

*CLINTON*  
INITIAL LICENSE EXAM

JULY 16 THRU 23, 2001

NRC Review Comments on Facility-  
Developed Written Examination and  
Operating Test

(See ES-401-9 for NRC Review  
Comments on Facility-Developed  
Written Examination)

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p style="text-align: center;">A.1.a (RO) (core alt. surveillance log)</p> <p style="text-align: center;">ENHANCEMENT</p>	<p><u>NRC:</u>           The Task Standard should also state the requirement to identify the problems with the SRMs. <i>NUREG-1021, Appendix C defines a Task Standard as the predetermined outcome against which task performance will be measured.</i></p> <p><u>LICENSEE RESPONSE:</u>   The Task Standard was updated.</p>
<p style="text-align: center;">A.1.b (RO) (determine if core pwr, flow, or thermal limits exceeded)</p> <p style="text-align: center;">ENHANCEMENT</p>	<p><u>NRC:</u>           The Task Standard should also state the requirement to identify that MFLCPR and MFLPD are &gt; 1.0. <i>NUREG-1021, Appendix C defines a Task Standard as the predetermined outcome against which task performance will be measured.</i></p> <p><u>LICENSEE RESPONSE:</u>   The Task Standard was updated.</p>

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p>A.2 (RO) (perform rest. from rpi testing)</p> <p>ENHANCEMENTS</p>	<p><u>NRC:</u> The Task Standard should also state the requirement to identify the mis-aligned control rod. <i>NUREG-1021, Appendix C defines a Task Standard as the predetermined outcome against which task performance will be measured.</i></p> <p><u>LICENSEE RESPONSE:</u> The Task Standard was updated.</p> <p><u>NRC:</u> Step 8.1.4 of CPS 9011.01 states that the CORE MAP is on page 7. The CORE MAP is actually on page 8.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and has since corrected the procedure.</p>
<p>A.3 (RO) (determine dose)</p> <p>UNSAT<sub>1</sub></p>	<p><u>NRC:</u> The task does not match the stated K/A. K/A 2.3.10 states "Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure." This task simply requires the applicant to determine expected dose. As such, the applicant's knowledge of responsibilities concerning exposure control are not tested. <b>This JPM is considered UNSAT.</b></p> <p><u>LICENSEE RESPONSE:</u> The JPM was upgraded to require the applicant to make a decision concerning whether or not he/she would exceed the Station's administrative control limit for exposure. This additional action test's the applicant's ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.</p>

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p style="text-align: center;">A.1.b (SRO) (determine if core pwr, flow, or thermal limits exceeded)</p> <p style="text-align: center;">ENHANCEMENT</p>	<p><u>NRC:</u>           The Task Standard should also state the requirement to identify that MFLCPR and MFLPD are &gt; 1.0. <i>NUREG-1021, Appendix C defines a Task Standard as the predetermined outcome against which task performance will be measured.</i></p> <p><u>LICENSEE RESPONSE:</u>   The Task Standard was updated.</p>
<p style="text-align: center;">A.2 (SRO) (perform rest. from rpi testing)</p> <p style="text-align: center;">ENHANCEMENTS</p>	<p><u>NRC:</u>           Step 1 of the JPM requires the applicant to identify that control rod 28-29 is marked "N/A" and should have been exercised, but was not. Control rod 28-29 is not marked "N/A" on the CORE MAP (must therefore be fully withdrawn and not require testing).</p> <p><u>LICENSEE RESPONSE:</u>   The JPM was modified to mark control rod 28-29 as "N/A."</p> <p><u>NRC:</u>           Step 8.1.4 of CPS 9011.01 states that the CORE MAP is on page 7. The CORE MAP is actually on page 8.</p> <p><u>LICENSEE RESPONSE:</u>   The procedure was updated.</p>

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p style="text-align: center;">A.4 (SRO) (determine pars)</p> <p style="text-align: center;">ENHANCEMENTS</p>	<p><u>NRC:</u> As written, requires the applicant to perform similar actions twice. Recommend giving the applicant a completed NARS that states initial event classification (GE) and PARS and requiring him/her to reclassify the event and determine PARS based on a shift in wind direction. In doing so the examiner will observe an event classification, a PARS determination, and a time critical (15 minute) event reclassification.</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and modified the JPM.</p> <p><u>NRC:</u> Initiating Cue should state that "RPV level is less than TAF..."</p> <p><u>LICENSEE RESPONSE:</u> The licensee agreed and modified the JPM.</p>
<p style="text-align: center;">B.1.b (startup mdrfp)</p> <p style="text-align: center;">ENHANCEMENTS</p>	<p><u>NRC:</u> Step 8.1.3.5 of the JPM requires the applicant to raise RPV level to high in the control band. JPM should include a cue establishing the required RPV control band.</p> <p><u>LICENSEE RESPONSE:</u> The licensee updated the initiating cue to include the required control band.</p>

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p>B.1.c (defeat group 1 isolation)</p> <p>ENHANCEMENTS</p>	<p><u>NRC:</u> The Initiating Cue should state the reason for defeating the MSIV/MSL drain Group I isolation.</p> <p><u>LICENSEE RESPONSE:</u> The initiating cue was updated to include a reason for defeating the Group I isolation.</p> <p><u>NRC:</u> The JPM should include a step requiring the applicant to physically locate and obtain the required jumpers.</p> <p><u>LICENSEE RESPONSE:</u> The JPM was updated to require the applicant to physically locate and obtain the required jumpers.</p>
<p>B.1.d (manually start lpcs)</p> <p>ENHANCEMENTS</p>	<p><u>NRC:</u> The Task Standard should also state the requirement for the applicant to identify the failure of the LPCS system to initiate and to take appropriate actions to start LPCS. <i>NUREG-1021, Appendix C defines a Task Standard as the predetermined outcome against which task performance will be measured.</i></p> <p><u>LICENSEE RESPONSE:</u> The Task Standard was updated.</p> <p><u>NRC:</u> The JPM should indicate that this is an alternate path JPM, particularly in the step where the transition to another step or procedure takes place.</p> <p><u>LICENSEE RESPONSE:</u> The JPM was updated to clearly indicate the location of the alternate path.</p>

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p>B.1.e (transfer 4kv bus to reserve)</p> <p><b>UNSAT<sub>2</sub></b></p>	<p><u>NRC:</u> The failure of the applicant to place the synch switch in off appears to be of <b>little consequence</b>. If the applicant does not place the synch switch in off, and the auto trip of the load breaker occurs, the associated diesel generator will auto-start and power the bus. <i>NUREG-1021, ES-303 requires that the consequences of an applicant's actions to be included in the justification for failure.</i></p> <p><u>LICENSEE RESPONSE:</u> The JPM was upgraded such that if the applicant does not manipulate the switches correctly, the load breaker will trip, the bus will deenergize, and the emergency diesel generator will start and load the bus.</p>
<p>ENHANCEMENTS</p>	<p><u>NRC:</u> The Task Standard should also state that the applicant is expected to respond to the failure of the bus to successfully transfer. <i>NUREG-1021, Appendix C defines a Task Standard as the predetermined outcome against which task performance will be measured.</i></p> <p><u>LICENSEE RESPONSE:</u> The Task Standard was updated.</p> <p><u>NRC:</u> The JPM should indicate that this is an alternate path JPM, particularly in the step where the transition to another step or procedure takes place.</p> <p><u>LICENSEE RESPONSE:</u> The JPM was updated to clearly indicate the location of the alternate path.</p>

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p style="text-align: center;">B.1.f (shifting rad monitors)</p> <p style="text-align: center;"><b>UNSAT<sub>3</sub></b></p>	<p><u>NRC:</u>      The failure to properly transfer a rad monitors appears to be of little <b>consequence</b>. <i>NUREG-1021, ES-303 requires that the consequences of an applicant's actions to be included in the justification for failure.</i> If shifting the rad monitors were required to meet technical specifications, consequence could be demonstrated.</p> <p><u>LICENSEE RESPONSE:</u>      The JPM was upgraded such that the realignment of the rad monitors was required to satisfy Tech Spec requirements.</p>



## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p>B.1.g (start vc in high rad mode)</p> <p><b>UNSAT<sub>4</sub></b></p>	<p><u>NRC:</u> Failure to recognize and take action to properly align the VC system appears to be of little <b>consequence<sub>5</sub></b>. <i>NUREG-1021, ES-303 requires that the consequences of an applicant's actions to be included in the justification for failure.</i> The system will automatically realign on a high rad signal regardless.</p>
	<p><u>LICENSEE RESPONSE:</u> The licensee modified the JPM to ensure the automatic realignment was disabled.</p>
<p>ENHANCEMENTS</p>	<p><u>NRC:</u> The Task Standard should also state that the applicant is expected to identify that dampers did not realign and take action to properly align the VC system. <i>NUREG-1021, Appendix C defines a Task Standard as the predetermined outcome against which task performance will be measured.</i></p>
	<p><u>LICENSEE RESPONSE:</u> The Task Standard was updated.</p>
	<p><u>NRC:</u> The JPM should indicate that this is an alternate path JPM, particularly in the step where the transition to another step or procedure takes place.</p>
	<p><u>LICENSEE RESPONSE:</u> The JPM was updated to clearly indicate the location of the alternate path.</p>

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p style="text-align: center;">B.2.a (locally open scram brkrs)</p> <p style="text-align: center;">ENHANCEMENTS</p>	<p><u>NRC:</u> Step 1 of the JPM states to deenergize 1C71-P011B, breakers CB23 through 26. CPS 4411.08 states that breakers CB23 through 36 are to be placed in off.</p> <p><u>LICENSEE RESPONSE:</u> The JPM was modified to indicate that breakers CB23 through 36 are to be placed in off.</p>
<p style="text-align: center;">B.2.b (locally start h<sub>2</sub> recombiner)</p> <p style="text-align: center;">ENHANCEMENTS</p>	<p><u>NRC:</u> Containment pressure should be given in the cue.</p> <p><u>LICENSEE RESPONSE:</u> The initiating cue was updated to include containment pressure.</p> <p><u>NRC:</u> The cue provided in step 2.5.1 of the JPM should indicate whether containment water level is increasing, decreasing or remaining the same.</p> <p><u>LICENSEE RESPONSE:</u> The cue in step 2.5.1 was updated to state that containment water level was "19 feet, 6 inches, and steady."</p>

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p>B.2.c (manual start of fire pump)</p> <p>ENHANCEMENTS</p>	<p><u>NRC:</u> The Task Standard should also state that the applicant is expected to recognize the failure of the pump to start and take action. <i>NUREG-1021, Appendix C defines a Task Standard as the predetermined outcome against which task performance will be measured.</i></p> <p><u>LICENSEE RESPONSE:</u> The Task Standard was updated.</p> <p><u>NRC:</u> The JPM should indicate that this is an alternate path JPM, particularly in the step where the transition to another step or procedure takes place.</p> <p><u>LICENSEE RESPONSE:</u> The JPM was updated to clearly indicate the location of the alternate path.</p>
<p>Scenario One</p> <p>ENHANCEMENTS</p> <p>Events 1 through 5</p> <p>Event 5</p>	<p><u>NRC:</u> Include a list of symptoms for each event. <i>NUREG-1021, ES301, Form ES 301-4, Item 3 states "Each event description consists of...the symptoms/cues that will be visible to the crew..."</i></p> <p><u>LICENSEE RESPONSE:</u> Symptoms were included.</p> <p><u>NRC:</u> Failure of the recirc flow control valve would not work due to a simulator modeling error. This event was replaced with a trip of the "A" recirc pump.</p> <p><u>LICENSEE RESPONSE:</u> The event was replaced and validated.</p>

## COMMENTS ON CLINTON OPERATING EXAM

JPM/Scenario Event Number	Comment(s)
<p style="text-align: center;">Scenario Two</p> <p style="text-align: center;">ENHANCEMENTS</p> <p style="text-align: center;">Events 1 through 6</p>	<p><u>NRC:</u>            Include a list of symptoms for each event. <i>NUREG-1021, ES301, Form ES 301-4, Item 3 states "Each event description consists of...the symptoms/cues that will be visible to the crew..."</i></p> <p><u>LICENSEE RESPONSE:</u>    Symptoms were included.</p> <p><u>NRC:</u>            Event 10, "Trip of the "A" RHR Pump," cannot be credited to the BOP as a component failure since actions required to recover from the Event will have already been taken as a result of Event 9, "Failure of the "B" RHR pump to start."</p> <p><u>LICENSEE RESPONSE:</u>    The BOP operator was removed as being credited during this event.</p>
<p style="text-align: center;">Scenario Three</p> <p style="text-align: center;">ENHANCEMENTS</p> <p style="text-align: center;">Events 1 through 5</p>	<p><u>NRC:</u>            Include a list of symptoms for each event. <i>NUREG-1021, ES301, Form ES 301-4, Item 3 states "Each event description consists of...the symptoms/cues that will be visible to the crew..."</i></p> <p><u>LICENSEE RESPONSE:</u>    Symptoms were included.</p>