is okay as it then leave it as written. I would suggest to separate the two answers so that the second answer is NOT split across part of the first line and on the second line. Discuss Otherwise appears to be ok. <p>Addressed comment # 3 & 5. Will discuss comment # 4 with NRC Question is ok as revised. Drl 2/18/15 Question is Satisfactory. DB 3/11/15</p>
46	F	2-3												S	062A1.03, New, Memory <ol style="list-style-type: none"> KA appears to

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															2. UNIT 2 3. Add noun name of the 2A3-2A2 breaker in bullet 2. 4. Bullet 4 punctuation after Train A," put a comma inside quotes. 5. On last bullet instead of on use found on. 6. First line of stem, us comma after the procedure number. 7. Distractors A and B are not plausible because when synchronizing I do not believe there is anything that is done is the fast direction. Is there? IF NOT then this is not plausible. Need to find something else to evaluate. MAYBE slow in the fast direction could be used. 8. Put a comma between the breaker name and the bus voltage. 2A3 YO 2A2, 4.16v bus. In this case VAC is not used as it was in other electric bus power designations. Be consistent . Maybe can use slow in the fast direction for first part of A and B. discuss with licensee. I made this an E vice a U Addressed comment # 3, 4, 5, 6, & 8.. Discuss comment # 7 with NRC Question is ok as revised.drl 2/18/15 Question is Satisfactory. DB 3/11/15
47	F	2-3												S	063K4.03, NEW,FUND 1. KA appears to match 2. Unit 1 3. Appears to be ok Question is Satisfactory. DB 3/11/15
48	F	2-3												S	063A3.01, NEW, Memory 1. KA appears to match 2. Unit 1 3. Stem needs to be plural because distractor C has two

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only				
49	H	2-3													S	064K6.07, NEW, COMP 1. KA appears to match 2. Unit 2 3. From the stem, how does the SNPO know that the relief valve failed open and reseated? 4. Are ROs required to KNOW the determination of OPERABILITY for the DG based on the air receivers? I do not believe they are. Ask OPS MGR if this is allowable. Where does this operability determination come from? Could not find with material presented. Get OPS MGR to write in email this is RO knowledge. Generic, all questions that OPS MGR or rep is asked to ensure that ROs are required to know this information this is documented in an email to Paul Farnsworth. 5. Lower level analysis, almost a memory. Not very high analysis 6. Put the two part answer for each distractor on separate lines. Otherwise appears to be ok. Addressed comment # 3. Will discuss comment # 4 with NRC Question is ok as revised. Drl 2/18/15 Question is Satisfactory. DB 3/11/15	
50	F	3													S	064K6.08, NEW, Memory	

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
																1. KA appears to match 2. UNIT 1 3. HOW is this question determined to be fundamental. There are some analysis that has to be done if the applicant cannot remember whatever they are expected to remember to answer this question. I do not believe this is fundamental knowledge. Is there someplace that this information is provided so that an applicant can read this analysis? Show if available. 4. Are the RO applicants expected to know from memory the TS 3.8.1.1, ask OPS MGT to verify this is correct. 5. For stem, put the "AND" on a separate line space, then put the last question. For example XXXXXXXX: AND IF a Loss of Offsite Power (LOSP) were to occur, what would be the expected system result? If this is not clear ask. 6. Distractor D. After the word "gravity" there is one to many character spaces before "when" starts, remove this character space. \ Discuss the above with the OPS MGR or representative to determine the above questions. DFO pumps are part of the LCO above the line. Also basic system knowledge Incorporated comment # 3, 5 and 6 Will change to comprehension/analysis Question is ok as revised. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
51	F	3												S	073A1.01, NEW, Memory 1. KA appears to match.	

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															2. Unit 1 3. Capitalize the word ONLY in distractors A and B and the word BOTH in distractors C and D. Generically done this way in other questions. 4. Is this information the RO is expected to know from memory? Verify with the OPS MGR and obtain email if the OM agrees with this expectation. Otherwise appears to be ok. Revised question to incorporate comments Discuss with NRC – Ops Rep says RO knowledge Ok as revised. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
52	F	2-3												S	076K1.07, NEW, Memory 1. KA appears to match. 2. Unit 1 3. There is one to many character spaces in Distractors C and D second part, after Water and before Heat. Need to remove one of them; 4. Appears to be ok. Revised question to incorporate comments Question is Satisfactory. DB 3/11/15
53	F	2-3												S	078A4.01, Modified Bank 4391, Fundamental 1. KA appears to match 2. UNIT 1 3. Are these two annunciators in the control room? If they are say so. 4. Meets modified requirements. 5. Distractor C has an extra character space after the word “cross-tie” and before from. Remove this space.

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only				
54	H	3													S	078G2.4.8, Modified Bank 4161, Comp 1. KA appears to 2. Unit 1 3. Change the noun name for 1-EOP-09 to read as procedure title actually does. 4. Punctuation inside quotes. 5. Action in stem should be action(s) 6. Punctuation inside the quotes in distractors and comma's also in quote in distractor C prior to Section 2. Like "....Trip Actions, Section 2." 7. Otherwise appears to be ok. Revised question to incorporate comments OK as revised. drl 2/18/15 Question is Satisfactory. DB 3/11/15	
55	F	2				X									S	103A4.06, New, Fund. 1/29/15 drl 1. K/A is met. 2. Change A and B 1 to In Modes 1 – 4 and Mode 6. That is more plausible. Revised question to incorporate comments OK as revised. Drl 2/18/15 sig mod Question is Satisfactory. DB 3/11/15	
56	H	3													S	001K3.02, Bank, Comp. 1/29/15 drl 1. K/A is met. Question is Satisfactory. DB 3/11/15	
57	F	2						X							S	017K6.01, New, Fund. 1/29/15 drl 1. K/A is marginally met. 2. The first part of the question is a GFE question. 3. The second part borders on trivia. Why would an RO need to	

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															have that information memorized? Isn't there something more significant to test? Comment #3: Wouldn't classify this as trivia. This is a TS compliance topic. This topic is covered in the Ops Policy. This is something RO's sign for on daily and monthly surveillance checksheets for minimum operability requirements of this system. Changed question to ask MINIMUM required operable channels/core quadrant If Ops Management is OK with this knowledge requirement, than this is acceptable. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
58	H	3				X								S	029A2.03, New, Comp. 1/29/15 1. K/A is met. 2. Add "Startup operations and the associated required valve lineups" to K/A statement. 3. C is not plausible. An operator would never think of using an EOP for a normal evolution. Revised question – discuss with NRC OK as revised. Drl 2/18/15 sig mod Question is Satisfactory. DB 3/11/15
59	H	2				X			X					E	028A4.03, New, Comp. 1/29/15 drl 1. K/A is met. 2. An NLO could answer this question. Why not ask how to do something on the panel in the control room. As written, C does not seem plausible. Revised question – discuss with NRC Change second part of question to read ""Containment hydrogen concentration can be monitored ____; and make the second part of A&B read "EITHER in the Control Room or locally in the Hydrogen Analyzer Cubicles" Use that only if it is accurate. Drl 2/18/15 No changes made. Recommendation not accurate. Pf 2/25 Question revised.

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
60	F	3-4	X											S	Question is Satisfactory. DB 3/11/15 034A3.01, New, Fund. 1/29/15 drl 1. K/A is met. 2. Reference the procedure in use during fuel movement. Added procedure number OK as revised. Drl 2/18/15	
61	F	3												S	035K1.12, Bank, Fund. 1/29/15 drl 1. K/A is met. 2. Reference the procedure number in use for the test. This would allow the ZMBP interlock to be activated. Added procedure reference number OK as revised. Drl 2/18/15	
62	H	3				X								S	041K5.01, New, Comp. 1/29/15 drl 1. K/A is met. 2. A and C are not plausible. Unless you've changed your SBCS there is nowhere in the scheme do you have valves maintaining for a specified .time and then changing position to maintain a different value. Post EPU this is the way SBCS works on a rx trip OK, I stand corrected. Drl 2/18/15	
63	H	3												S	071K4.06; Mod., Comp. 1/29/15 drl 1. K/A is met. 2. Must be Unit 2 question to meet K/A.	
64	H	2												S	072A1.01; New, Comp. 1/29/15 drl 1. K/A is met. 2. Unit 2 question.	
65	F	2				X	X							E	075K2.03, Bank, Fund. 1/29/15 drl 1. K/A is somewhat met. 2. Don't need third bullet. Just state that you are aligning the 1C	

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															<p>ICW pump IAW 1-NOP-21.03C.</p> <p>3. D is not incorrect, this would just require entry into a TS LCO. Clarify that all other swing components are currently in standby and then ask for the most desirable electrical alignment. Or give them that the A charging pump is OOS and the B pump is caution tagged with minimize use due to high packing leakage. Then ask the same question, except this time the electrical alignment will stay on the A side. That might be a more insightful question, because having the AB busses powered from different sides is not very plausible. This would also become a higher level question.</p> <p>Discuss NRC comments – driven by validation issues. Refer to distracter analysis for explanations.</p> <p>The question as asked can be answered by any ANPO. This is bordering on LOD < 2. There is little discernment associated with this question. You might as well just ask "What is (are) the power supplies for the 1C ICW pump?" The fact that you state that you are using an NOP to align the buses would be enough to let everyone know that everything is aligned B. Perhaps if you stated you lost the B and had to start the C in place of the ICW pump, then asked what the ONP would have you do, it would be better. Drl 2/18/15</p> <p>Re-wrote question. Pf 2/25 sig mod Question is Satisfactory. DB 3/11/15</p>
66	3	F												S	<p>G2.1.42, New, Fund. 1/29/15 drl</p> <ol style="list-style-type: none"> K/A is met. Unit 2 question. Are you certain this is a new question? <p>Modified from exam bank now referenced Question is Satisfactory. DB 3/11/15</p>
67	3	H												S	<p>G2.1.45, Mod, Comp. 1/29/15 drl</p> <ol style="list-style-type: none"> K/A is met. How was this modified? <p>Will bring exam bank question 3981 Question is Satisfactory. DB 3/11/15</p>

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
68	2	H				X									E	G2.2.1, Bank, Comp. 1/29/15 drl 1. K/A is met. 2. D is weak. Why do you consider it plausible? Changing the critical boron concentration is plausible but it would be incorrect borate to achieve criticality within +/-500 pcm in the middle of a startup with a reactivity anomaly. Boration/Dilution is performed earlier in the startup process. I agree that it would be incorrect, but why do you consider it plausible? Drl 2/18/15 Adding boric acid is a negative reactivity insertion which is plausible but not procedurally correct. Pf 2/25 Question is Satisfactory. DB 3/11/15
69	2	F													S	G2.2.13, New, Fund. 1/29/15 drl 1. K/A is met. 2. Pure memorization Question is Satisfactory. DB 3/11/15
70	2	F				X									S	G2.2.23, New, Fund. 1/29/15 drl 1. K/A is met 2. Is an AR required when DS 29 or 30 is written? If so, that should be added to the answer to make A and B more plausible. Comment #2, AR not required per Ops Rep Question is OK. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
71	2	H				X									S	G2.3.12, New, Comp. 1/29/15 drl 1. K/A is met. 2. If I was not sure between B and D, I would choose B because it seems to be a subset of D. I believe what you are trying to say is that the entry can be made and power changes may occur as long as Mode 1 is not entered. 3. Rephrase C to say all Regulating Rods must be inserted. Made changes as noted in comments 2 & 3. OK as revised. Drl 2/18/15 sig mod Question is Satisfactory. DB 3/11/15

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
Q#	1. LOK (F/H)	2. LOD (1-5)	Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only	6. U/E/S	7. Explanation
72	H	3				X								S	G2.3.5, New, Comp. 1/29/15 1. K/A is met. 2. Question as written is confusing. First, make it clear that RM-23P is the portable rad monitor. Second change the question to read "When the RM-23P is placed in service, which ONE of the following describes (1) the Control Room Alarm Function and (2) the location that the "B"MSL" rad monitor can be read. Then adjust the answers accordingly 3. C and D (2) don't make a lot of sense, if you put the portable rad monitor in service why would you not be able to read the indication there? 4. C(1) is questionable. If you have indication in the MCR, why would you not have alarm ability? Revised question to incorporate all comments OK as revised. Drl 2/18/15 sig mod Question is Satisfactory. DB 3/11/15
73	F	2												S	G2.4.17, New, Fund. 1/29/15 drl 1. K/A is met 2. No references Question is Satisfactory. DB 3/11/15
74	H	2										X		S	G2.4.47, New, Comp, 1/29/15 drl 1. K/A is NOT met. The question is supposed to test their ability to diagnose and recognize trends 2. EPIP-01 provided Comment #1: reworded stem so that the applicant must use indications to diagnose the event rather than tell them what the leak rate is and to determine that it is a LOCA rather than SGTR or ESD. This question was written from the perspective of a EPIP communicator which can be an RO. OK as revised. Drl 2/18/15 sig mod Question is Satisfactory. DB 3/11/15
75	H	3				X								E	G2.4.6, Bank, Comp. 1/29/15 drl 1. K/A is met. 2. Subcooling and ECCS flow curves references provided.

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			Stem Focus	Cues	T/F		Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															3. Not sure why someone would consider C with pressurizer so full and filling. Comment #3: lowered prz level to 55% to make "C" more plausible (Pzr normal band 60-70%) A seems to be a subset of D (or vice versa). Also since the pressurizer is filling and all temperatures are lowering, someone choosing to get more ECCS flow © seems improbable. Drl 2/18/15 Re-wrote distractors. Pf 2/25 sig mod Question is Satisfactory. DB 3/11/15
SRO ONLY Questions															
76	H	2-3				X								S	APE008AA.2.25, NEW, COMP. 01/20/2015 1. KA appears to match. 2. Unit 1 3. The first part appears to be ok with selection of procedure. 4. Second part of the question distractors is NOT as easy to describe. This does not seem to be something the SRO has to ponder upon with the TS being provided. Basically, this appears to be a direct look up with the TS attached. 5. I do not believe there is much to determine when two of the three Action steps provides the 4 hours and 30 hours. 6. Explain which TS B or C is actually being referenced? 7. Do not see why anyone would select distractors C or D with ONLY in the distractors. Is this a possible answer? Discuss with licensee. 8. Can the question be provided without the TS? I realize this is not a requirement for the ROs to know action items greater than 1 hour, however, the SRO potentially could be asked to recall this without the reference. Ask OPS representative if this would be ok to do. Need to discuss plausibility of C and D second part. Comment #6: paragraph a, b & c are supplied as a reference. For selections C & D, this TS action applies (be in Cold Shutdown within

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
																<p>30 hours) for Pressure Boundary Leakage. It could be plausible for the applicant to interpret leakage through a code safety or PORV as pressure boundary. Discuss with NRC</p> <p>OK as written. Drl 2/18/15</p> <p>Question is Satisfactory. DB 3/11/15</p>
77	H	2-3												S	<p>APE025AG2.2.40, New, Comp</p> <ol style="list-style-type: none"> KA appears to match Unit 1 Is it necessary to have the part of the stem that asks "For the given conditions, ..." I do not believe that this is necessary. Ask licensee to see if this can be deleted. What is the significance of using the level of 60 ft? I am not sure why this was selected. Have licensee explain. The paragraph that starts with "With the Refueling ..." does not have to have that NO SDC cooling loops is in operation. This can be deleted. The applicants should understand this from the initial conditions presented. This part can be deleted. The second question concerning the consequences. Please find a way to ask this without providing teaching in the stem. It is not necessary to state the loss of sufficient RCS recirculation through the core. This is teaching. Try to shorten this without this teaching. <p>Discuss with licensee.</p> <p>Comment #3 Will review with Ops-deleted</p> <p>Comment #4: This is the normal refueling cavity level. This can be assumed??</p> <p>Incorporated comments # 5 & 6</p> <p>Discuss with NRC</p> <p>OK as revised. Drl 2/18/15</p> <p>Question is Satisfactory. DB 3/11/15</p>	

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only				
78	F	2-3													X	S	<p>APE026AA2.05, NEW, Fund</p> <ol style="list-style-type: none"> KA appears to MATCH Unit 2 Not sure that in the first question that 1C is appropriate, should this be 2 C CCW pump since this is a Unit 2 question? Ask licensee if this is true. Not sure this is SRO only. While the procedure provides the way to do this, the RO's should also know this from the way the system is designed. Why is this SRO ONLY? Have licensee provide a diagram to show this physical piping line up. I have trouble visualizing this with what is going on. During discussion at the region. The second part of the question is most definitely RO knowledge. The 19000 gpm is the max flow rate through the tube side. There is a step 4.5 of PNLs that shows that the maximum flow through a single ICW pump is 18,500 gpm. I would rather use that number than 19000 gpm. It is more operationally valid and makes more sense than the 19000. Discuss with licensee. <p>Discuss with licensee if this is SRO only. Incorporated comments #3, 5 (will provide drawing) & 6. Discuss with NRC, Comment #4: Review discussion on page 2 of question (comment section) for SRO Only justification. OK as revised. Dr1 2/18/15 sig mod Question is Satisfactory. DB 3/11/15</p>
79	H	3														E	<p>EPE055EA2.02, NEW, COMP.</p> <ol style="list-style-type: none"> KA appears to match. Unit 1 Is it necessary to have the MAXIMUM time because the time limit is 60 mins or less. Or as the table puts it as less than or

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															equal to 60 min. 4. Why are we not using for the first part the Unit 2 vs the unit 1 numbers and instead of using the 4 hour mark. Discuss with the licensee. The time critical action list for Unit 1 shows 60 and Unit 2 shows 30. I would think that would be better to use than the 4 hour time limit. 5. What does it mean as the unit is the DC coping unit? I forgot, Please, have licensee explain. 6. Discuss why SRO only. OK. I guess. Discuss the use of 30 vs 4 hours. Incorporated comments. Discuss with NRC Comment # 5: DC coping means that DC powered components were designed into the system to cope with a loss of one Safety DC bus This is close. The second part needs to be reworded. As written, I would always choose open because I know I need steam flow to induce NC. I think what you are trying to ask is is there too much cooling (do you need to open the ADVS more or less). Drl 2/18/15 Incorporated recommendation. Pf 2/25 Question is Satisfactory. DB 3/11/15
80	H	3												S	056AG2.4.30, MODIFIED BANK 4049, COMP, 1. KA appears to match. 2. Unit 1 and 2 3. Licensee did not provide the Bank question this was modified from. This should have been in the package. Cannot verify if this question meets modified requirement. 4. From the question, it looks like we are asking to use the two parts in the distractors, the First as being Unit 1 and the Second being Unit 2? IS this correct? IF so, please add to each distractor Unit 1 and Unit 2, where it belongs. 5. NEXT time please add the appropriate EPIP section, to look at

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															rather than having to find it in the material. 6. Should there be a classification for each Unit at each time? I am not sure the way this is written is appropriate for both units. Discuss with licensee. Discuss to understand better. Addressed comment #3. Will provide copy of exam bank Q# 4049 Comments 3, 4, 5 & 6. There can only be one classification for the SITE. The applicant must determine this from the two sets of times and conditions given. Discuss with NRC OK as revised. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
81	H	2-3												S	077AG2.2.37, MODIFIED BANK 4427, COMP. 1. KA appears to match. 2. Unit 1 3. In the initial conditions, is HVS-1B the complete designator for this control circuit? Is there a Unit 1 designator in front? Ask licensee to change if necessary. 4. In the stem, should STOP be in all caps in the fifth bullet? Ask licensee. 5. In the stem. The question does not have to indicate that the 1B containment Cooling fan is NOT running. All it has to ask is "in this configuration. The description above does not require the repeat of the actual status of the pump being stopped. 6. In all distractors, complete the sentence so that ie. For distractor C – "ONLY the 1A Offsite Power Circuit is inoperable." Or for distractor A – "Both are inoperable." It is not clear what is inoperable in A and B. Discuss if licensee does not understand comment. 7. While the question is identified as a comprehension it is really a memory because the applicant has to remember the issue associated with UNIT 1. This may be a fundamental level of

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															knowledge vice comprehension. Discuss type of question. Otherwise appears to be ok with changes requested. Incorporated comments #3, 5. Comment #4 stop is the action, AUTO is the switch position. Comment #6: just above the selections is the word "Declare". Put that in front of each selection and the sentence will be complete. Comment #7: Ops Policy now states that with a CFC not running with switch in AUTO, declare that specific Offsite Power train inoperable ONLY when switchyard voltage is < 232 kV. Applicant has to use multiple parts of info to come to the correct response. Discuss with NRC This is Fundamental knowledge, but does meet SRO level. OK. Drl 2/18/15 Question is Satisfactory. DB 3/11/15
82	H	3												S	003AG2.1.7, NEW, COMP, Used in HLC 21- Q 91, NRC, 1. KA appears to match. 2. Unit 1 3. Previous question marked NEW, however, body identifies significantly modified. Previous question not provided. 4. In second bullet, change quote sign (") to inches. Same in each distractor, use inches vice the abbreviation. 5. In question 1, is it better to have "prior to CEA recovery or the way it is? 6. Should in distractors A and B second part use "reduce" instead of "reducing?" And replace "while" with "and." Discuss with licensee. Does it matter? 7. Be <u>consistent</u> with the use of a single quote (') for procedure emphasis. Other places the (") is used. Otherwise appears to be ok. Will address comment #3. This question was on the last NRC exam I

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															<p>Changed the condition in the stem of the question as well as the correct answer. It has not been entered into the St.Lucie exam bank as of yet.</p> <p>Incorporated comments #4, 5, 6 & 7</p> <p>Discuss with NRC</p> <p>OK as revised. Drl 2/18/15</p> <p>Question is Satisfactory. DB 3/11/15</p>
83	F	2												E	<p>APE068AA2.09, NEW, Memory,</p> <ol style="list-style-type: none"> KA appears to match. Unit 2 Wording of bullet one is awkward. UNIT 2 has evacuated the Control room? <u>Be consistent</u> with the use of periods. There is one at the end of the second bullet. Distractors C and need first question need to be changed from Tcold instruments + 50 to just Tcold instruments. BY placing the 50 in there it reminds the applicant what instrument is at the Remote Shutdown Panel. I believe that the question just asks what instrument. Can we just have Th and Tc? I doubt that the SRO's would think there is ONLY one Tcold instrument. This is fundamental RO knowledge. The second question is very wordy and may be misread by the applicants, can this be shortened. Look at this and see if it really is asking what you are trying to say. Have OPS rep review and determine if it is reasonable for the SROs to have to know the minimum number of instruments from the table by memory? Want to make sure this is reasonable for the SROs to know. <p>Discuss changes with licensee.</p> <p>Incorporated comments #3, 4 & 7</p>

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Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															<p>Comment #8: Discuss with NRC and Ops Rep</p> <p>The revisions made thus far are good. Rick's comment about Tcold + 50 F is still valid. I understand that the procedure says to use Tcold + 50, but that is too big of a clue. If you reword the question to ask which instruments to use on the RSP, then you would not reference the + 50F. drl 2/19/15</p> <p>Incorporated recommendation. Pf 2/25 sig mod</p> <p>Question is Satisfactory. DB 3/11/15</p>
84	F	2				X								X	<p>076AG2.2.25, NEW, FUNDAMENTAL,</p> <ol style="list-style-type: none"> KA appears to NOT match Unit 1 Currently the way this question is written it does NOT ask anything about the Bases of Technical Specifications. What is provided in each of the distractors as answers is the sample requirements that are required by that annunciator. The second part of the question provides sort of the bases, but it seems that the answers do not completely answer the question. From page 27 of 26 last paragraph under ¼.4.8 talks about the allowable concentration and maximum allowable doses. This is more of the bases information. <p>This question has to be reworked to match the KA. Discuss with licensee.</p> <p>Revised stem & selections A, C & D to include wording from bases</p> <p>The times given in the selections are directly from the TS bases for the LCO. Discuss with NRC to address KA match concern</p> <p>OK as revised. Drl 2/19/15 sig mod</p> <p>Question is Satisfactory. DB 3/11/15</p>

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
85	H	3													<p>CEA13AA2.2, BANK 4047, COMP</p> <ol style="list-style-type: none"> KA appears to Unit 2 At the end of the sentence incorporate whatever punctuation within the Quotes. For this example, it should look like "...Circulation Cooldownn." Not "...Circulation Cooldown." Be consistent between questions. Every bullet has a period at the end. I really don't care just be consistent. The TS speaks to INDICATED LEVEL. WE do not state that in the initial conditions, is that necessary? Since there are NO references, are the SRO applicants expected to know 6 hour or 72 hours. I would venture that the 6 hour is a standard number they hear all the time. IN the first question, "Hot Shutdown" is written like this, however, in the TS it is in all CAPS, like "HOT SHUTDOWN," which should it be? For each distractor, put a line in between the first and second answer. <p>Otherwise appears to be ok.</p> <p>Incorporated comments. The last bullet in the stem implies that is the indicated level. Discuss with NRC.</p> <p>OK as revised. Drl 2/19/15</p> <p>Question is Satisfactory. DB 3/11/15</p>

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
86	H	2													<p>008A2.05, New, Comprehension</p> <ol style="list-style-type: none"> KA appears to match. Unit 1, Add comma after s in RCP's," to place it inside the quotes. Generic Issue. There are a few more places in this question that the comma needs to be put in the quotes. Corrected, ok as is now. 01/21/2015 Is it necessary to have the way HCV-14-1 fails? Fails closed! This is teaching. The applicants should know how the valve fails with the failed solenoid. Corrected, ok as is now. 01/21/2015 The questions distractors A and B, second part, should be reworded to remove the wording "is still." I think that it reads ok without that. Corrected I am not saying that IAW is not a known abbreviation however, it should most likely be written out. That is unless it is ok with licensee. TS not provided. However, the answer D and distractor C have a 4 hour knowledge requirement. Does management expect that SRO's have this committed to memory? This is beyond expectations of NRC requirements. Discuss with licensee. Corrected, ok as is now. 01/21/2015 Would like to see the second part start with what we are asking the applicant to evaluate. For example, "Which one of the following (WOOTF) describes the TS applicability....." Also, since the TS 3.6.3.1, is in ALL distractors suggest to have this in the question stem so the applicants do not have to read it 4 times. 01/21/2015 corrected. Knowledge Level of question is low. First part is RO. Second part SRO but not very difficult. Is there some way to put a TS call that is incorrect but has to be determined because these distractors A and B have reduced flow? Potentially? Discuss items above with licensee. <p>01/21/2015</p> <ol style="list-style-type: none"> Periods in the bullets, consistency. <p>Otherwise this question is ok. Incorporated comments. Question is Satisfactory. DB 3/11/15</p>

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
87	H	3														022A2.04, New, Comprehension, 1. KA appears to match. 2. Unit 2 3. In bullet after annunciator windows, second line it looks like "Containment Fan Cooler Operations "but has just tripped. I am not sure what is going on, but it looks like there is a space missing. Not sure. Please look at file to see what it is. 4. To the second to last bullet starting with 2-AOP..., add a comma after Fans, like shown. 5. In first question, put the "?" inside the quotes, like "Fans?" 6. In the questions, add the 1) and 2) to each of the questions. This will ensure that the applicants do not associate the incorrect answer to each part. Enhancement. 7. Not sure in distractors C and D that provides the 5 hour requirement. Would like to have this time frame removed. This Keys the answer in because of the time. Make it look like A and B first part. 8. What is the actual Reactor Vessel Support Structure limit on temperature? The question provides containment vessel design temperature of 264, but not the support structure. The way the question is written the questions distractors are written in the documents provided. This may 9. Otherwise appears to be ok with the above changes. 01/21/2015 1. Was this initially sent in? I cannot find in the emailed copy. I believe that these comments should have been in the row for question #89. Look at the KA. We revised Q#89 per the above

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															<p>comments in response to your pre-review. Discuss with NRC Question 87 review The fact that B and C have the same due date would lead the applicant to look at those two more closely. Additionally, with C and D sharing B1 heater info would lead to identifying B1 as the culprit. Therefore, C would be the most likely answer without knowing anything about the plant. Change A to proportional heaters by 8/23 at 1800. Drl 2/19/15 Incorporated recommendation. Pf 2/25 sig mod</p> <p>Question is Satisfactory. DB 3/11/15</p>
88	H	2-3												S	<p>013G2.2.22, NEW, COMP</p> <ol style="list-style-type: none"> KA appears to matches. Unit 2 Put the comma inside the quotes. After (RWT)," Are the SRO applicants expected to know that 48 hour requirement from memory? Discuss with OPS to ensure this is true. The allowance for unlimited time to be in bypass does not seem to be plausible. I did not look, have licensee show the places that on a De-energized circuit that this is true. It seems that bypass would be a true answer. Discuss with licensee to understand. What ESFAS channels are those? Next exam, when you identify that for example in this case the CSAS is referenced, please add that reference to the material so this does not have to be looked up separately. This makes it much faster for the review. Please. <p>Appears to be ok, ask licensee to show examiner how this works.</p> <p>Discuss with NRC. Will bring references. This is a very unique TSAS due to the bases behind it (swapping over to a potentially empty sump which could lead to air binding ECCS pumps). Applicants should know this. It is also addressed in the Ops Policy on Tech Specs</p>

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															OK as revised. Drl 2/19/15 Question is Satisfactory. DB 3/11/15
89	H	2-3												E/U	022A2.04, NEW, COMP 1. KA appears to match 2. Unit 2 3. Add a line break between question #2 and the first distractor. This is all bunched up and it is not easy to read that way. 4. Should the first question actually be completes the statement? It states identifies the actions, but the question has a fill in the blank. I am thinking that maybe we should just ask what is necessary to be done with RCS temperature and remove the teaching that is occurring in the stem, where we provide what actions are done in the procedure. The way it is written it will cue the applicants into what needs to be done. How about this, just ask what is the RCS temperature requirement? Answer: same as written. 5. What conditions will cause the containment temperature would get to above 350 degrees? Is this possible during these accidents associate with this type of situation? Not sure that this would make sense. Need to have licensee explain why this is reasonable. Addressed comment #3 and revised stem per comment #4 Comment #5: With the loss of adequate Cont Fan Coolers, the FSAR requires the RCS to be < 350 degrees within 5 hours. Will bring FSAR reference. Discuss with NRC Hot standby and hot shutdown do not work with 264 F. Its too much of a stretch to assume that you can keep containment temperature that low at NOT. It's even a little stretch with Hot Shutdown, but at least plausible. Change maintain Hot Stanby to Cold Shutdown. Drl 2/19/15 Incorporated comments. Pf 2/25 sig mod Question is Satisfactory. DB 3/11/15

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
90	H	3													E	039A2.03, NEW, however, used on HLC 20, Q 92, states significantly Modified. 1. KA appears to match 2. Unit 1 3. Previous question not provided in package. 4. Add a line space after question # 2 and (Reference Provided) 5. How much of the AOP-8.02 will be provided? Just the page provided with submittal or the entire procedure? Discuss with licensee. 6. Is it necessary to add the DATE this is occurring in the stem of the question? Ask licensee why or why not? 7. Does the question in # 2 need to identify the MAXIMUM time that the MODE 3 entry is accomplished? This is based on step 2.1 B RNO. 24 hours? Ask licensee. 8. Also need to ask when is the earliest time for question # 1. Discuss with licensee. Will provide old Q92 for reference. Incorporated comment #3 & 4 Will provide AOP-08.02 up through page 15 Discuss with NRC to address concerns from comments 6. 7 & 8. With the reference provided this is NOT an SRO level question. Instead of asking them the time to be in Mode 3 ask them for the basis for the requirement to be in Mode 3. Drl 2/19/15 Recommend removing AOP reference. Pf 2/25 sig mod Question is Satisfactory. DB 3/11/15
91	H	1-2 for SRO only												X	U	015G2/1/7. NEW, Comprehension, 1. KA appears to match 2. Unit 2 3. In this question "inches" is used vice ("), which I think is better. Just be consistent. 4. In stem of question use quotes for procedural name as done in other questions.

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															5. If this question is used vice 88 then put answers on separate lines, the way it is for me is hard to read. The question has overlap issues and one of them needs to be replace, this question or # 88. Discuss with licensee. Revised question to address overlap concerns. Discuss with NRC Not certain new question is to the SRO level. Both TS actions are 1 hour statements. How the AFAS panel is designed is RO knowledge. Unless you go into some OPS Policy and talk about requirements there, this does not reach SRO level. Dri 2/19/15 Re-wrote question. Pf 2/25 sig mod Question is Satisfactory. DB 3/11/15
93	H	1-2											X	U	072A2.03, New, Comprehension, 1. KA appears to match. 2. Unit 2. 3. The information in the initial conditions of the question is written differently than the previous questions. In that, the power supply and procedure name are not in quotes as in the other questions. Be consistent! 4. Question is NOT SRO ONLY. This knowledge is required of ALL individuals. Regardless if there is a failure or an actual alarm the expectation is the same of the individual in the plant. There does not have to be an SRO to determine if they should evacuate or not. 5. Stem of the question only corresponds on what the operators do. The second part is not required by the question. This needs to add what direction should the Unit SRO direct? 6. May also be considered GET.

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		
															<p>7. Very low comprehension, closer to a memory. What do you do with an ARM alarm when you are in the plant? Leave immediately.</p> <p>8. If this is a TS item, then can potentially use that to make SRO only.</p> <p>9. Question needs to be replaced.</p> <p>01/22/2015</p> <ol style="list-style-type: none"> Question was changed to add SRO portion. The new part of this question provides the answer or help to determine the answers for Questions 92 and 88. By adding the TS portion we keep on testing the 48 hour and next Cold Shutdown requirement. Unfortunately, this change overlaps the described questions above. <p>Question still remains a U</p> <p>Revised questions 88 & 92 such that they no longer provide help to answer this question (i.e. "next cold shutdown requirement" was removed from 88 & 92). Discuss with NRC to address overlap concerns</p> <p>This is ok now. Put the words "automatically upon the fuse failure" after ___(1)__. Drl 2/19/15</p> <p>Incorporated comments. Pf 2/25</p> <p>Question is Satisfactory. DB 3/11/15</p>
94	F	2-3												S	<p>G2.1.37, Bank 4404, Memory,</p> <ol style="list-style-type: none"> KA appears to match. Generic plant. As is the question appears to be ok, however, I would rearrange the stem and put the TS at the beginning of the question. This

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															makes the mind set to already know what area is being talked about. 4. Appears to be ok. 01/22/2015 1. Stem was changed. 2. Is it necessary to add "most restrictive"? Appears to be ok as is. Question is Satisfactory. DB 3/11/15
95	H	2-3				X								S	G2.1.40, New, comprehension. 1. KA appears to match. 2. Unit 2 3. Is the first part, 23 feet RO systems knowledge? Or not? RO knowledge to answer this part. 4. Unit 1 and 2 differences. OK 5. DOES irradiated encompass recently irradiated? This appears to be a subset and could potentially make distractor B also a potential answer. Two potential answers. 6. SRO knowledge? Is there a learning objective for the RO concerning this in the refueling lesson plan? Ask licensee to determine if this is true. 7. Discuss with licensee if SRO only or not? 01/22/2015 Missed that this was identified as Significantly Modified question from Q97 of the HLC 20 NRC exam. Previous question NOT provided. Unable to verify if it was significantly modified. 1. Include comma with noun name in quotes, be consistent. 2. Change distractors C and D first part to use the Unit 1 requirement of 23 feet above the fuel . This is a better distractor than top of fuel assemblies seated in the reactor pressure

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
																vessel. This at least tests UNIT 1 and UNIT 2 Differences. 3. TS 3.91, decay time requires the reactor to be subcritical 72 hours before fuel can be moved. This knowledge requirement is above the line in TS and required knowledge of Reactor Operators. 4. Therefore the question does not test at the SRO level even though this knowledge appears in the bases. The answer can be obtained with only RO knowledge. Question is not at SRO level. <u>Unsatisfactory. Discuss with licensee.</u> Incorporated comments 1 & 2. Will provide modified question (#97) Revised question to address SRO level concerns (3&4).Discuss with NRC OK as revised drl 2/19/15 sig mod Question is Satisfactory. DB 3/11/15
96	F	2-3												S	G2.2.17, New, Memory, 01/22/2015 1. KA appears to match. 2. Unit 1 3. Put noun name for the procedure in quotes, consistency 4. Have licensee explain what the Scheduled Work greater than 50% of a shutdown LCO. Does this mean looking at the LCO for that system? IF so, why was the LCO not provided? Have licensee explain. Which one is it? Appears to be ok. Incorporated comment #3 Discuss with NRC. No reference – direct lookup Even if provided, not a direct lookup. Focus on High Risk. We don't provide WM-AA-100-1000 Question is OK. Drl 2/19/15	

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation	
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Backward	Q=K/A	SRO Only			
																Question is Satisfactory. DB 3/11/15
97	H	3												S		G2.2.38, NEW (From Q90 of HLC20 NRC stated significantly modified), Comp 1. KA appears to 2. Unit 1 3. Is there a noun name for OPS policy 503? IS it necessary to put it in the stem? Ask licensee. 4. Put a line space after "following:" Otherwise appears to be ok Incorporated comments # 3 & 4. Provide Q#90 HLC20 NRC OK as revised drl 2/19/15 Question is Satisfactory. DB 3/11/15
98	F	3												E		G2.3.14, NEW, Memory, 1. KA appears to match 2. Unit 1. 3. I think that it would be better to have the days in the stem and in the distractors, so that the applicants can figure out it that way. Distractor B states by 1145 the NEXT day. 4. What actually would be provided to the applicant? I do not understand what pages would be provided? It looks like the attachment 2 and some other document, not sure what the other one is. 5. Will have to look at that LI-AA-102-1001. Explain to see if this provides a direct look up. 6. This question may be ok but have to look at that document to see if this is can be provided or if not can the applicant answer

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			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															the question 01/22/2015 Basically the entire question was re-written. <ol style="list-style-type: none"> 1. KA appears to match 2. Unit 1 3. IN bullet 3 the individual falls on the floor is in reference to the WEC SRO. IF this is the case, can we just state that, rather than stating the individual. I believe this would make this clearer. 4. Under 2000, the last bullet, can be shortened. Is it necessary to inform the reader that the amount of contamination (2500 DPM) was done on a portable frisker? Discuss with licensee. 5. Under time 2300, shorten first bullet. "The hospital reported to the Shift Manager, that the injured individual's BAC was 0.5. What are the units for BAC? If it has some unit designation, please add. This is a % so need to add the % symbol. 6. Is the entire attachment 2 going to be provided? Ask licensee what they had planned on providing. 7. The procedure SY-AA-100-1000 states that this is a based on a "Confirmatory" test. The report does not state that it was a "Confirmatory" test. This needs to be added. 8. In the second bullet under 2300, add the actual time that the investigation determined when the alcohol was consumed. This should be within the time the procedure describes when operators are NOT allowed to consume alcohol. 9. The Explanation states that the WEC SRO is not "ACTIVE," from the information provided how would they know this? ACTIVE has a specific definition and this cannot be determined from no information. 10. The explanation states that the individual has a contamination level of 1500 DPM, this is NOT the same as the information provided in the stem. Please determine what number to use! 11. Explanation states ONLY the 8 hr report is necessary, however the answer has TWO times for reporting. ??

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ES-401, Rev. 9

Written Examination Review Worksheet

Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws					5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only			
																<p>There are many changes that should be made to make this new question easier to read and determine what is going on. If the above is not clear ask.</p> <p>Incorporated #3, 5, 7 comments,</p> <p># 4.This was referenced because this is what would be used in reality. Removed for bullet</p> <p>#6 answer is yes</p> <p>#9 This is noted if the applicant makes an assumption that the WEC is inactive so the rule would not apply. The bottom line is that the WEC holds a current license and the rule applies. At PSL normally WEC SRO's don't stand shiftly watches (i.e. not active).</p> <p>#10 & 11 This was an oversight from the previous revision. Updated</p> <p>The proposed answer explanation needs revised to accurately describe the scenario.</p> <p>Otherwise, OK. DI 2/19/15</p> <p>Incorporated comments. Pf 2/25</p> <p>Question is Satisfactory. DB 3/11/15</p>
99	H	3													E	<p>G2.4.16, MODIFIED BANK 4148, COMP 01/23/2015</p> <ol style="list-style-type: none"> KA appears to matches Unit 1 Consistent use of quotes for procedures. Is it appropriate to state that the ADV is "WIDE" open? I think this should be 100% or something like that. Need to add noun names for EOP 15. In distractors that have Based on the "Tcold rise." Change that to Tcold difference." Or something like that! I do not believe that referring to this as a "rise." Tcold change, is better. And the same for the last bulleted item. All that has to be said is

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ES-401, Rev. 9

Written Examination Review Worksheet

Form ES-401-9

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F			Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		

Q#	1. LOK (F/H)	2. LOD (1-5)	3. Psychometric Flaws					4. Job Content Flaws				5. Other		6. U/E/S	7. Explanation
			Stem Focus	Cues	T/F	Cred. Dist.	Partial	Job-Link	Minutia	#/units	Back-ward	Q=K/A	SRO Only		
															<p>“Tcold has gone from 535 to 541 over the past few minutes.”</p> <p>7. The previous bank question has Success Path capitalized, in this example it is not. I would think that the capitalized version is the correct way. Licensee decide.</p> <p>8. Should the bases and the procedural requirement be on two lines?</p> <p>9. Is the SG level change or Tcold temp change really the BASES or is this the reason why it has to be done? Discuss with licensee. This is an important concept of this question.</p> <p>Discuss with licensee.</p> <p>Incorporated comment #3, 4, 5, 6, 7. Reworded the question (comment #8). Comment #9 Discuss with NRC</p> <p>OK as revised. Ensure that this does not overlap EOP-15 scenario in operating exam. Drl 2/19/15</p> <p>No overlap with EOP-15. scenario Pf 2/25 sig mod</p> <p>Question is Satisfactory. DB 3/11/15</p>
100														E	<p>G2.4.44, NEW, COMP,</p> <ol style="list-style-type: none"> KA appears to match Unit 1 Unit 1 has NOT declared a GE but the EC of Unit 1 did. Distractors A and C, has QRAB, what is the basis for this being plausible? I would think that QRA would be more plausible than this. When would the EC determine the combination of the both Sectors should be used? Is this ever done? Recommend changing to QRA. <p>Discuss with licensee to determine if this is more plausible.</p> <p>Reformatted bullets in stem</p> <p>Reworded to incorporate comments in #3</p> <p>#4: EPIP directions state to use 10 meter indication. If wind direction</p>

Facility: <u>St. Lucie</u>		Date of Exam: <u>3/18/2015</u>		Exam Level: RO <input checked="" type="checkbox"/>	SRO <input checked="" type="checkbox"/>
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	<u>AG</u>	<u>N/A</u>	<u>CB</u>		
2. Answer key changes and question deletions justified and documented	<u>AG</u>	<u>N/A</u>	<u>CB</u>		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	<u>AG</u>	<u>N/A</u>	<u>CB</u>		
4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail	<u>AG</u>	<u>N/A</u>	<u>CB</u>		
5. All other failing examinations checked to ensure that grades are justified	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	<u>AG</u>	<u>N/A</u>	<u>CB</u>		
Printed Name/Signature		Date			
a. Grader	<u>Andreas Goldau / </u>	<u>4/8/15</u>			
b. Facility Reviewer(*)	<u>N/A</u>	<u>N/A</u>			
c. NRC Chief Examiner (*)	<u>Daniel M. Bacot / </u>	<u>4/9/15</u>			
d. NRC Supervisor (*)	<u>Eugen Guthrie / </u>	<u>4/21/15</u>			
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					