

Personally Identifiable Information - Withhold Under 10 CFR 2.390

Enclosure 7

**Browns Ferry Nuclear Plant
Units 1, 2, and 3**

**Senior Reactor Operator Initial
License Operating Examination - Post Examination Response**

Facility Comments Made in Accordance With ES-501 Attachment 1

(See Attached)

BFN 2017 NRC Exam for ILT class 1703

Post Operating Exam Comment

JPM 694 Minimum Staffing-SM personal emergency

The Facility acknowledges that there was an error in the initial staffing provided to the candidates that was not detected during validation or during the NRC Preparation Week. This error resulted in not having an SRO to relieve the STA of duties other than STA duties within 10 minutes as required by procedure.

Step 3 of the JPM to move the Outside Unit Supervisor/Incident Commander (IC) to fill the U1 Unit Supervisor position should not have been a Critical Step.

Step 4 of the JPM to fill the Incident Commander position with a qualified RO was incorrectly changed during the NRC Preparation Week to be a Critical Step without due diligence on the part of the Facility.

Step 5 of the JPM is revised to call in an additional SRO due to the error referenced above.

Applicant Performance:

Applicants identified that the Shift Manager position is required at all times and filled the position with the most senior active SRO.

Applicants identified the requirement to restore minimum staffing within 2 hours.

Some Applicants temporarily redistributed shift manning to fill the shift positions.

Bases for Post Exam Comment:

Step 3 of the JPM to redistribute the shift to fill the Unit 1 Unit Supervisor position should not be a Critical step.

Bases:

10CFR50.54(m)(2)(i) reduces the number of SROs by one for three Units with two Control Rooms vs three Control Rooms.

10CFR50.54(m)(2)(iii) states: "When a nuclear power unit is in an operational mode other than cold shutdown or refueling, as defined by the unit's technical specifications, each licensee shall have a person holding a senior operator license for the nuclear power unit in the control room at all times".

The Facilities' position is that this condition is met by the Unit 2 Unit Supervisor because Unit 1 and Unit 2 share a Control Room.

Tech Spec 5.2.2.b states: "Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and Specifications 5.2.2.a and 5.2.2.f for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements".

OPDP-1 Attachment 1, Shift Staffing, Section 1.0.B states: "In addition to the SM on site, a second active licensed SRO shall be in the control room at all times. The SM may, from time to time, act as relief Operator for the licensed SRO assigned to the control room".

Step 4 of the JPM to move a qualified RO to the IC position should not be a critical step.

Bases:

OPDP-1 Attachment 1, Shift Staffing, Section 1.0.G states: "At BFN, the Incident Commander will be one of the Unit Supervisor positions not assigned to a unit or the STA role".

Note: Prior to Rev 33 of OPDP-1, dated 7/14/2014, the IC position could be staffed with a qualified RO or SRO.

There is currently no procedural requirement to fill the IC position with an RO.

The intent of this step was to temporarily assign responsibility for the IC duties to a qualified RO until the position could be filled by calling in an SRO.

There is precedence for filling the IC role with a qualified RO during the unexpected absence of one of the Unit Supervisor/SRO positions. On 2/8/2015, an on shift Unit Supervisor had to leave the site due to a medical emergency. The responsibility for the IC role was temporarily assigned to a qualified RO from 0830 until 1004, when an additional Unit Supervisor reported to the site and relieved the RO of IC duties. This is documented in the Operations log on 2/8/2015.

Currently BFN does not staff the shift using ROs in the IC role. According to the BFN Learning Management System, however, there are 14 ROs qualified as Incident Commander.

Step 5 of the JPM to comply with Tech Specs 5.2.2, Unit Staff, is a Critical step. The Applicants are required to call in a replacement SM or an SRO to replace the original SM. The Applicants are also required to call in an additional SRO due to the error in the initial manning which will allow the IC and STA position to be independently staffed.

Based on the information above, the Facility recommends accepting a revised JPM answer key with two Critical steps (See Attached).

Documents Reviewed include:

10CFR50.54

Tech Spec section 5.2

OPDP-1 current and previous revisions

BFN Learning Management System (LMS)

BFN eSOMS Operation Narrative Logs



Job Performance Measure (JPM)

SITE:	BFN	JPM TITLE:	Minimum Staffing – SM personal emergency, immediately leaves site
JPM NUMBER:	694	REVISION:	2

TASK APPLICABILITY:	SRO <input checked="" type="checkbox"/>	STA <input type="checkbox"/>	UO <input type="checkbox"/>	NAUO <input type="checkbox"/>
TASK NUMBER / TASK TITLE(S):	S-000-AD-89; Observe Conduct of Operations Guidelines			
K/A RATINGS:	RO 2.9 SRO 3.9			
K/A STATEMENT:	2.1.5: Ability to use procedures related to shift staffing, such as minimum crew complement, overtime limitations, etc.			
RELATED PRA INFORMATION:	N/A			
SAFETY FUNCTION:	Admin – Conduct Of Operation			

EVALUATION LOCATION:	<input type="checkbox"/> In-Plant	<input type="checkbox"/> Simulator	<input type="checkbox"/> Control Room	<input type="checkbox"/> Lab
	<input checked="" type="checkbox"/> Other - List	Classroom		

APPLICABLE METHOD OF TESTING: Discussion Simulate/Walkthrough Perform

TIME FOR COMPLETION: N/A TIME CRITICAL (Y/N) N ALTERNATE PATH (Y/N) N

Developed by:	_____	_____
	<i>Developer</i>	<i>Date</i>
	(Ensure validator is briefed on exam security per NPG-SPP-17.8.1) (See JPM Validation Checklist in NPG-SPP-17.8.2)	
Validated by:	_____	_____
	<i>Validator</i>	<i>Date</i>
Approved by:	_____	_____
	<i>Site Training Management</i>	<i>Date</i>
Approved by:	_____	_____
	<i>Site Training Program Owner</i>	<i>Date</i>



Job Performance Measure (JPM)

OPERATOR: _____

JPM Number 694

SRO _____ DATE: _____

TASK STANDARD: Using the Shift Manning Sheet provided and the experience levels of the available SROs, determines the temporary SM for the crew and calls out a replacement SM.

PRA: NA

REFERENCES/PROCEDURES NEEDED: OPDP-1 Unit 2 Tech Specs

VALIDATION TIME: 15 Minutes

PERFORMANCE TIME: _____

COMMENTS: _____

Additional comment sheets attached? YES ___ NO ___

RESULTS: SATISFACTORY ___ UNSATISFACTORY ___ (Retain entire JPM for records)

SIGNATURE: _____ DATE: _____
EXAMINER



Job Performance Measure (JPM)

Classroom

INITIAL CONDITIONS:

- All three Units are operating at 100% power
- It's Saturday Dayshift
- Shift staffing requirements have been met

The Crew has been on watch for the past 3 hours.

INITIATING CUES:

You are the Shift Manager (SM) and a personal emergency requires you to immediately leave the site.

Review the attached weekly schedule and determine what actions are required to comply with all applicable shift manning requirements.



Job Performance Measure (JPM)

		Weekly Schedule	
		Group 2	
		M T W T F S S	
		N O O O D D D	
	NOTE		
SM	&	Hill, R.G.	\$
US-1		Jones, T.R	\$
US-2	&,*	Rodgers, R.J.	\$
US-3		Speckman, T.B.	\$
US-4	%,w, s	Hardin, D.D.	
US-5	*	Holder, B.R.	\$
US-6			
US-7			
US-8			
UO		Aman, D.R.	
UO	&	Intauno ,M.A.	\$
UO		Mascareno, T	
UO		Tew, C.E.	
UO	&	Becker, T.E.	
UO	&	Best, D.L.	\$
UO	&	Logins, K.C.	
UO		Morton, S.A.	

A - SEE LEAVE BOOK
(@) - PERFORM NO LICENSE DUTIES
(b) - BREAKIN NEEDED FOR AUO ROUNDS
(d) - CHECK PROFICIENCY LIST FOR BI NEED
(s) - NOT EMERGENCY RESPONDER QUALIFIED
(w) - CHECK MEDICAL RESTRICTIONS
& - MEDICAL OR RESPIRATOR FIT DUE THIS QUARTER
% - BREAKIN REQUIRED TO WORK TS POSITION
* - STA QUALIFIED
(I) - LLRT LEVEL 1 TESTER
(II) - LLRT LEVEL 2
- NOT SST QUALIFIED
^ - NRC PHONE (JITT)
\$ - INCIDENT COMMANDER QUALIFIED
(1) - PERFORM NO-SOLO LICENSE DUTIES
(2) - NOT FIREWATCH QUALIFIED

- SM - Hill - SRO, Qualified SM - 10 years experience
- U1 US Jones - SRO - 15 years experience
- U2 US Rodgers - SRO - 1 year experience
- U3 US Speckman - SRO - 10 years experience
- WCC Hardin - SRO - 20 years experience, medical restriction (can't lift >20 lbs)
- OS/IC Holder - SRO - 7 years experience

KEY

In accordance with OPDP-1 page 8 of 77.

The SM becomes incapacitated, or

The SM is otherwise unable to perform SM duties.

Then the following order of succession applies:

1. Another SRO on shift who is SM qualified.
2. Any SM-qualified person with an active SRO license who is immediately available such as in training, or on site for another reason.
3. **Most senior person on shift with active SRO license.**

Move T.R. Jones to Shift Manager

Move Bob Holder to Unit 1 Unit Supervisor

Designate a qualified RO as incident commander

In accordance with Tech Specs 5.2.2 Unit Staff

Perform a Shift Manager call out and get a Qualified SM in the next 2 hours.



Job Performance Measure (JPM)

START TIME _____

STEP / STANDARD	SAT / UNSAT
<p><u>Step 1:</u> References OPDP-1 Conduct of Operations for guidance.</p> <p><u>Standard:</u> Determines that with the SM position vacant that the most senior person on shift with an active SRO license will be selected as a temporary replacement.</p>	<p>___ SAT</p> <p>___ UNSAT</p> <p>___ N/A</p>
<p><u>Step 2:</u> References OPDP-1 Conduct of Operations for guidance.</p> <p><u>Standard:</u> Determines that T.R. Jones is selected to fill the Shift Manager's position temporarily.</p>	<p>Critical Step</p> <p>___ SAT</p> <p>___ UNSAT</p> <p>___ N/A</p>
<p><u>Step 3:</u> Redistributes the shift to fill the US position.</p> <p><u>Standard:</u> Moves Bob Holder from Incident Commander to Unit 1 Unit Supervisor.</p>	<p>___ SAT</p> <p>___ UNSAT</p> <p>___ N/A</p>
<p><u>Step 4:</u> Redistributes the shift to fill the Incident Commander position.</p> <p><u>Standard:</u> Moves Intauno or Best to fill the Incident Commander position.</p>	<p>___ SAT</p> <p>___ UNSAT</p> <p>___ N/A</p>



Job Performance Measure (JPM)

STEP / STANDARD	SAT / UNSAT
<p><u>Step 5:</u> Complies with Tech Specs 5.2.2 Unit Staff</p> <p>Shift crew composition may be less than the minimum requirement of 10 CFR 50.54(m)(2)(i) and Specifications 5.2.2.a and 5.2.2.f for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.</p> <p><u>Standard:</u> Calls out for a replacement Shift Manager to be filled within 2 hours.</p>	<p>Critical Step</p> <p>___ SAT</p> <p>___ UNSAT</p> <p>___ N/A</p>

STOP TIME _____

END OF TASK



Job Performance Measure (JPM)

Provide to Applicant

Classroom

INITIAL CONDITIONS:

- All three Units are operating at 100% power
- It's Saturday Dayshift
- Shift staffing requirements have been met

The Crew has been on watch for the past 3 hours as follows:

		Weekly Schedule	
		Group 2	
		M T W T F S S	
		N O O O D D D	
SM	&	Hill, R.G.	\$
US-1		Jones, T.R	\$
US-2	&,*	Rodgers, R.J.	\$
US-3		Speckman, T.B.	\$
US-4	% ,w, s	Hardin, D.D.	
US-5	*	Holder, J.R.	\$
US-6			
US-7			
US-8			
UO		Aman, D.R.	
UO	&	Intauno ,M.A.	\$
UO		Mascareno,T	
UO		Tew,C.E.	
UO	&	Becker,T.E.	
UO	&	Best,D.L.	\$
UO	&	Logins,K.C.	
UO		Morton, S.A.	

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