

# Vepco

VIRGINIA ELECTRIC AND POWER COMPANY, RICHMOND, VIRGINIA 23261

January 29, 1979

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
Attn: Mr. O. D. Parr, Chief  
Light Water Reactors Branch No. 3  
Division of Project Management  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

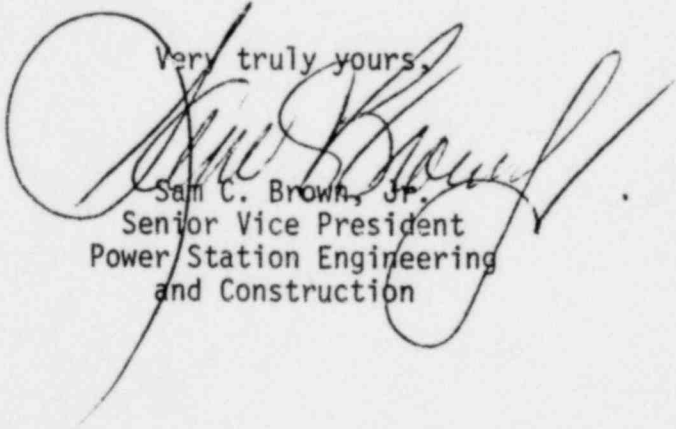
Serial No. 711A/120178  
PSE&C/CHJ:bep/mc

Docket No. 50-339

Dear Mr. Denton:

With reference to our January 12, 1979, letter, Serial No. 711/120178, concerning our degraded voltage protection scheme, please find attached additional information that was not included in the excerpt from the Technical Specifications.

Very truly yours,



Sam C. Brown, Jr.  
Senior Vice President  
Power Station Engineering  
and Construction

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TABLE 3.3-5 (Continued)

ENGINEERED SAFETY FEATURES RESPONSE TIMES

<u>INITIATING SIGNAL AND FUNCTION</u>	<u>RESPONSE TIME IN SECONDS</u>
7. <u>Containment Pressure--High-High</u>	
a. Containment Quench Spray	≤ 60.0
b. Containment Isolation - Phase "B"	≤ 60.0
8. <u>Containment Pressure--Intermediate High-High</u>	
a. Steam Line Isolation	≤ 7.0
9. <u>Steam Generator Water Level--Low-Low</u>	
a. Auxiliary Feedwater Pumps	≤ 60.0
10. <u>Station Blackout</u>	
a. Auxiliary Feedwater Pumps	Not Applicable
11. <u>Main Feedwater Pump Trip</u>	
a. Auxiliary Feedwater Pumps	Not Applicable
12. <u>Steam Generator Water Level--High-High</u>	
a. Turbine Trip - Reactor Trip	≤ 2.5
b. Feedwater Isolation	≤ 11.0
13. <u>Loss of Power</u>	
a. 4.16 kv Emergency Bus Undervoltage (Loss of voltage)	≤ 13.3 ###
b. 4.16 kv Emergency Bus Undervoltage (Degraded voltage)	≤ 11.5 With S.I. ### ≤ 64 With No. S.I. ###

TABLE 3.3-5 (Continued)

TABLE NOTATION

- \* Diesel generator starting and sequence loading delays included. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps, and Low Head Safety Injection pumps.
- # Diesel generator starting and sequence loading delays not included. Offsite power available. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps.
- ## Diesel generator starting and sequence loading delays included. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps.
- ### The response times shown are based on the time from when the signal reaches the trip setting until the Diesel Generator is supplying the Emergency Bus.