

VIRGINIA ELECTRIC AND POWER COMPANY  
RICHMOND, VIRGINIA 23261

W. L. STEWART  
VICE PRESIDENT  
NUCLEAR OPERATIONS

October 14, 1983

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
Attn: Mr. James R. Miller, Chief  
Operating Reactors Branch No. 3  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Serial No. 557  
PSE/BSD:cdk:0009N  
Docket Nos. 50-338  
50-339  
License Nos. NPF-4  
NPF-7

Gentlemen:

GENERAL DESIGN CRITERIA 17 ANALYSIS  
NORTH ANNA UNIT NOS. 1 AND 2

The purpose of this letter is to provide a status report of our progress on resolving the rerating of motor operated valves (MOV's) and our plan for further work as committed to in our June 7, 1983 letter, Serial No. 326.

We have continued to pursue verification of valve torque requirements from vendors. Calculations of the valve torques for all valves, except butterfly or wafer valves, will be prepared. Comparative butterfly or wafer valves at other stations will be used to verify torque requirements for North Anna butterfly or wafer valves.

A preliminary review of the alignment of valves in the plant and the control circuitry for each MOV has determined that 74 of the original 130 MOVs will not need to operate in an emergency when the voltage on the 480 volt bus is below 90 percent of the MOV rated voltage. The remaining 56 MOVs will be rerated or replaced as needed. Based on verified torque values 8 of these MOVs can be rerated. Based on preliminary reviews, we believe at least 30 of the remaining 48 can be rerated. We are continuing to obtain verified torques for these 48 valves.

Attached is our plan to resolve this item. We will provide a schedule for completion of this work by January 20, 1984, after a complete assessment of the technical data obtained during the Fall maintenance outages, now scheduled for the middle of October for Unit 1 and late November for Unit 2.

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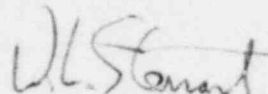
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Mr. Harold R. Denton

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Based on progress to date, we do anticipate that the rerating of 8 MOVs can be completed prior to the end of the second refueling after September 1, 1982, now scheduled for May 1984 for Unit 1 and September 1984 for Unit 2. Since the additional valve information needed to complete the torque calculations will be obtained during the Fall 1983 maintenance outages, and, if necessary, during 1984 refueling outages, all verified torque values may not be available until the third quarter of 1984. At that time, we will determine which remaining MOVs may be rerated and which must be replaced. We, therefore, request that the completion of MOV rerate and replacement be extended until the end of third refueling after September 1, 1982.

Very truly yours,

  
W. L. Stewart

cc: Mr. R. C. DeYoung, Director  
NRC Office of Inspection and Enforcement  
Division of Reactor Operations INSpection  
Washington, D. C. 20555

Mr. J. P. O'Reilly  
Regional Administrator - Region II

Mr. M. B. Shymlock  
Resident Inspector - North Anna

NORTH ANNA POWER STATION  
UNIT 1 AND 2  
MOV RERATE AND REPLACEMENT  
PRELIMINARY PLAN

1. Verify which valves must operate on an SI or CDA.
2. Verify required torques to operate valves based on calculations for all except butterfly or wafer valves.

Note: For some non-butterfly or wafer valves, information on the valve stem characteristics must be obtained during outages which makes the calculations outage dependent. We presently anticipate that this will be completed in October, 1983 for Unit 1 and in November, 1983 for Unit 2.

3. Provide comparisons of required torques for butterfly and wafer valves.
  4. Limitorque has previously provided information on the torque capabilities of the motor operators and will be requested to determine if a torque switch replacement or reset, a motor replacement, or a motor and operator replacement is required. We presently anticipate that this will be completed by May 1984 for Unit 1 and by July 1984 for Unit 2.
  5. Design Change Packages (DCP) will then be developed to make these modifications. We anticipate that the DCP 82-29A for Unit 1 will be available by April 1985 and DCP 82-29B for Unit 2 will be available by June 1985.
  6. Implementation will occur as feasible in the next refueling and intervening maintenance outages.
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STATUS OF VEPCO MOV ANALYSIS

NORTH ANNA POWER STATION  
UNIT NOS. 1 and 2

1. Total number of MOVs on original list	130
2. Number of MOVs which are not required to operate on SI or CDA (Note 1)	74
3. Number of MOVs which are required to operate on SI or CDA	56
4. Number of MOVs in #3 which can be rerated	8
5. Number of MOVs in #3 which potentially can be rerated (Note 1)	30+
6. Number of MOVs in #3 which potentially require replacement or modification of the motor operators (Note 1)	12+

Note 1: Preliminary - final numbers to be confirmed. By January 20, 1984 an updated status will be provided.