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August 8, 1994

Docket No. 50-461

10CFR50.55a

Document Control Desk
Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Request for Authorization Pursuant to 10CFR50.55a to Utilize ASME
Section XI Code Cases N-498-1, N-416-1 and N-517

Dear Sir:

The purpose of this letter is to request approval for use of the following three American Society of Mechanical Engineers (ASME) Section XI, Division 1 code cases:

1. Code Case N-498-1, "Alternative Rules for 10-Year System Hydrostatic Testing for Class 1, 2 and 3 Systems,"
2. Code Case N-416-1, "Alternative Pressure Test Requirement for Welded Repairs or Installation of Replacement Items by Welding, Class 1, 2 and 3,"
3. Code Case N-517, "Quality Assurance Program Requirements for Owners."

These code cases were approved by the ASME Boiler and Pressure Vessel code committee, but are not included in the most recent listing of Nuclear Regulatory Commission approved code cases in Revision 10 of Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability-ASME Section XI Division 1."

10CFR50.55a, "Codes and Standards" requires that systems and components of boiling and pressurized water-cooled nuclear power reactors must meet the requirements of the ASME Boiler and Pressure Vessel Code as specified in certain paragraphs of 10CFR50.55a. Subsection 10CFR50.55a(a)(3) states that proposed alternatives to the requirements of those particular paragraphs of 10CFR50.55a may be used when authorized by the Director of the Office of Nuclear Reactor Regulation. This subsection further states the applicant shall demonstrate the (i) the proposed alternatives would provide an acceptable level of quality and safety, or (ii) compliance with the specified requirements of 10CFR50.55a would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

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Code case N-498-1 has been approved by the ASME Boiler and Pressure Vessel code case committee (on May 17, 1994) as providing alternative rules that may be used in lieu of those required by Section XI, Division 1, Table IWB-2500-1, Category B-P, Table IWC-2500-1, Category C-H, and Table IWD-2500-1, Categories D-A, D-B, and D-C, as applicable, for the 10-year system hydrostatic test.

Code case N-416-1 provides an alternative pressure test in lieu of the hydrostatic pressure test required by para. IWA-4000 for welded repairs or installation of replacement items by welding. This code case was approved by the ASME Boiler and Pressure Vessel code case committee on February 15, 1994.

Code case N-517 provides alternatives in lieu of the possession of a Certificate of Authorization or Quality System Certificate (Materials), required by para. IWA-4170(c) and (d). This code case was also approved by the ASME Boiler and Pressure Vessel code case committee on February 15, 1994.

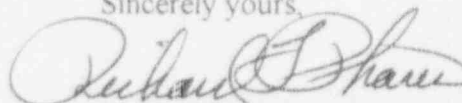
Based upon ASME approval of these code cases, Illinois Power (IP) believes that use of these alternatives would provide an acceptable level of quality and safety pursuant to item (i) of 10CFR50.55a(a)(3). As a result, IP believes that approval of this request per 10CFR50.55a(a)(3) is warranted.

Code cases N-416-1 and N-517 are already published in the ASME code book entitled "Code Cases-Nuclear Components". Code case N-498-1 is not published in the code book yet; however, ASME is planning to publish it in the next supplement within a few weeks. For convenience however, copies of these code cases are attached to this letter.

In order to support the fifth refueling outage (RF-5) at CPS (currently scheduled to start March 1995), it is requested that approval of these code cases be granted by early October 1994 since planning of the outage work scope and activities for RF-5 is already well under way at CPS. It is expected that substantial cost savings and reduced radiation exposure can be achieved from the elimination of all Class 1, 2, and 3 repair/replacement hydrostatic tests during RF-5 and during future outages as well.

Your prompt attention to this matter is appreciated.

Sincerely yours,



Richard F. Phares
Director, Licensing

Attachments

SSG/csm

cc: NRC Clinton Licensing Project Manager
NRC Resident Office, V-690
Regional Administrator, Region III, USNRC
Illinois Department of Nuclear Safety

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N-498-1

Approval Date: May 11, 1994

See Numerical Index for expiration
and any reaffirmation dates.

Case N-498-1
Alternative Rules for 10-Year System Hydrostatic
Testing for Class 1, 2 and 3 Systems
Section XI, Division 1

Inquiry: What alternative rules may be used in lieu of those required by Section XI, Division 1, Table IWB-2500-1, Category B-P, Table IWC-2500-1, Category C-H, and Table IWD-2500-1, Categories D-A, D-B, and D-C, as applicable, for the 10-year system hydrostatic test?

Reply:

(a) It is the opinion of the Committee that as an alternative to the 10-year system hydrostatic test required by Table IWB-2500-1, Category B-P, the following rules shall be used.

(1) A system leakage test (IWB-5221) shall be conducted at or near the end of each inspection interval, prior to reactor startup.

(2) The boundary subject to test pressurization during the system leakage test shall extend to all Class 1 pressure retaining components within the system boundary.

(3) Prior to performing the VT-2 visual examination, the system shall be pressurized to nominal operating pressure for at least 4 hours for insulated systems and 10 minutes for noninsulated systems. The system shall be maintained at nominal operating pressure during performance of the VT-2 visual examination.

(4) Test temperatures and pressures shall not exceed limiting conditions for the hydrostatic test curve as contained in the plant Technical Specifications.

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(5) The VT-2 visual examination shall include all components within the boundary identified in (a)(2) above.

(6) Test instrumentation requirements of IWA-5260 are not applicable.

(b) It is the opinion of the Committee that, as an alternative to the 10-year system hydrostatic test required by Table IWC-2500-1, Category C-H, the following rules shall be used.

(1) A system pressure test shall be conducted at or near the end of each inspection interval or during the same inspection period of each inspection interval of Inspection Program B.

(2) The boundary subject to test pressurization during the system pressure test shall extend to all Class 2 components included in those portions of systems required to operate or support the safety system function up to and including the first normally closed valve, including a safety or relief valve, or valve capable of automatic closure when the safety function is required.

(3) Prior to performing the VT-2 visual examination, the system shall be pressurized to nominal operating pressure for a minimum of 4 hours for insulated systems and 10 minutes for noninsulated systems. The system shall be maintained at nominal operating pressure during performance of the VT-2 visual examination.

(4) The VT-2 Visual Examination shall include all components within the boundary identified in (b)(2) above.

(5) Test instrumentation requirements of IWA-5260 are not applicable.

(c) It is the opinion of the Committee that, as an alternative to the 10-year system hydrostatic test required by Table IWD-2500-1 Categories D-A, D-B, or D-C (D-B for the 1989 Edition with the 1991 and subsequent Addenda), as applicable, the following rules shall be used.

(1) A system pressure test shall be conducted at or near the end of each inspection interval or during the same inspection period of each inspection interval of Inspection Program B.

(2) The boundary subject to test pressurization during the system pressure test shall extend to all Class 3 components included in those portions of systems required to operate or support the safety system function up to and including the first normally closed valve, including a safety or relief valve or valve capable of automatic closure when the safety function is required.

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(3) Prior to performing the VT-2 visual examination, the system shall be pressurized to nominal operating pressure for at least 4 hours for insulated systems and 10 minutes for noninsulated systems. The system shall be maintained at nominal operating pressure during performance of the VT-2 visual examination.

(4) The VT-2 visual examination shall include all components within the boundary identified in (c)(2) above.

(5) Test instrumentation requirements of IWA-5260 are not applicable.

*** END ***

Approval Date: February 15, 1994

*See Numeric Index for expiration
and any reaffirmation dates.*

Case N-416-1

**Alternative Pressure Test Requirement for Welded
Repairs or Installation of Replacement Items by
Welding, Class 1, 2 and 3
Section XI, Division 1**

Inquiry: What alternative pressure test may be performed in lieu of the hydrostatic pressure test required by para. IWA-4000 for welded repairs or installation of replacement items by welding?

Reply: It is the opinion of the Committee that in lieu of performing the hydrostatic pressure test required by para. IWA-4000 for welded repairs or installation of re-

placement items by welding, a system leakage test may be used provided the following requirements are met.

(a) NDE shall be performed in accordance with the methods and acceptance criteria of the applicable Subsection of the 1992 Edition of Section III.

(b) Prior to or immediately upon return to service, a visual examination (VT-2) shall be performed in conjunction with a system leakage test, using the 1992 Edition of Section XI, in accordance with para. IWA-5000, at nominal operating pressure and temperature.

(c) Use of this Case shall be documented on an NIS-2 Form.

If the previous version of this case were used to defer a Class 2 hydrostatic test, the deferred test may be eliminated when the requirements of this revision are met.

Approval Date: February 15, 1994

See Numerical Index for expiration
and any reaffirmation dates.

Case N-517
Quality Assurance Program Requirements for
Owners
Section XI, Division I

Inquiry: What alternatives to possession of a Certificate of Authorization or Quality System Certificate (Materials), required by para. IWA-4170(c) and (d)¹ may be used by an Owner to perform the following activities?

- (a) Qualification of material manufacturers and suppliers in accordance with NCA-3800;
- (b) Upgrading stock material in accordance with NCA-3867.4(e) and (f);
- (c) Acceptance of small products in accordance with NB/NC/ND/NE/NF-2610(b) and (c).

Reply: It is the opinion of the Committee that as an alternative to possession of a Certificate of Authorization or Quality System Certificate (Materials), required by para. IWA-4170(c) and (d)¹, the provisions of this

Case may be used by an Owner to perform the activities identified in the Inquiry, provided the following requirements are met:

- (a) This Case may be used only for the nuclear plants operated by the Owner performing these activities;
- (b) The Owner's Quality Assurance Program required by para. IWA-1400(n) shall describe how these activities are controlled;
- (c) When qualifying material manufacturers or material suppliers, the Owner shall use NCA-3800 of the 1992 Edition with the 1992 Addenda;
- (d) When accepting small products, the Owner shall perform the activities required of the Certificate Holder by NB/NC/ND/NE/NF-2610(b);
- (e) When upgrading stock material, the Owner shall perform the activities required of the Certificate Holder by NCA-3867.4(f);
- (f) Activities performed in accordance with this Case shall be subject to monitoring by the Authorized Nuclear Inservice Inspector;
- (g) When upgrading stock material or accepting small products, use of this Case shall be recorded on a Certified Material Test Report or a Certificate of Compliance, as applicable.

¹IWA-7210(b) and (c) in Editions and Addenda prior to the 1991 Addenda.