



**Entergy
Operations**

Entergy Operations, Inc.

Route 3, Box 1370

Springdale, AR 72801

Tel 501-964-3100

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U. S. Nuclear Regulatory Commission
Document Control Desk
Mail Station P1-137
Washington, DC 20555

Subject: Use of ASME Code Cases N-416-1 and N-498-1

Arkansas Nuclear One - Units 1 and 2
Docket Nos. 50-313 and 50-368
License Nos. DPR-51 and NPF-6

Grand Gulf Nuclear Station
Docket No. 50-416
License No. NPF-29

Waterford 3 Steam Electric Station
Docket No. 50-382
License No. NPF-38

River Bend Station
Docket No. 50-458
License No. NPF-47

Gentlemen:

The purpose of this submittal is to request approval, pursuant to 10CFR50.55a(a)(3), for the use of the American Society of Mechanical Engineers (ASME) Code Cases N-416-1 and N-498-1 as alternatives to the ASME Section XI Code requirements in effect at all of Entergy Operations' nuclear units, i.e., Arkansas Nuclear One, Units 1 and 2 (ANO), Grand Gulf Nuclear Station, Waterford 3 Steam Electric Station, and River Bend Station. Code Case N-416-1 was approved for use on February 15, 1994, by the ASME Board of Nuclear Codes and Standards and is included in Supplement 8 of the Nuclear Code Case Book for the 1992 edition of the Code. Code Case N-498-1 was approved by the ASME Board of Nuclear Codes and Standards on May 11, 1994, but has not yet been published. Neither code case has yet been added to the approved list of code cases included in NRC

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Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability - ASME Section XI Division 1."

Code Case N-416-1, "Alternative Pressure Test Requirement for Welded Repairs or Installation of Replacement Items by Welding," addresses the use of a system leakage test as an alternative in lieu of performing the hydrostatic pressure test required by IWA-4000 for Class 1, 2, and 3 components, provided certain requirements are met.

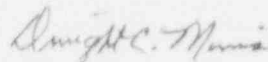
Code Case N-498-1, "Alternative Rules for 10-Year System Hydrostatic Pressure Testing for Class 1, 2, and 3 Systems," utilizes leakage (Class 1) and pressure (Class 2 and 3) tests, in conjunction with other requirements, as an acceptable alternative to 10-year hydrostatic pressure tests.

The alternative pressure tests permitted by these code cases fulfill the same purpose as a hydrostatic pressure test, i.e., a check for component/system leakage. To perform a hydrostatic test, a pressure above normal operating pressure is required; therefore, the affected system must be placed in a non-conventional configuration to support, isolate, or obtain this elevated pressure. Since system pressure tests are performed at operating pressure, the probability of challenging the pressure integrity of any affected component, or causing the actuation of any system safety valve, is reduced from that of a hydrostatic test. Testing at operating pressure also eliminates the need to "gag" or remove system pressure relief valves, as is currently necessary to comply with the higher pressure requirements for hydrostatic tests. The elimination of "gagging" or valve removal reduces the possibility of damaging the affected relief valves, thereby causing system leakage or valve inoperability. Additionally, elimination of hydrostatic tests minimizes the shutdown risk due to non-conventional system configurations. Based upon the preceding, Entergy Operations has determined that the proposed alternatives will provide an acceptable level of quality and safety as required by 10CFR50.55a(a)(3)(i).

ANO-1 is the first of Entergy Operations' nuclear units to be able to utilize these code cases, with its twelfth refueling outage (1R12) currently scheduled to begin on February 14, 1995. Approval of Entergy Operations' request to use these code cases prior to 1R12 will save approximately \$525,000 (\$14,000 for N-416-1 and \$511,000 for the Class 3 hydros covered by N-498-1) at ANO-1. This amount includes the cost of one day of critical path time due to the 10-year hydrostatic tests of the service water system. Throughout the life of the two ANO units, elimination of the hydrostatic tests covered by these two code cases are expected to save in excess of \$3,495,000. Similar cost savings, reduced for single unit operation, are expected at Entergy Operations' other nuclear units. Due to the significant cost savings to be achieved by the use of these code cases, as well as the marginal increase in safety caused by implementation, Entergy Operations requests that this submittal be considered a cost beneficial licensing action (CBLA).

Should you have any questions regarding this submittal, please contact me.

Very truly yours,



Dwight C. Mims
Director, Licensing

DCM/jjd

cc: Mr. Leonard J. Callan
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Mr. Stewart D. Ebnetter
Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta St., N. W., Suite 2900
Atlanta, GA 30323

NRC Senior Resident Inspector
Arkansas Nuclear One
1448 S. R. 333
Russellville, AR 72801

NRC Resident Inspector's Office
Waterford 3 Steam Electric Station
Trailer 426
Post Office Box B
Killona, LA 70066

NRC Resident Inspector's Office
River Bend Station
Post Office Box 1051
St. Francisville, LA 70775

Mr. George Kalman
NRR Project Manager Region IV/ANO-1 & 2
U. S. Nuclear Regulatory Commission
NRR Mail Stop 13-H-3
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Mr. P. W. O'Connor
NRR Project Manager Grand Gulf
U. S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
NRR Mail Stop 13-H-3
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Mr. David Wiggington
NRR Project Manager, Region IV/W3
U. S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
NRR Mail Stop 13-H-3
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Mr. Ramon Azua
NRR Project Manager, Region IV/RB
U. S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
NRR Mail Stop 13-H-3
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Mr. Eugene Imbro
CBLA Task Force
U. S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
NRR Mail Stop 9-A-1
One White Flint North
11555 Rockville Pike
Rockville, MD 20852