

Facility: <u>IPEC</u>		Date of Examination: <u>10/31/2016</u>
Examination Level: RO <input checked="" type="checkbox"/> SRO <input type="checkbox"/>		Operating Test Number: _____
Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	M, S	<p><b>Electrical Verification – Offsite Power Sources Surveillance</b></p> <p>2.1.18 Ability to make accurate, clear and concise logs, records, status boards, and reports. RO – 3.6</p>
Conduct of Operations	M, R	<p><b>Vapor Containment Daily Leakrate 2-PT-D-001</b></p> <p>2.1.25 Conduct of Operations - Ability to interpret reference materials such as graphs, curves, tables etc. RO – 3.9</p>
Equipment Control	M, R	<p><b>Determine Mechanical Isolation Boundaries for a Tagout of 21 Safety Injection Pump</b></p> <p>2.2.13 Equipment Control - Knowledge of tagging and clearance procedures. RO – 4.1</p>
Radiation Control	M, R	<p><b>Determine Radiological Conditions, RWP Requirements, and Potential Dose</b></p> <p>2.3.7 Radiological Controls - Ability to comply with radiation work permit requirements during normal and abnormal conditions. RO – 3.5</p>
Emergency Plan	N/A	N/A
<p><b>NOTE:</b> All items (five total) are required for SROs. RO applicants require only four items unless they are retaking only the administrative topics (which would require all five items).</p>		
<p>* Type Codes &amp; Criteria:</p> <p>(C)ontrol room, (S)imulator, or Class(R)oom                  (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs &amp; RO retakes)                  (N)ew or (M)odified from bank (≥ 1)                  (P)revious 2 exams (≤ 1; randomly selected)</p>		

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 Examination Level: RO  SRO  Operating Test Number: \_\_\_\_\_

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	M R	Update Electrical Power Availability for Shutdown Safety Assessment 2.1.18 - Ability to make accurate, clear, and concise logs, records, status boards, and reports. SRO – 3.8
Conduct of Operations	M R	Review Vapor Containment Daily Leakrate 2-PT-D-0012.1.25 Conduct of Operations - Ability to interpret reference materials such as graphs, curves, tables etc. SRO – 4.2
Equipment Control	N R	Reportability for Safety Limit Violation 2.2.22 Equipment Control - Knowledge of limiting conditions for operations and safety limits. SRO – 4.7
Radiation Control	M, R	Review / Authorize a Liquid Waste Release 2.3.6 Ability to approve release permits. SRO – 3.8
Emergency Plan	M R or S	Classify Event and Complete Form EP-1, Part 1 2.4.41 – Knowledge of the emergency action level thresholds and classifications. SRO – 4.6 (45.11)

NOTE: All items (five total) are required for SROs. RO applicants require only four items unless they are retaking only the administrative topics (which would require all five items).

\* 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)

Facility: <u>IPEC</u>		Date of Examination: <u>10/31/2016</u>
Exam Level: RO <input type="checkbox"/> SRO-I <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>		Operating Test No.: _____
Control Room Systems: 8 for RO; 7 for SRO-I; 2 or 3 for SRO-U		
System / JPM Title	Type Code*	Safety Function
a. Transfer to Hot Leg Recirc 000011A.1.11 (4.2/4.2)	A, EN, S, M	2
b. Initiate Bleed and Feed Cooling 00WE05A101 (4.1/4.0)	A, E, S	3
c. RO Only		
d. Respond to #1 RCP Seal Failure 003000A2.01 (3.5/3.9)	S, E, N	4P
e. Transfer 6.9KV buses 1 through 4 to Buses 5 and 6 (Station Aux Transformer 062000A4.01 (3.3/3.1)	D, S, L	6
f. Instrument Failure Steam Flow 035000K.4.01 (3.6/3.8)	A, S, M	7
g. Reset R-44 Alarm Setpoint 073000A.4.02 (3.7/3.7)	S, D	9
h. Reset Phase A 103000A.3.01 (3.9/4.2)	A, E, S,	5
In-Plant Systems* (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)		
i. Trip the Reactor Locally 000068A.1.14 (4.2/4.4)	E,	1
j. Start a Battery Charger 063000A.4.01 (2.8/3.1)	D	6
k. Locally Operate Charging Without Instrument Air 000068A106 (4.1/4.2)	A, E,	8
* All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions; all five SRO-U systems must serve different safety functions; in-plant systems and functions may overlap those tested in the control room.		
* Type Codes	Criteria for RO / SRO-I / SRO-U	

<p> A)lternate path  (C)ontrol room  (D)irect from bank  (E)mergency or abnormal in-plant  (EN)gineered safety feature  (L)ow-Power / Shutdown  (N)ew or (M)odified from bank including 1(A)  (P)revious 2 exams  (R)CA  (S)imulator </p>	<p> 4-6 / 4-6 / 2-3  <math>\leq 9 / \leq 8 / \leq 4</math>  <math>\geq 1 / \geq 1 / \geq 1</math>  <math>\geq 1 / \geq 1 / \geq 1</math> (control room system)  <math>\geq 1 / \geq 1 / \geq 1</math>  <math>\geq 2 / \geq 2 / \geq 1</math>  <math>\leq 3 / \leq 3 / \leq 2</math> (randomly selected)  <math>\geq 1 / \geq 1 / \geq 1</math> </p>
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Facility: IPEC Date of Examination: 10/31/2016

Exam Level: RO  SRO-I  SRO-U  Operating Test No.: \_\_\_\_\_

Control Room Systems: 8 for RO; 7 for SRO-I; 2 or 3 for SRO-U

System / JPM Title	Type Code*	Safety Function
a. Transfer to Hot Leg Recirc 000011A.1.11 (4.2/4.2)	A, EN, S, M	2
b. Initiate Bleed and Feed Cooling 00WE05A101 (4.1/4.0)	A, E, S	3
c. Reset Track and Hold 059000A.2.11 (3.0/3.3)	S, D	4S
d. Respond to #1 RCP Seal Failure 003000A2.01 (3.5/3.9)	S, E, N	4P
e. Transfer 6.9KV buses 1 through 4 to Buses 5 and 6 (Station Aux Transformer 062000A4.01 (3.3/3.1)	D, S,L	6
f. Instrument Failure Steam Flow 035000K.4.01 (3.6/3.8)	A, S, D	7
g. Reset R-44 Alarm Setpoint 073000A.4.02 (3.7/3.7)	S, D	9
h. Reset Phase A 103000A.3.01 (3.9/4.2)	A, E, S,	5

In-Plant Systems\* (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)

i. Trip the Reactor Locally 000068A.1.14 (4.2/4.4)	E,	1
j. Start a Battery Charger 063000A.4.01 (2.8/3.1)	D	6
k. Locally Operate Charging Without Instrument Air 000068A106 (4.1/4.2)	A, E,	8

\* All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions; all five SRO-U systems must serve different safety functions; in-plant systems and functions may overlap those tested in the control room.

* Type Codes	Criteria for RO / SRO-I / SRO-U
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<p>           A)lternate path            (C)ontrol room            (D)irect from bank            (E)mergency or abnormal in-plant            (EN)gineered safety feature            (L)ow-Power / Shutdown            (N)ew or (M)odified from bank including 1(A)            (P)revious 2 exams            (R)CA            (S)imulator         </p>	<p>           4-6 / 4-6 / 2-3   <math>\leq 9 / \leq 8 / \leq 4</math>  <math>\geq 1 / \geq 1 / \geq 1</math>  <math>\geq 1 / \geq 1 / \geq 1</math> (control room system)  <math>\geq 1 / \geq 1 / \geq 1</math>  <math>\geq 2 / \geq 2 / \geq 1</math>  <math>\leq 3 / \leq 3 / \leq 2</math> (randomly selected)  <math>\geq 1 / \geq 1 / \geq 1</math> </p>
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