

Facility: **Wolf Creek Generating Station** Date of Examination: **March 06, 2006**
 Exam Level: **SRO-U** Operating Test No.: **1**

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. Establish Alternate High Injection using EMG FR-C2 (ESF)	S-1 NAS	2
b. Re-energize Safety Related Bus NB02 using OFN NB-030	S-2 NS	6
c. Control Room Not Habitable, Control at Aux Shutdown Panel	S-3 MSAL SRO	4
d.		
e.		
f.		
g.		
h.		

In-Plant Systems[@] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)

i. Perform local actions for Emergency Boration (2001 Exam)	P-1 DEARP	1
j.		
k. Align Fire Protection System to the Condensate Storage Tank	P-3 DE	8

@ All control room (and in-plant) systems must be different and 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
(A)lternate path	4-6 / 4-6 / 2-3
(C)ontrol room	
(D)irect from bank	≤ 9 / ≤ 8 / ≤ 4
(E)mergency or abnormal in-plant	≥ 1 / ≥ 1 / ≥ 1
(L)ow-Power / Shutdown	≥ 1 / ≥ 1 / ≥ 1
(N)ew or (M)odified from bank including 1(A)	≥ 2 / ≥ 2 / ≥ 1
(P)revious 2 exams	≤ 3 / ≤ 3 / ≤ 2 (randomly selected)
(R)CA	≥ 1 / ≥ 1 / ≥ 1
(S)imulator	

Facility: **Wolf Creek Generating Station** Scenario No.: **1 (New)** Op-Test No.: **1**

Examiners: _____ Operators: _____

Initial Conditions: **55% power, "B" Main Feed Pump (MFP) rolling at 1100 rpm**

Turnover: **Place 2nd MFP on line, maintain current power for flux map**

Event No.	Malf. No.	Event Type*	Event Description
1	N/A	N-BOP	Place 2 nd MFP on line
2	mPCS02A	R-ATC	Turbine Impulse Pressure AC PT-505 fails low causing control rod insertion.
3	mMSS01C2	I-BOP	"C" SG Pressure Instrument fails low, affecting Steam Flow indication and MFP Speed Control.
4	mCCW18B	C-ATC C-BOP	Component Cooling Water System (CCW) Leak in the "B" Train Safety Loop. Requires removing "B" Train CCW and ECCS pumps from service.
5	mRCS07B	M	Small Break LOCA, Safety Injection
6	mCCW06A r19064B	C-ATC	"A" Train CCW pump A trips on SI and the C pump fails to autostart.
7	mPSC10C	C-BOP	Containment Isolation Phase A fails to automatically actuate

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

Facility: **Wolf Creek Generating Station** Scenario No.: **2 (Mod)** Op-Test No.: **1**

Examiners: _____ Operators: _____

Initial Conditions: **100% power, Normal Operations**

Turnover: **"A" Emergency Diesel Generator (EDG) is Out of Service.**
Severe Thunder Storm Watch in Effect for Coffey County.
Block Valve BB HV-8000A closed and power removed.
due to PORV blowing fuses.

Event No.	Malf. No.	Event Type*	Event Description
1	mWAT06 A	R-ATC	Circ Water Pump "A" trips causing a Main Turbine Setback to 80%.
2	mPRS01A	I-ATC	Pressurizer Pressure Instrument fails high
3	P24100C P24100D	C-ATC	Instrument Air to Containment, KA HV-29, fails closed causing a loss of normal charging and letdown.
4	mRCS02A	M	330 gpm Steam Generator Tube Rupture on "A"
5	P19019B P19028B	C-ATC	Both Essential Service Water Pumps fail to automatically start on Safety Injection
6	rPRS07	C-ATC	Block Valve BB HV-8000B fails to open, affecting RCS depressurization. Requires entry into contingency procedure EMG C-33 for SGTR with Loss of Pressure Control.

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

Facility: Wolf Creek Generating Station **Scenario No.:** B/U (Bank) **Op-Test No.:** 1

Examiners: _____ **Operators:** _____

Initial Conditions: 100% power, Normal operations

Turnover: Normal Charging Pump and "A" AFW pump are out of service

Event No.	Malf. No.	Event Type*	Event Description
1	mPRS01B	I-ATC	Pressurizer Pressure Channel for lower selected channel fails high, affects only one PORV and not the Master Pressure Controller
2	mFWM05 A	C-BOP	"A" Main Feed Pump speed controller fails low
3	mRCS06B	M	Small Break LOCA
4	Various	C-ATC	Automatic Safety Injection fails to actuate on both trains, Manual available
5	P17023B P17027B mCVC13A mCVC13B	C-ATC	A and B Charging pumps trip on safety injection, A and B Safety Injection pumps fail to start automatically. This results in no High Head or Intermediate Head Injection. The Safety Injection pumps may be manually started.
6	mMSS07E	C-ATC	"A" Steam Generator Atmospheric Relief valve fails open post trip.

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

Facility: <u>Wolf Creek Generating Station</u>		Date of Examination: <u>03/06/2006</u>
Examination Level: <u>RO</u>		Operating Test Number: <u>1</u>
Administrative Topic (see Note)	Type Code*	Describe activity to be performed
Conduct of Operations 2.1.20 (A1.a)	NS	Perform Surveillance STS BG-001, Boron Injection Flow Path Verification, on the Simulator.
Conduct of Operations 2.1.25 (A1.b)	PR	Determine Time to Boil and Core Uncovery based on a loss of Shutdown Cooling. (2001 SRO Admin)
Equipment Control 2.2.13 (A2)	NR	Prepare a Clearance Order to remove a leaking pump from service.
Radiation Control 2.3.1 (A3)	MR	Given a Radiological Survey Map and Radiation Work Permit determine the Radiological conditions and controls required.
Emergency Plan		N/A
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)		

Administrative Topic (see Note)		Type Code*	Describe activity to be performed
Facility: Wolf Creek Generating Station		Date of Examination: 03/06/2006	
Examination Level: SRO		Operating Test Number: 1	
Conduct of Operations 2.1.5 (A1.a)	NR	One licensed operator had to leave shift. Determine from a list which operators could be called in without getting permission for exceeding work hour limitations.	
Conduct of Operations 2.1.25 (A1.b)	PR	Determine Time to Boil and Core Uncovery based on a loss of Shutdown Cooling. (2001 SRO Admin)	
Equipment Control 2.2.13 (A2)	NR	Review a Clearance Order for approval and identify the errors.	
Radiation Control 2.3.1 (A3)	MR	Given a Radiological Survey Map and Radiation Work Permit determine the Radiological conditions and controls required.	
Emergency Plan 2.4.41 (A4)	MS	After completing a dynamic scenario on the simulator, make the correct Emergency Plan Classification for the events.	
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Facility: Wolf Creek Generating Station Date of Examination: March 06, 2006
 Exam Level: RO Operating Test No.: 1

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. Establish Alternate High Injection using EMG FR-C2	S-1	NAS	2
b. Re-energize Safety Related Bus NB02 using OFN NB-030	S-2	NS	6
c. Increase ECCS Accumulator Pressure (2001 Exam)	S-3	DSLPP	3
d. Rad Monitors Re-27/28 alarm, FBIS fails to actuate	S-4	NALS	7
e. Start up a Containment Mini-Purge	S-5	DS	8
f. Recover a mis-aligned rod using OFN SF-011.	S-6	NS	1
g. Swap Containment Spray pumps to Containment Sumps	S-7	NAS	5
h. Feed SG's with the Start Up Feed Pump using EMG FR-H1	S-8	NAS	4 Secondary

In-Plant Systems[@] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)

i. Perform local actions for Emergency Boration (2001 Exam)	P-1	DEARP	1
j. Control Room Evacuation for Turbine Building Actions	P-2	ME	4
k. Align Fire Protection System to the Condensate Storage Tank	P-3	DE	8

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(S)imulator	

Facility: Wolf Creek Generating Station Exam Level: SRO-I		Date of Examination: March 06, 2006 Operating Test No.: 1	
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a. Establish Alternate High Injection using EMG FR-C2	S-1	NAS	2
b. Re-energize Safety Related Bus NB02 using OFN NB-030	S-2	NS	6
c. Control Room Not Habitable, Control at Aux Shutdown Panel	S-3 SRO	MSAL	4
d. Rad Monitors Re-27/28 alarm, FBIS fails to actuate	S-4	NALS	7
e. Start up a Containment Mini-Purge	S-5	DS	8
f. Recover a mis-aligned rod using OFN SF-011.	S-6	NS	1
g. Swap Containment Spray pumps to Containment Sumps	S-7	NAS	5
h.			
In-Plant Systems[@] (3 for RO); (3 for SRO-I); (3 or 2 for SRO-U)			
i. Perform local actions for Emergency Boration (2001 Exam)	P-1	DEARP	1
j. Control Room Evacuation for Turbine Building Actions	P-2	ME	4
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(L)ow-Power / Shutdown		≥ 1 / ≥ 1 / ≥ 1	
(N)ew or (M)odified from bank including 1(A)		≥ 2 / ≥ 2 / ≥ 1	
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(R)CA		≥ 1 / ≥ 1 / ≥ 1	
(S)imulator			