

Facility: <u>Hope Creek Generating Station</u>	Date of Examination: <u>2/23/15</u>
Examination Level: RO <input checked="" type="checkbox"/> SRO <input type="checkbox"/>	Operating Test Number: <u>1</u>

Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	D,S	Complete Daily Surveillance Log. (ZZ016) Operator completes required Daily Surveillance Log entries in accordance with HC.OP-DL.ZZ-0026. (Items 61-74)
Conduct of Operations	M,S	Perform Power Changes During Operation-Single Loop Operations (ZZ047) Operator performs Section 5.1, Jet Pump Operability Verification, of HC.OP-ST.BB-0007 and identifies and reports any Unsatisfactory information
Equipment Control	M,S	Isolate Leak (ZZ048) Operator identifies the mechanical and electrical components, and their required positions, to isolate, vent, and drain a leak identified on an ECCS system pipe using controlled station Mechanical Drawings.
Radiation Control		
Emergency Procedures/Plan	M,S	Perform Licensed Operator Review of MEES.(ZZ014) Operator performs the Licensed Operator Review of the Major Equipment and Electrical Status (MEES) Form.

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)

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Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations	D,R	Complete an Action Statement Log Entry. (ZZ029) Operator completes a manual Action Statement log entry for the failure of a containment isolation valve, <u>AND</u> submits for CONCURRENCE REVIEW in accordance with OP-HC-108-115-1001.
Conduct of Operations	N,R	Review Operations Logs In Use During A Shift (ZZ049) Operator performs the CRS review of Attachment 3 of OP-HC-108-116-1001, Spent Fuel Pool Decay Heat Load Determination.
Equipment Control	M,R	Review Power Distribution Lineup. (ZZ022) Operator performs the SM/CRS review of the completed HC.OP-ST.ZZ-0001.and identifies applicable Technical Specification requirements.
Radiation Control	D,P,R	Determine Liquid Radwaste Rad Monitor CTB Weir Flow (ZZ050) [2013 NRC] Operator performs the Control Room Supervisor review, and correction, of HC.OP DL.ZZ 0026 Surveillance Log
Emergency Procedures/Plan	D,S	Classify an event. (ECG007) Operator classifies an event and makes notifications within identified Critical Times in accordance with EP-HC-111-101

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- (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>Hope Creek Generating Station</u>	Date of Examination: <u>2/23/15</u>
Exam Level: RO <input checked="" type="checkbox"/> SRO-I <input checked="" type="checkbox"/> SRO-U <input type="checkbox"/>	Operating Test No: <u>1</u>

Control Room Systems [@] (8 for RO); (7 for SRO-I); (2 or 3 for SRO-U, including 1 ESF)		
System / JPM Title	Type Code*	Safety Function
a. REACTOR PROTECTION SYSTEM (SB013) Operator resets RPS, identifies a control rod out of position and reseats the control rod in accordance with HC.OP-SO.SB-0001.	A,D,E	7
b. RWCU (BG003) Operator responds to a containment isolation and restores RWCU IAW HC.OP-AB.CONT-0002.	E,N	2
c. CRDH SYSTEM (BF012) Operator responds to a loss of CRD regulating function in accordance with HC.OP-AB.IC-0001.	A,D,E,L	1
d. CONTROL ROOM HVAC (GK003) Operator places Control Area Ventilation Train B in-service without cooling in accordance with Steps 5.8.1 through 5.8.5 of HC.OP-SO.GK-0001.	EN,N	9
e. PRIMARY CONTAINMENT SYSTEM (GS011) Operator vents the Drywell, and secures venting the Drywell in accordance with HC.OP-AB.CONT-0001.	EN,N	5
f. SACS (EG008) Operator implements Condition A of HC.OP-AB.COOL-0002.	A,D,E	8
g. MAIN TURBINE (AC007) Operator responds to an abnormal Main Turbine condition during Main Turbine roll in accordance with HC.OP-SO.AC-0001.	A,D	3
h. RECIRCULATION SYSTEM (BB001) RO ONLY Operator resets the Reactor Recirculation Runbacks in accordance with HC.OP-SO.BB-0002	D,E	4

In-Plant Systems [@] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)		
i. CRDH SYSTEM (BF001) Operator alternates CRDH System Flow Control Valves in accordance with Section 5.2 of HC.OP-SO.BF-0001.	D,R	1
j. INSTRUMENT GAS (KL006) Operator overrides a valve containment isolation signal in accordance with HC.OP-AB.COMP-0002	E,EN,N	5
k. 120 VAC Distribution (PN004) Operator removes a 120 VAC inverter from service IAW HC.OP-SO.PN-0001	A,N	6

@	All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions; all 5 SRO-U systems must serve different safety functions; in-plant systems and functions may overlap those tested in the control room.
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* Type Codes	Criteria for RO / SRO-I / SRO-U
(A)lternate path	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	$\leq 9 / \leq 8 / \leq 4$
(E)mergency or abnormal in-plant	$\geq 1 / \geq 1 / \geq 1$
(EN)gineered safety feature	- / - / ≥ 1 (control room system)
(L)ow-Power / Shutdown	$\geq 1 / \geq 1 / \geq 1$
(N)ew or (M)odified from bank including 1(A)	$\geq 2 / \geq 2 / \geq 1$
(P)revious 2 exams	$\leq 3 / \leq 3 / \leq 2$ (randomly selected)
(R)CA	$\geq 1 / \geq 1 / \geq 1$
(S)imulator	

Facility: Hope Creek Scenario No.: 1 Op-Test No.: 2015

Examiners: _____ Operators: _____ (SRO)
 _____ (RO)
 _____ (BOP)

Initial Conditions: 84% power. Power lowered for RFP maintenance.

Turnover:
Place RFP in service. Raise Reactor power to 100%.

New

Event No.	Malf. No.	Event Type*	Event Description
1		N(BOP) N(SRO)	Place RFP In Service
2		R(ATC) R(SRO)	Raise Reactor Power with Recirculation System
3		C(ATC) C(SRO) TS(SRO)	Recirculation Pump Runaway
4		C(BOP) C(SRO) TS(SRO)	Loss of 1DD482
5		M(ALL)	LOCA
6		C(ATC) C(SRO)	RPS Failure-ATWS/ARI Scram Successful
7		C(BOP) C(SRO)	HPCI Injection Valve Failures-Loss of Condensate
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			

Facility: Hope Creek Scenario No.: 2 Op-Test No.: 2015

Examiners: _____ Operators: _____ (SRO)
 _____ (RO)
 _____ (BOP)

Initial Conditions: 95% Power. Power reduction in progress for a rod pattern adjustment.

Turnover:
Swap EHC pumps. Reduce power to 85%. Hold for Reactor Engineer review of plant conditions.

ESG-073 modified.

Event No.	Malf. No.	Event Type*	Event Description
1		N(BOP) N(SRO)	EHC Pump Swap
2		R(ATC) R(SRO)	Lower Power With Control Rods and Recirculation Flow
3		I(ATC) I(SRO) TS(SRO)	Flow Unit Failure
4		C(ALL)	EHC System Leak
5		M(ALL)	ATWS-Main Turbine Trip-Bypass Valve Failure
6		C(BOP) C(SRO)	Failure of SBLC to Automatically Initiate
7		C(ATC) C(SRO)	CRD Pump trip- EOP Implementation Failure
* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor			

Facility: Hope Creek Scenario No.: 3Op-Test No.: 2015

Examiners: _____ Operators: _____ (SRO)
 _____ (RO)
 _____ (BOP)

Initial Conditions: 100% Power.

Turnover:
 Maintain 100% power.

ESG-002 Modified

Event No.	Malf. No.	Event Type*	Event Description
1		R(ATC) R(SRO) C(BOP)	FWH Leak
2		C(ATC) C(SRO) TS(SRO)	Inadvertent SBLC System Actuation
3		TS(SRO)	Loss of 10D410
4		M(ALL)	Loss of Offsite Power
5		C(BOP) C(SRO)	Auto Start Failure of EDGs
6		C(BOP) C(SRO)	RCIC Overspeed Trip
7		C(ATC) C(SRO)	SACS Pump Trip

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor

Facility: Hope Creek Scenario No.: 4Op-Test No.: 2015
 Examiners: _____ Operators: _____ (SRO)
 _____ (RO)
 _____ (BOP)
Initial Conditions: 100% Power.
 Turnover:
Maintain 100% power.

ESG-082 Modified

Event No.	Malf. No.	Event Type*	Event Description
1		N(BOP) N(SRO)	Containment O2 Weekly Surveillance Test
2		C(BOP) R(ATC) R(SRO) TS(SRO)	SRV Open/Closes
3		C(BOP) C(SRO)	Earthquake- Service Air Compressor Trip
4		C(ATC) C(SRO)	RWCU Pump Leak-Failure to Automatically Isolate
5		C(ALL)	Air Leak w/Multiple Rod Drift -Scram
6		M(ALL)	LOP-Station Blackout
7		C(BOP) C(SRO)	LOCA Requiring Steam Cooling-RCIC Isolation
8		C(BOP) C(SRO)	RHR Injection Failure

* (N)ormal, (R)eactivity, (I)nstrument, (C)omponent, (M)ajor