

VIRGINIA ELECTRIC AND POWER COMPANY

RICHMOND, VIRGINIA 23261

April 27, 1992

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D. C. 20555

Serial No. 92-291  
NL&P/ETS R5  
Docket No. 50-280

License No. DPR-32

Gentlemen:

**VIRGINIA ELECTRIC AND POWER COMPANY**  
**SURRY POWER STATION UNIT 1**  
**MECHANICAL SNUBBER FUNCTIONAL TESTING REQUIREMENTS**  
**WAIVER OF COMPLIANCE**

Functional testing of mechanical snubbers was performed during the current Unit 1 refueling outage in accordance with the requirements of Technical Specification 4.17. The completed functional test results were compared to the acceptance criteria as defined in Section 4.17.E. Three of the tested mechanical snubbers did not meet the Technical Specification requirement of less than a 50% increase in the drag force since the last functional test. For each failure to meet the requirements of Technical Specification 4.17.E, Technical Specification 4.17.C.6 requires an additional 10% of that type of snubber be tested.

The maximum 50% increase in drag since the previous functional test was a valid acceptance criterion for the original mechanical snubbers (Pacific Scientific) installed at Surry. However, those snubbers have been replaced with snubbers (Anchor Darling) of a different design. The vendor has provided their technical position that a 50% increase in drag is not indicative of incipient failure. The drag test results are highly variable and, therefore, cannot be used to indicate a trend in snubber performance.

It has been concluded that the most appropriate test is the one employed by Surry where the measured running drag force is compared to an acceptance criterion, which is based on limiting drag to 3% of the maximum snubber design load. An engineering evaluation has been performed and the snubbers have been determined to be fully operable and capable of performing their intended function. However, applying the 50% increase in drag force criterion, verbatim compliance with the Technical Specification requirements would require additional functional testing of a 10% sample of the mechanical snubbers. These additional tests to satisfy an inappropriate criterion serve no purpose and would contribute to increased occupational exposure.

In an April 24, 1992 conference call between Virginia Power and the NRC, we requested and received verbal approval for a one-time waiver from the 10% additional functional testing requirements of Technical Specification 4.17.C.6 for mechanical

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snubbers. This request and its approval were based on the inappropriate acceptance criterion (50% increase in drag force) stated in Technical Specification 4.17.E.1.a and the above discussion of engineering evaluations for operability of the snubbers affected by the application of this criterion. A Technical Specification change will be developed and submitted to modify the functional requirements for mechanical snubbers to establish appropriate acceptance criteria.

In addition, we have reviewed test results from previous Anchor Darling mechanical snubber functional tests and identified several cases where drag force increased by more than 50% from the previous test. These cases have been reviewed and evaluated by Engineering and the snubbers were determined to be fully operable.

### SAFETY IMPACT AND POTENTIAL CONSEQUENCES

The engineering evaluations of the subject snubbers have determined that the snubbers are fully capable of performing their intended function. Operation of the snubbers under accident conditions remains unchanged. Therefore, no adverse safety consequences result from eliminating the additional mechanical snubber functional testing.

### SIGNIFICANT HAZARDS CONSIDERATION

The proposed waiver of the additional mechanical snubber inspection requirements in Technical Specification 4.17.C.6 for this inspection interval does not result in a significant hazards consideration.

1. The proposed waiver does not increase the probability or consequences of an accident previously evaluated. The existing Technical Specification requirement of less than 50% increase in drag force does not provide an appropriate indication of operability for the Anchor Darling mechanical snubbers installed at Surry. The subject snubbers have been evaluated and determined to be fully operable and capable of performing their intended function. Therefore, it is unnecessary to perform the expanded functional testing to provide the same level of assurance for snubber operability. Thus, the probability or consequences of an accident will not change due to this waiver of mechanical snubber functional testing requirements.
2. The proposed waiver will not create the possibility of a new or different kind of accident from any accident previously evaluated. The waiver eliminates the need for additional functional testing of mechanical snubbers and does not change the operation or the ability of the snubbers to perform their intended function. Therefore, new accident precursors or accident types are not being generated.
3. The proposed waiver does not involve a reduction in a margin of safety. The level of equipment (snubbers) operability is not being reduced. The completed snubber functional tests have provided the required assurance that the mechanical snubbers installed at Surry will perform their intended function, as required. Thus, no margin of safety is being reduced.

## ENVIRONMENTAL CONSEQUENCES

This waiver will not change the types of any effluents that may be released offsite, nor create a significant increase in individual or cumulative occupational radiation exposure. Mechanical snubbers remain capable of performing their intended function.

The waiver of compliance and the associated safety evaluation were reviewed by the Station Nuclear Safety and Operating Committee prior to changing plant conditions (i.e., exceeding 200°F in the primary system). It has been determined that no unreviewed safety question or significant hazards consideration exists.

Very truly yours,



W. L. Stewart  
Senior Vice President - Nuclear

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