

VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

July 11, 1980

Mr. James P. O'Reilly, Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Serial No. 601
NO/RGS:smv
Docket No. 50-339
License No. NPF-7

Dear Mr. O'Reilly:

IE BULLETIN 80-06
NORTH ANNA POWER STATION
UNIT NOS. 1 AND 2

This letter is in response to a telephone conversation held with NRC representatives on June 30, 1980. It appears that several commitments in our IE Bulletin 80-06 response letter, Serial No. 421, are in conflict with commitments made in earlier letters of April 15, 1980, Serial No. 246 and June 10, 1980 letter, Serial No. 463.

NRC Comment

It was noted that Vepco committed in the April 15, 1980, letter to provide a full evaluation and answers to the following concerns in Vepco's response to IE Bulletin 80-06.

- "1) The overriding of one type of safety actuation signal (e.g., particulate radiation) should not cause the blocking of any other type of safety actuation signal (e.g., iodine radiation, reactor pressure) for those valves that have no function other than containment isolation.
- 2) Physical features (e.g., key lock switches) should be provided to ensure adequate administrative controls.
- 3) A system level annunciation of the overridden status should be provided for every safety system impacted when any override is active. (See Regulatory Guide 1.47)."

(From NRC letter, POTENTIAL DESIGN DEFICIENCIES IN BYPASS, OVERRIDE, AND RESET CIRCUITS OF ENGINEERED SAFETY FEATURES dated March 13, 1980)

The response to the Bulletin did not contain the requested information.

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Response

We have reviewed our protection system design to determine its degree of conformance to the Items 1, 2 and 3 criteria defined in the NRC letter dated March 13, 1980, on Bypass, Override and Reset circuits. The following is our response to the NRC concerns:

Item 1.

The overriding of one type of safety actuation signal of Engineered Safety Features circuits does not cause the blocking of any other type of safety actuation signal.

Items 2., 3.

The physical features provided for administrative controls and system level annunciation of override status for North Anna Unit 2 are provided in the following table:

<u>Service</u>	<u>ESF Signal</u>	<u>Bypass/Override</u>	<u>Admin. Control</u>	<u>Annunciation</u>
1. Quench Spray PP Suction VV - MOV-QS200A MOV-QS200B	CDA	Limit Switch - Will complete close sequence before opening on CDA. If push- button is held in "close" valve opening is prevented.	None	None
2. Quench Spray PP Disch VV - MOV-QS201A MOV-QS201B	CDA	Limit Switch - Will complete close sequence before opening on CDA. If push- button is held in "close", valve opening is prevented.	None	None
3. Recirculation Spray Heat Exch. Supply VV- MOV-SW203A MOV-SW203B MOV-SW203C MOV-SW203D	CDA	Key Switch	Yes	#624 Annunciator Window

	<u>Service</u>	<u>ESF Signal</u>	<u>Bypass/Override</u>	<u>Admin. Control</u>	<u>Annunciation</u>
4.	Recirculation Spray Heat Exch. Return VY- MOV-SW204A MOV-SW204B MOV-SW204C MOV-SW204D	CDA	Key Switch	Yes	#624 Annunciator Window
5.	Recirculation Spray PP Case Cooling PP 2-RS-P-3A 2-RS-P-3B	CDA	Selector Switch If selector switch is placed in "OFF" position to defeat CDA, selector must be held in "OFF" position (spring return to normal)	None	None
6.	Boric Acid Isolation VV 2884A 2884B 2884C	SI	Pushbutton - The pushbutton must be held in "OPEN" position to defeat the closure of the VV	None	None
7.	Emergency Generator 2H - Start circuit 1 Start circuit 2	SI	Selector Switch - Selector switch placed in normal position transfers to manual local.	Yes	#256 Annunciator Window
8.	Emergency Generator 2J - Start circuit 1 Start circuit 2	SI	Selector Switch - Selector switch placed in normal position transfers to manual local.	Yes	#256 Annunciator Window

1. We have determined that 4160 volt and 480 volt switchgear can be disabled by operation of an operating switch in the "Pull to Lock" position. This could defeat an ESF signal to close, however, it is considered under administrative control and is annunciated.
2. Operation of certain electrical protection relays can override an ESF signal to start 4 KV equipment for bus protection. This is automatic protection and is annunciated and is documented in our FSA.

NRC Comment

In a June 10, 1980, letter from Vepco, it was indicated that the Service Water Radiation Monitoring Sample Pumps for Unit 2 had been modified so that once the CDA or SI is received, the pumps will continue operating through the timing sequence. However, in the IE Bulletin 80-06 response, Vepco indicated that the modification would not be made until the first refueling outage. Have the Service Water Radiation Monitoring Sample Pumps control circuits been modified?

Response

The Service Water Radiation Monitoring Sample Pumps circuit modification for Unit 2 has been completed.

NRC Comment

Vepco indicated in the June 10, 1980, response that the Main Condenser Air Ejector to containment modification would be accomplished by January 1, 1981, for Unit 2. This commitment is in conflict with the Bulletin response which committed to the implementation of the circuit modification by the next refueling outage. When will the modification be completed?

Response

The Main Condenser Air Ejector to containment circuit modification will be accomplished before full power operation of Unit 2.

NRC Comment

In discussions with NRC staff members, it has been determined that Vepco's commitment to the January 1, 1981, implementation of the Main Steam Trip Valve modification is unacceptable. The NRC requires that the control circuit modification be implemented prior to full power operation.

Response

The Main Steam Trip Valve control circuit modification will be implemented prior to the full power operation of Unit 2.

NRC Comment

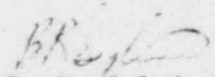
The NRC requested that Vepco verify that the Engineered Safety Feature (ESF) reset controls for Unit 2 were tested during the preoperational test program to determine the applicability of the reset problem discovered on Unit 1.

Response

During the preoperational phase of Unit 2, the ESF reset problem was discovered on Unit 1. Unit 2 was reviewed to determine the applicability of the problem. Appropriate modifications were made and tested on Unit 2. Other corrective actions are scheduled and, in the interim, administrative controls are in place. Applicable tests are conducted periodically on the ESF reset circuits to verify operability at required surveillance intervals.

If you have any questions or require additional information, please contact this office.

Very truly yours,


B. R. Sylvia
Manager - Nuclear
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RGS/smv:SQ3

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