



## Nebraska Public Power District

COOPER NUCLEAR STATION  
P.O. BOX 98, BROWNVILLE, NEBRASKA 68321  
TELEPHONE (402) 825-3811

CNSS820238

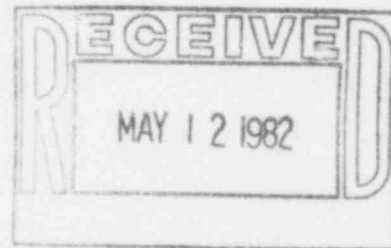
May 6, 1982

Mr. John T. Collins, Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive  
Suite 1000  
Arlington, Texas 76011

Dear Sir:

This report is submitted in accordance with Section 6.7.2.B.2 of the Technical Specifications for Cooper Nuclear Station and discusses a reportable occurrence that was discovered on April 15, 1982. A licensee event report form is also enclosed.

Report No.: 50-298-82-08  
Report Date: May 6, 1982  
Occurrence Date: April 15, 1982  
Facility: Cooper Nuclear Station  
Brownville, Nebraska 68321



### Identification of Occurrence:

A condition which may have resulted in operation in a degraded mode permitted by a limiting condition for operation established in Section 3.6.H.1 of the Technical Specifications.

### Conditions Prior to Occurrence:

A snubber was installed in the drywell on 11-10-76 and was removed from the drywell on 6-2-81 during the refueling outage. It was being tested for certification by Wyle Laboratory to allow its reuse in the plant.

### Description of Occurrence:

During diagnostic testing by Wyle Laboratory of several Pacific Scientific snubbers, a Model PSA-10 (Part No. 1801103-07), S/N 544, snubber exceeded the acceleration rate of 0.02g for the compression stroke.

### Designation of Apparent Cause of Occurrence:

The apparent cause of this occurrence has been attributed to the improper installation of the clutch spring in the snubber or by the installation of a defective clutch spring in the snubber by the Pacific Scientific Company during the manufacture of the snubber.

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Analysis of Occurrence:

Snubber, S/N 544, was installed in the drywell on a main steam relief line in location VR-61-8-Z on 11-10-76 to replace a hydraulic snubber. Snubber, S/N 544, was removed from the drywell on 6-2-81. During diagnostic testing by Wyle Laboratory to recertify the unit, this snubber exceeded the acceleration rate of 0.02g for the compression stroke and thus does not meet the design specification for mechanical snubbers. Upon disassembly of the snubber, the clutch spring was found raised approximately 1/4 inch out of position in the inertia mass. This mis-positioned clutch spring would not allow the lower tang of the capstan spring to contact the clutch spring. During the compression stroke of the snubber, the capstan spring would not torque down around the mandrel and resist the compression stroke of the unit. No activation or restraining action would occur during the compression stroke.

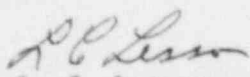
The clutch spring in this snubber may have been incompletely installed into place in the inertia mass during manufacture. It was also noted, however, that the clutch spring did not have as great an outward tension as a clutch spring from another snubber. Because of this reduced outward spring tension, the clutch spring was not fixed tightly in the inertia mass. Thus, from movement of the snubber and from vibration in the piping, the clutch spring may have slipped out of the inertia mass and resulted in the failure found during the certification testing.

This mechanical snubber which was installed in drywell location VR-61-8-Z is designed to accommodate the thermal growth of the relief line during normal operation and to provide a restraint to pipe movement during transient and seismic events. This snubber did not provide a pipe support function during normal operation. There was no record of seismic events during the time this snubber was installed. This event is not repetitive and presents no adverse consequences to public health and safety.

Corrective Action:

Snubber, S/N 544, has been returned to Pacific Scientific Company for repair and certification. Seismic structure VR-61-8-Z was redesigned and a larger model mechanical snubber was installed as part of the Mark I Containment Program during the 1981 Refueling Outage.

Sincerely,



L. C. Lessor  
Station Superintendent  
Cooper Nuclear Station

LCL:cg  
Attach.