



MISSISSIPPI POWER & LIGHT COMPANY

Helping Build Mississippi

P. O. BOX 1640 JACKSON, MISSISSIPPI 39205

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August 10, 1984

J. B. RICHARD
SENIOR VICE PRESIDENT - NUCLEAR

U.S. Nuclear Regulatory Commission
Region II
101 Marietta St., N.W., Suite 2900
Atlanta, Georgia 30323

Attention: Mr. J. P. O'Reilly, Regional Administrator

Dear Mr. O'Reilly:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-13
File: 0260/L-401.0
Supplemental Response for IE
Bulletin No. 81-01, Revision 1
AECM-84/0414

- References: (1) AECM-82/124 dated 4/21/82
(2) Letter of June 7, 1984 from D. M. Verrelli (NRC) to J. B. Richard (MP&L) including Inspection Report No. 50-416/84-15
(3) AECM-84/0343 dated 7/2/84
(4) Mechanical Standard Shock Arrestor Design Specification Report No. DR 1319, Revision E, January 3, 1984 from Pacific Scientific

In AECM-82/124 dated April 21, 1982, Mississippi Power & Light Company (MP&L) submitted to the Nuclear Regulatory Commission (NRC) the results of inspections, testing and evaluation of mechanical snubbers performed to meet the requirements of IE Bulletin No. 81-01, Revision 1. In this report six snubbers were reported as having "excessive noise during stroke" or "above average force to complete stroke."

Reference 2 required MP&L to replace the above six snubbers with new units and further required MP&L to evaluate the cause of the abnormal behavior identified in manual stroke testing of these six snubbers and submit an addendum to the report required by IE Bulletin No. 81-01, Revision 1 by July 1, 1984. Per telephone conversation between Caudle Julian (NRC Region 2) and Boyd Shingleton (MP&L), submittal date of this report was extended first to August 1, 1984 (Reference 3) and later to August 10, 1984.

The subject six snubbers were functionally tested on a Bergen-Paterson test machine at GGNS. Four snubbers (S/N's 6651, 7424, 7912 and 11206) passed the functional testing and are considered operable. No firm conclusion could be drawn on the remaining two snubbers (S/N's 11081 and 7468) on the basis of tests performed at GGNS. Snubbers S/N's 11081 and 7468 were sent to Pacific Scientific (Snubber Vendor) in California for further testing to provide greater assurance of test reliability. Both snubbers passed functional testing performed at the Pacific Scientific test facility. A summary of the functional testing of all six snubbers is provided in the Attachment.

MISSISSIPPI POWER & LIGHT COMPANY

Snubber S/N 11081 (PSA- $\frac{1}{4}$); During testing on the Bergen-Paterson test Machine this snubber registered a maximum friction force of 11 lbs. versus an allowable of 7.0 lbs. When tested at Pacific Scientific it registered a friction force of 2.5 lbs. Although not part of the functional testing a lost motion test recorded 0.034 inch of lost motion. An allowable of 0.040 inch is specified in Reference 4. There was no evidence of damage to the snubber. Per vendor recommendation the unit will be reworked as part of regular maintenance.

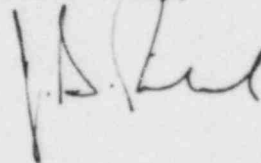
It should be noted that PSA- $\frac{1}{4}$ was replaced by PSA- $\frac{1}{2}$ (pipe support drawing Q1B21G153C01, Rev. 2) per the new design loads by Bechtel prior to plant turnover.

Snubber S/N 7458 (PSA-10); During testing on the Bergen-Paterson test machine on the first attempt this snubber locked up during the activation test. However, it released the load when stroked in the opposite direction. The test was repeated and the snubber passed the functional tests with no evidence of lock up. At Pacific Scientific the snubber again passed the functional test with no evidence of any lock up. The initial lock up may have been caused by a test machine malfunction. Since dynamic loads are cyclic the snubber would have released the loads and been functional. The snubber was disassembled for inspection and dent marks including wear marks were noted on snubber components. The snubber will be reworked and recertified.

It is not possible to determine the cause of these dent marks. It appears they may have been a result of damage during construction prior to start up testing.

This completes MP&L's engineering evaluation of the six snubbers identified during the IE Bulletin 81-01 inspection. This letter constitutes our complete response to Reference (2). Should you have any questions, please advise.

Yours truly,



JBR:rg
Attachment

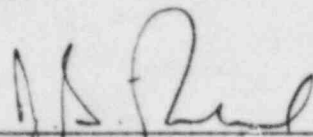
cc: Mr. R. B. McGehee (w/o)
Mr. N. S. Reynolds (w/o)
Mr. G. B. Taylor (w/o)

Mr. Richard C. DeYoung, Director (w/a)
Office of Inspection & Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

AFFIDAVIT

STATE OF MISSISSIPPI
COUNTY OF HINDS

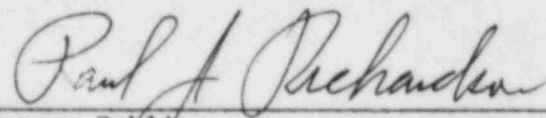
J. B. Richard, being duly sworn, states that he is Senior Vice President - Nuclear, of Mississippi Power & Light Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this response to IE Bulletin No. 81-01, Revision 1, on behalf of Company, Middle South Energy, Inc. and South Mississippi Electric Power Association; that he signed the foregoing letter as Senior Vice President - Nuclear, of Mississippi Power & Light Company; and that the statements made and the matters set forth therein are true and correct to the best of his knowledge, information and belief.



J. B. Richard

SUBSCRIBED AND SWORN TO before me, a Notary Public, in and for the County and State above named, this 10th day of August, 1984.

(SEAL)



Notary Public

My commission expires:

October 27, 1987

SUMMARY OF FUNCTIONAL TESTING
OF MECHANICAL SNUBBERS
[S/N's 6651, 7424, 7466, 7512, 11081 and 11206]

1. SNUBBER S/N 6651 (Hanger Q1B21G032R05)
PSA-10

On site test, Bergen-Paterson test machine.

- a) Maximum Friction Drag Load = 70 lbs.
Maximum Allowable = 300 lbs.
- b) Activation Acceleration < 0.02 G's
Maximum Allowable = 0.02 G's

Remarks: Snubber passed functional testing.

2. SNUBBER S/N 7424 (Hanger Q1E22G002R03)
PSA-10

On site test, Bergen-Paterson test machine.

- a) Maximum Friction Drag Load = 78 lbs.
Maximum Allowable = 300 lbs.
- b) Activation Acceleration = 0.0082 G's
Maximum Allowable = 0.02 G's

Remarks: Snubber passed functional testing.

3. SNUBBER S/N 7512 (Hanger Q1G41G006R07)
PSA-10

On site test, Bergen-Paterson test machine.

- a) Maximum Friction Drag Load = 209 lbs.
Maximum Allowable = 300 lbs.
- B) Activation Acceleration = 0.014 G's
Maximum Allowable = 0.02 G's

Remarks: Snubber passed functional testing.

4. SNUBBER S/N 11206 (Hanger Q1E22G001R10)
PSA-3

On site test, Bergen-Paterson test machine

- a) Maximum Friction Drag Load = 48 lbs.
Maximum Allowable = 120 lbs.
- b) Activation Acceleration = 0.01 G's
Maximum Allowable = 0.02 G's

Remarks: Snubber passed functional testing.

5. SNUBBER S/N 11081 (Hanger Q1B21G153C01)
PSA-1/4

Results of final test by Pacific Scientific

- a) Maximum Friction Drag Load = 2.5 lbs.
Maximum Allowable = 7.0 lbs.
- b) Activation Acceleration = 0.012 G's
Maximum Allowable = 0.02 G's

Remarks: Snubber passed functional testing.

6. SNUBBER S/N 7468 (Hanger Q1E22G003R02)
PSA-10

Results of final test by Pacific Scientific

- a) Maximum Friction Drag Load = 155 lbs.
Maximum Allowable = 300 lbs.
- b) Activation Acceleration = 0.011 G's
Maximum Allowable = 0.02 G's

Remarks: Snubber passed functional testing.