

# WOLF CREEK

NUCLEAR OPERATING CORPORATION

November 11, 2015

Jaime H. McCoy  
Vice President Engineering

ET 15-0026

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

- Reference:
- 1) Letter dated March 12, 2012, from E. J. Leeds and M. R. Johnson, USNRC, to M. W. Sunseri, WCNO, "Request for Information Pursuant to Title 10 of the Code of Federal Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force (NTTF) Review of Insights from the Fukushima Dai-ichi Accident"
  - 2) Letter WO 14-0095 dated December 23, 2014, from C. O. Reasoner, WCNO, to USNRC
  - 3) Letter ET 15-0015 dated June 24, 2015, from J. H. McCoy, WCNO, to USNRC
  - 4) Electronic Mail dated August 6, 2015, from S. M. Wyman, USNRC, to T. W. Solberg, WCNO

Subject: Docket No. 50-482: Response to Request for Additional Information Regarding the Expedited Seismic Evaluation Process Report

Gentlemen:

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Reference 1 to Wolf Creek Nuclear Operating Corporation (WCNO). The Enclosure of Reference 2 provided the Wolf Creek Generating Station (WCGS) Expedited Seismic Evaluation Process (ESEP) Report requested in Enclosure 1 of Reference 1. Reference 3 provided a response to a request for additional information related to the ESEP Report in Reference 2.

Reference 4 provided a request for additional information related to the WCGS ESEP Report. The Attachments and Enclosure provide WCNO's response to the request for additional information.

This letter serves as a supplement to Reference 2, and includes the following changes under Attachment II:

1. Update to Section 7.1, "Identification of ESEL items inaccessible for walkdowns"
2. Update to Section 8.4, "Summary of Regulatory Commitments"

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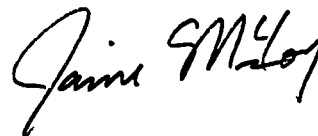
Enclosure I replaces Attachment A of Reference 2, in its entirety. The changes made to Attachment A are designated with revision bars.

Attachment I to this letter provides a list of commitments that will be taken in association with the Near-Term Task Force Recommendation 2.1 ESEP Report and the implementation dates for those commitments.

Per discussion on October 26, 2015, with S. M. Wyman, USNRC, WCNOG was granted an extension to November 12, 2015, from the due date stated in Reference 4.

If you have any questions concerning this matter, please contact me at (620) 364-4156, or Cynthia R. Hafenstine (620) 364-4204.

Sincerely,



Jaime H. McCoy

JHM/rit

Attachments: I List of Regulatory Commitments  
II Updated Expedited Seismic Evaluation Process (ESEP) Report

Enclosure: I Attachment A. Wolf Creek Generating Station Expedited Seismic Evaluation List (ESEL)

cc: M. L. Dapas (NRC), w/a, w/e  
C. F. Lyon (NRC), w/a, w/e  
N. H. Taylor (NRC), w/a, w/e  
S. M. Wyman (NRC), w/a, w/e  
Senior Resident Inspector (NRC), w/a, w/e

STATE OF KANSAS     )  
                                  ) SS  
COUNTY OF COFFEY )

Jaime H. McCoy, of lawful age, being first duly sworn upon oath says that he is Vice President Engineering of Wolf Creek Nuclear Operating Corporation; that he has read the foregoing document and knows the contents thereof; that he has executed the same for and on behalf of said Corporation with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By Jaime H McCoy  
Jaime H. McCoy  
Vice President Engineering

SUBSCRIBED and sworn to before me this 11<sup>th</sup> day of November, 2015.



Gayle Shepherd  
Notary Public

Expiration Date 7/24/2019

### LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Wolf Creek Nuclear Operating Corporation (WCNOC) in this document. Any other statements in this letter are provided for information purposes and are not considered regulatory commitments. Please direct questions regarding these commitments to Cynthia R. Hafenstine, Manager Regulatory Affairs at Wolf Creek Generating Station, (620) 364-4204.

REGULATORY COMMITMENT	DUE DATE
WCNOC will walkdown inaccessible items, perform High Confidence of Low Probability of Failure (HCLPF) table updates, report any required modifications with proposed completion dates, and provide a letter with this supplemental information.	No later than 60 days following completion of Refueling Outage 21, fall 2016

**Attachment II**  
**Updated Expedited Seismic Evaluation Process (ESEP) Report**  
**(Corrected Sections Only)**

The following pages identify changes to two sections of Wolf Creek Generating Station's Expedited Seismic Evaluation Process (ESEP) Report (Enclosure to letter WO 14-0095). This attachment replaces the following sections in the ESEP Report:

1. Update to Section 7.1, "Identification of ESEL items inaccessible for walkdowns"
2. Update to Section 8.4, "Summary of Regulatory Commitments"

**7.1 Identification of ESEL items inaccessible for walkdowns**

The additional items (Items 137-162) provided to the Wolf Creek Generating Station ESEL as a result of WCNO letter ET 15-0015 (response to NRC request for clarification) are located inside containment, with the exception of Items 141 and 142 (Steam Generator Atmospheric Relief Valves ABPV0001 and ABPV0002). The components inside containment may not be walked down until Refueling Outage 21, currently scheduled for fall 2016. If existing documentation is sufficient, further walkdowns may not be necessary.

#### 8.4 Summary of Regulatory Commitments

The following actions will be performed as a result of the ESEP:

Action #	Equipment ID	Equipment Description	Action Description	Completion Date
1	Multiple (ESEL Items 137-162)	Multiple (ESEL Items 137-162)	WCNOC will walkdown inaccessible items, perform HCLPF table updates, report any required modifications with proposed completion dates, and provide a letter with this supplemental information.	No later than 60 days following completion of Refueling Outage 21, Fall 2016

**Attachment A. Wolf Creek Generating Station  
Expedited Seismic Evaluation List (ESEL)  
(13 Pages)**



**Attachment A. Wolf Creek Generating Station ESEL**

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
<b>Mechanical ESEL Items</b>					
1	TAP01	Condensate Storage Tank	Operable	Operable	SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
2	PAL02	TDAFW Pump	Not Operating	Operating	SG Makeup with SGs Available - Phase 1
3	ALHV0034	MOV	Open	Closed	SG Makeup with SGs Available - Phase 1
4	ALHV0035	MOV	Open	Closed	SG Makeup with SGs Available - Phase 1
5	ALFE0049	Flow Element			SG Makeup with SGs Available - Phase 1
6	ALHV0012	Air Operated Valve	Open	Open	SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
7	ALFE0004	Flow Element			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
8	ALFT0004	Flow Transmitter			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
9	ALFT0011	Flow Transmitter			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
10	ALHV0010	Air Operated Valve	Open	Open	SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
11	ALFE0003	Flow Element			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
12	ALFT0003	Flow Transmitter			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
13	ALFT0009	Flow Transmitter			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
14	ALHV0008	Air Operated Valve	Open	Open	SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
15	ALFE0002	Flow Element			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
16	ALFT0002	Flow Transmitter			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
17	ALFT0007	Flow Transmitter			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
18	ALHV0006	Air Operated Valve	Open	Open	SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
19	ALFE0001	Flow Element			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
20	ALFT0001	Flow Transmitter			SG Makeup with SGs Available - Phase 1, Phase 2, Phase 3
21	ABHV0005	Air Operated Valve	Closed	Fail Open	SG Makeup with SGs Available - Phase 1
22	ABHV0048	Air Operated Valve	Open	Fail Closed	SG Makeup with SGs Available - Phase 1
23	ABHV0006	Air Operated Valve	Closed	Fail Open	SG Makeup with SGs Available - Phase 1
24	ABHV0049	Air Operated Valve	Open	Fail Closed	SG Makeup with SGs Available - Phase 1

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
25	FCFV0310	Level Control Valve	Open	Closed	SG Makeup with SGs Available - Phase 1
26	FCLT0010	Level Indicator			SG Makeup with SGs Available - Phase 1
27	FCHV0312	Trip and Throttle Valve	Closed	Operating	SG Makeup with SGs Available - Phase 1
28	Speed Governor	Speed Governor	Standby	Operating	SG Makeup with SGs Available - Phase 1
29	FCFV0313	Speed Governor Valve	Open	Operating	SG Makeup with SGs Available - Phase 1
30	KFC02	AFW Pump Turbine	Not Operating	Operating	SG Makeup with SGs Available - Phase 1
31	TEM01	Boron Injection Tank			RCS Makeup with SGs not Available - Phase 2, Phase 3
32	EMPT0947	BIT Outlet Pressure Transmitter			RCS Makeup with SGs not Available - Phase 2, Phase 3
33	EMPI0947	BIT Outlet Pressure Indicator			RCS Makeup with SGs not Available - Phase 2, Phase 3
34	EMHV8801B	MOTOR-OPERATED VALVE EMHV8801B	Closed	Open	RCS Makeup with SGs not Available - Phase 2, Phase 3
35	EMFE0924	ECCS FLOW TO RCS COLD-LEG 1			RCS Makeup with SGs not Available - Phase 2, Phase 3
36	EMFE0925	ECCS FLOW TO RCS COLD-LEG 2			RCS Makeup with SGs not Available - Phase 2, Phase 3
37	EMFE0926	ECCS FLOW TO RCS COLD-LEG 3			RCS Makeup with SGs not Available - Phase 2, Phase 3
38	EMFE0927	ECCS FLOW TO RCS COLD-LEG 4			RCS Makeup with SGs not Available - Phase 2, Phase 3
39	TBN01	RWST			RCS Makeup with SGs not Available - Phase 1
40	BNLT0930	RWST Level Transmitter			RCS Makeup with SGs not Available - Phase 1
41	EJFCV0610	RHR PUMP A MINIFLOW VALVE	Open	Closed	RCS Makeup with SGs not Available - Phase 1
42	TBG03A	Boric Acid Tank			RCS Makeup with SGs Available - Phase 2, Phase 3
43	BGLT0102	BORIC ACID TANK A LEV			RCS Makeup with SGs Available - Phase 2, Phase 3
44	BGLI0102	BORIC ACID TANK A LEV			RCS Makeup with SGs Available - Phase 2, Phase 3
45	BBPV8702A	RHR TO RCS	Closed	Open	RCS Makeup with SGs not Available - Phase 1
<b>Electrical ESEL Items</b>					
46	NB001	4.16KV SWGR NB001 (Class 1E, Train A)	N/A	N/A	This component is powered by the FLEX DG in Phase 3 as stated in Sec. 8 of the WC Integrated FLEX Plan
47	NB00101	4.16 kV FDR BKR FOR RHRP-A DPEJ01A (Residual Heat Removal Pump A)	N/A	N/A	This component is powered by the FLEX DG in Phase 3 as stated in Sec. 8 of the WC Integrated FLEX Plan

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
48	NB00107	4.16 kV FDR BKR FOR CCWP-A DPEG01A (Component Cooling Water Pump A)	N/A	N/A	This component is powered by the FLEX DG in Phase 3 as stated in Sec. 8 of the WC Integrated FLEX Plan
49	NB00110	4.16 kV FDR BKR FOR XFMR XNG03 (4160 V to 480 V for LC NG003)	N/A	N/A	Although this component is not part of the current FLEX Phase 3 plan, WCNOG has decided to add this to the ESEL in order to independently power NG03
50	NB00113	4.16 kV FDR BKR FOR XFMR XNG01 (4160 V to 480 V for LC NG001)	N/A	N/A	This component is powered by the FLEX DG in Phase 3 as stated in Sec. 8 of the WC Integrated FLEX Plan
51	NB00109	4.16 kV FLEX GEN TIE-IN POINT (BKR) FOR TRAIN A	N/A	N/A	This component is powered by the FLEX DG in Phase 3 as stated in Sec. 8 of the WC Integrated FLEX Plan
52	XNG01	4.16-KV/480 V LOAD CENTER TRANSFORMER XNG01 FOR LC NG001	N/A	N/A	This component is powered by the FLEX DG in Phase 3 as stated in Sec. 8 of the WC Integrated FLEX Plan
53	NG001	480 V LOAD CENTER NG01	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
54	NG00101	MAIN BKR FOR LC NG01	N/A	N/A	This component is powered by the FLEX DG in Phase 3 as stated in Sec. 8 of the WC Integrated FLEX Plan
55	NG00103	FDR BKR FOR 125 V VITAL BATTERY CHARGER NK021	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
56	NG00112	FLEX 500 kW TIE IN BRK (Phase 2 connection point)	N/A	N/A	This component is powered by the FLEX DG in Phase 2 as stated in Sec. 8 of the WC Integrated FLEX Plan
57	NG00116	TIE BKR (CONNECTS NG01 AND NG03)	N/A	N/A	This component is powered by the FLEX DG in Phase 2 as stated in Sec. 8 of the WC Integrated FLEX Plan
58	XNG03	4.16-KV/480 V LOAD CENTER TRANSFORMER XNG03 FOR LC NG003	N/A	N/A	Although this component is not part of the current FLEX Phase 3 plan, WCNOG has decided to add this to the ESEL in order to independently power NG03
59	NG003	480 V LOAD CENTER NG03	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
60	NG00301	MAIN BKR FOR LC NG03	N/A	N/A	Although this component is not part of the current FLEX Phase 3 plan, WCNOG has decided to add this to the ESEL in order to independently power NG03

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
61	NG00303	FDR BKR FOR 125 V VITAL BATTERY CHARGER NK023	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
62	NK021	125 V BATTERY CHARGER NK021	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
63	NK071	TRANSFER SWITCH BUS NK01 BATTERY CHARGER NK21/NK25	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
64	NK001	125 VDC BUS SWITCHBOARD NK001	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
65	NK00102	FDR BKR FROM BATT CHGR NK021 TO NK001	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
66	NK00104	MAIN BREAKER FOR CNTRL AND DIST PNL NK041 (PART OF SWBD NK001)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
67	NK00105	MAIN BREAKER FOR CNTRL AND DIST PNL NK051 (PART OF SWBD NK001)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
68	NK011	125 V BATTERY NK011	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
69	NK00101	ISOLATION BKR FOR BATTERY NK011	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
70	NK00111	FDR BKR FOR INVERTER NN011 (PART OF SWBD NK001)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
71	NN011	7.5KVA INVERTER (FED FROM BATT CHARGER NK021)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
72	NN001	Class 1E AC DIST SWBD NN01 (SEP GRP 1)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
73	SA036A	ESFAS CH1 TERM	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
74	SENY0060A	NEUTRON FLUX MONITORING SYSTEM DETECTOR AMPLIFIER SENY 60A	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
75	SENY0060B	NEUTRON FLUX MONITORING SYSTEM DETECTOR AMPLIFIER SENY 60B	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
76	SB032A	W SS PROT SYS INPUT TRN B	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
77	SB029A	W SS PROT SYS INPUT TRN A	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
78	SB038	W PROCESS ANALOG PROTECTION SET CAB-01	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
79	SB029D	W SS PROT SYS OUT 2 TRN A	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
80	SE054A	W NUC INSTM NIS 1	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
81	SB030A	SSPS TRN A #1 TEST	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
82	RP053AC	BOP INSTRUMENTATION RACK (TERMINATION AREA)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
83	SB078	RPV LEVEL INSTR SYS (RVLIS) PROC PROT SYS CABINET	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
84	RP081A	T/C SUBCOOLING MONITOR CABINET	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
85	NK041	CNTRL & INSTR DIST SWBD NK041 (CLASS 1E 125 VDC)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
86	RL005	TURBINE GENERATOR AND FW CONSOLE	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
87	RL006	TURBINE GENERATOR AND FW CONSOLE	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
88	RP139	B AUXILIARY RELAY RACK RP139	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
89	NK051	CNTRL & INSTR DIST SWBD NK051 (CLASS 1E 125 VDC)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
90	BBPCV0455A	BBPCV0455A PORV SOLENOID FAILS TO OPEN ON DEMAND	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
91	RL021	REACTOR AUX CNTRL PANEL	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
92	RL022	REACTOR AUX CNTRL PANEL	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
93	RP209	B AUXILIARY RELAY RACK	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
94	RP289	DC DIST PNL RP289	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
95	RP330	AUX RELAY RACK RP330	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
96	RP332	B AUXILIARY RELAY RACK	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
97	NK051A	EM'CY LIGHTING DIST SWBD NK051A (SUBPNL OF NK051)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
98	NK023	125 V BATTERY CHARGER NK023	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
99	NK073	TRANSFER SWITCH BUS NK03 BATTERY CHARGER NK23/NK25	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
100	NK003	125 VDC BUS SWITCHBOARD NK003	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
101	NK00302	FDR BKR FROM BATT CHGR NK023 TO NK003	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
102	NK00304	MAIN BREAKER FOR CNTRL AND DIST PNL NK043 (PART OF SWBD NK003)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
103	NK013	125 V BATTERY NK013	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
104	NK00301	ISOLATION BKR FOR BATTERY NK013	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
105	NK00311	FDR BKR FOR INVERTER NN013 (PART OF SWBD NK003)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
106	NN013	7.5KVA INVERTER (FED FROM BATT CHARGER NK023)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
107	NN003	Class 1E AC DIST SWBD NN03 (SEP GRP 3)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
108	RP053DB	BOP INSTR RACK RP053DB	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan



ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
109	SB037	W PROCESS ANALOG PROTECTION SET CAB-03	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
110	NK043	CNTRL & INSTR DIST SWBD NK043 (CLASS 1E 125 VDC)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
111	AB007	Aux Relay Rack	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
112	NG00109	FDR BKR FOR 125 V SWING BATTERY CHARGER NK025	N/A	N/A	This component provides power to NK025 and, in turn, Separation Group 1.
113	NK025	125 V BATTERY CHARGER NK025 (Swing Battery Charger)	N/A	N/A	The A-Train swing charger will be used to power Separation Group 1.
114	NG002	480 V LOAD CENTER NG02	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
115	NG00212	FLEX 500 kW TIE IN BKR from FD201 (Phase 2 connection point)	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
116	NG00203	FDR BKR FOR 125 V VITAL BATTERY CHARGER NK024	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
117	NK024	125 V BATTERY CHARGER NK024	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
118	NK074	TRANSFER SWITCH BUS NK04 BATTERY CHARGER NK24/NK26	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
119	NK004	125 VDC BUS SWITCHBOARD NK004	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
120	NK00402	FDR BKR FROM BATT CHGR NK024 TO NK004	N/A	N/A	This component is powered by the FLEX DG, first Phase 2, then in Phase 3, as stated in Sec. 8 of the WC Integrated FLEX Plan
121	NK014	125 V BATTERY NK014	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
122	NK00401	ISOLATION BKR FOR BATTERY NK014	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
123	NK00411	FDR BKR FOR INVERTER NN011 (PART OF SWBD NK004)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
124	NN014	7.5KVA INVERTER (FED FROM BATT CHARGER NK024)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
125	NN004	Class 1E AC DIST SWBD NN04 (SEP GRP 4)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
126	SA036B	ESFAS CH4 TERM	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
127	RP147B	BOP Instrumentation Rack RP147B	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
128	SENY0061A	NEUTRON FLUX MONITORING SYSTEM DETECTOR AMPLIFIER SENY 61A	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
129	SENY0061B	NEUTRON FLUX MONITORING SYSTEM DETECTOR AMPLIFIER SENY 61B	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
130	SB032D	W SSPS Train B #2 Output	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
131	SB033A	SSPS Train B #1 Test	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
132	SB041	W PROCESS ANALOG PROTECTION SET CAB-04	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
133	RP053BC	BOP Instrumentation Rack RP053BC	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
134	SB079	RVLIS Process Cabinet SB079	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
135	RP081B	Subcooling Monitor Cabinet	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
136	SB148B	W PROCESS PROTECTION (Fire Isolation)	N/A	N/A	This component is powered during ALL phases of the FLEX strategy as stated in Sec. 8 of the WC Integrated FLEX Plan
<b>Additional Items in Response to NRC Clarification Questions</b>					
137	ABPT0514	Steam Generator A Pressure Transmitter (Steam Generator Pressure)	N/A	N/A	Monitor SG pressure in all three phases
138	ABPT0524	Steam Generator B Pressure Transmitter (Steam Generator Pressure)	N/A	N/A	Monitor SG pressure in all three phases
139	ABPT0534	Steam Generator C Pressure Transmitter (Steam Generator Pressure)	N/A	N/A	Monitor SG pressure in all three phases
140	ABPT0544	Steam Generator D Pressure Transmitter (Steam Generator Pressure)	N/A	N/A	Monitor SG pressure in all three phases
141	ABPV0001	Steam Generator A Atmospheric Steam Dump (Steam Generator Atmospheric Relief Valves)	Closed	Open	ARV will need to cycle open as needed to remove heat from steam generators
142	ABPV0002	Steam Generator B Atmospheric Steam Dump (Steam Generator Atmospheric Relief Valves)	Closed	Open	ARV will need to cycle open as needed to remove heat from steam generators
143	AELT0529	Steam Generator B Narrow Range Level Transmitter (Steam Generator Water Level)	N/A	N/A	Monitor SG pressure in all three phases
144	AELT0539	Steam Generator C Narrow Range Level Transmitter (Steam Generator Water Level)	N/A	N/A	Monitor SG pressure in all three phases
145	BBHV8001A	RCS Reactor Vessel Head Vent A Upstream Valve (Reactor Head Vent)	Closed	Standby	Flow limited by choked flow at RCS pressure. Maintained for defense in depth.

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
146	BBHV8002A	RCS Reactor Vessel Head Vent A Downstream Valve (Reactor Head Vent)	Closed	Standby	Flow limited by choked flow at RCS pressure. Maintained for defense in depth.
147	BBPCV455A	Pressurizer Power Operated Relief Valve (Pressurizer PORV)	Closed	Standby	PORV's operate in normal manner as conditions require. Not preferred path. Maintained for defense in depth.
148	BBPT0455	RCS Pressurizer Pressure Channel 1 (RCS Pressure)	N/A	N/A	Monitor RCS pressure in all three phases
149	BBTE0413A	RCS LOOP 1 Wide Range Hot Leg Prot. A Temperature Element (RCS Temperature)	N/A	N/A	Monitor RCS temperature in all three phases
150	BBTE0413B	RCS LOOP 1 Wide Range Cold Leg Prot. A Temperature Element (RCS Temperature)	N/A	N/A	Monitor RCS temperature in all three phases
151	BBTE0423A	RCS LOOP 2 Wide Range Hot Leg Prot. A Temperature Element (RCS Temperature)	N/A	N/A	Monitor RCS temperature in all three phases
152	BBTE0423B	RCS LOOP 2 Wide Range Cold Leg Prot. A Temperature Element (RCS Temperature)	N/A	N/A	Monitor RCS temperature in all three phases
153	EPHV8808A	Accumulator Tank A Outlet Isolation Valve (Accumulator Isolation Valves)	Open	Closed	Valve will need to be closed when the accumulators are empty
154	EPHV8808B	Accumulator Tank B Outlet Isolation Valve (Accumulator Isolation Valves)	Open	Closed	Valve will need to be closed when the accumulators are empty
155	EPHV8808C	Accumulator Tank C Outlet Isolation Valve (Accumulator Isolation Valves)	Open	Closed	Valve will need to be closed when the accumulators are empty
156	EPHV8808D	Accumulator Tank D Outlet Isolation Valve (Accumulator Isolation Valves)	Open	Closed	Valve will need to be closed when the accumulators are empty
157	GNPT0936	Containment Atmospheric Pressure Channel 2 Pressure Transmitter (Containment Pressure)	N/A	N/A	Monitor containment pressure in all three phases
158	GNPT0937	Containment Atmospheric Pressure Channel 1 Pressure Transmitter (Containment Pressure)	N/A	N/A	Monitor containment pressure in all three phases
159	TEP01A	Safety Injection Accumulator Tank A (Accumulators)	N/A	N/A	Needed only for Phase 1. Will be isolated before completely empty.

ESEL Item Num	Equipment		Operating State		Notes/Comments[1]
	ID	Description	Normal State	Desired State	
160	TEP01B	Safety Injection Accumulator Tank B (Accumulators)	N/A	N/A	Needed only for Phase 1. Will be isolated before completely empty.
161	TEP01C	Safety Injection Accumulator Tank C (Accumulators)	N/A	N/A	Needed only for Phase 1. Will be isolated before completely empty.
162	TEP01D	Safety Injection Accumulator Tank D (Accumulators)	N/A	N/A	Needed only for Phase 1. Will be isolated before completely empty.