Addendum to SAI Report No. 186-028-39

### ADDENDUM A TO TECHNICAL EVALUATION REPORT FIRST INTERVAL INSERVICE INSPECTION PROGRAM

ARKANSAS NUCLEAR POWER PLANT UNIT 1

Submitted to

U.S. Nuclear Regulatory Commission Contract No. NRC-03-82-096

Submitted by

Science Applications International Corporation Idaho Falls, Idaho 83402

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### ADDENDUM A TO TECHNICAL EVALUATION REPORT FIRST INTERVAL INSERVICE INSPECTION PROGRAM

Arkansas Nuclear One, Unit 1

### INTRODUCT ION

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Science Applications International Corporation (SAIC) submitted a Technical Evaluation Report (TER) on the Inservice Inspection (ISI) Program for Arkansas Nuclear 1 for the first inspection interval to the U.S. Nuclear Regulatory Commission (NRC) on September 17, 1982. (1) The ISI Program and relief requests evaluated in this report covered the second and third 40month inspection periods of the first 10-year interval, i.e., from April 19, 1978, through December 19, 1984. The program and requests were based on the 1974 Edition with Addenda through Summer 1975, the applicable Code in effect at the time.

After the TER was submitted, Arkansas Power and Light (AP&L) responded by letter dated November 12, 1982, (2) to an earlier NRC request for additional information dated March 2, 1982. (3) This response contained seven additional first-interval relief requests. Near the end of the first interval, on November 19, 1984, (4) pursuant to the terms of 10 CFR 50.55a (g)(5)(iv), AP&L submitted two additional relief requests that were subsequently modified by a letter of December 19, 1984. (5)

By letters dated November 20, 1984, (6) and May 6, 1985, (7) the NRC requested additional information concerning the relief requests for the first 10-year inspection interval. AP&L responded to these requests in letters dated January 31, 1985, (8) and June 24, 1985, (9) respectively. From these submittals, nine relief requests not previously evaluated have been identified. These new relief requests are evaluated in this addendum to the originally issued Technical Evaluation Report.

### I. CLASS 1 COMPONENTS

- A. Reactor Vessel
  - Nozzle-to-Safe End and Safe End-to-Pipe Welds, Category B-F, Items Bl.6 and B4.1

#### Code Requirements

Volumetric and surface examinations shall be made of 100% of each circumferential weld of dissimilar metals during each inspection interval.

### Code Relief Request

Relief is requested from surface examination of circumferential welds for the two core flood nozzle-to-safe end and safe end-to-pipe welds.

#### Proposed Alternative Examination

Both core flood nozzle-to-safe end and safe end-to-pipe welds would be 100% volumetrically examined coincident with the vessel nozzle examination from the vessel ID.

### Licensee's Basis for Requesting Relief

Access would require removal of the canal seal plate, shielding bricks, shielding supports in the nozzle areas, and insulation removal. This would require approximately 300 manhours of work in a 700-1000 mR/hr area.

### Evaluation

The core flood tanks inject water directly into the reactor vessel following a break in the primary pressure-retaining boundary, thereby providing a vital source of water for reactor core cooling. The type of welds for which relief from surface examination has been requested has a history of inservice flaw initiation in a number of plants. Assurance that the welds and base metal in the core flood system are structurally sound must therefore be provided by either performing the required examinations or an alternative that will provide equivalent or superior results. The increase in safety achieved by performing the required surface examination or an equivalent alternative outweighs the impracticalities cited by the licensee.

The licensee has proposed to eliminate the surface examination, but expand the required volumetric examination to cover 100% of the weld. This expanded volume would cover the cross section bounded by ACFEDB shown in Figure IWB-2500-8 of the 1980 Edition, Winter 1981 Addenda, and the examination would be conducted from the inside diameter. This alternative volumetric examination from the inside diameter is not, however, sufficient in itself to provide the degree of assurance necessary that outside diameter (0.D.) flaws will be detected. The first 10-year inservice inspection interval has already expired, therefore, requiring that the surface examination be performed during the first interval is not possible. However, the licensee should clearly demonstrate by the next refueling outage in the second 10-year interval that the actual procedure and instrument that would be used in the examination would detect 0.D. flaws in the existing configuration. If demonstrating the adequacy of the UT method is not possible, he should perform the surface examination as required during the next refueling outage of the second 10-year inspection interval. Relief from the surface examination should be granted for the subject welds for the first 10-year inspection interval.

### Conclusions and Recommendations

Based on the above evaluation, it is concluded that relief should be granted for the subject welds with the following provisions:

- (a) The licensee should demonstrate by the next refueling outage of the second inspection interval that the actual procedure and instrument that would be used in the proposed examination would detect 0.D. flaws in the existing configuration.
- (b) If demonstrating the adequacy of the UT method is not possible by the next refueling outage, he should perform the surface examination requirement during that outage.

#### References

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Reference 2.

### Code Requirement

For vessel support skirts, the volumetric examination performed during each inspection interval shall cover at least 10% of the circumference of the weld to the vessel. For support lug attachments, 100% of the welding to the vessel shall be examined.

The areas shall include the integrally welded support attachment (e.g., support skirts). This includes the welds to the vessel and the base metal beneath the weld zone and along the support attachment member for a distance of two support thicknesses.

### Code Relief Request

Relief is requested from performing a volumetric examination of the reactor vessel support skirt weld as required by the 1974 Edition, Summer 1975 Addenda of the Code.

#### Proposed Alternative Examination

None.

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### Licensee's Basis for Requesting Relief

The reactor vessel support skirt-to-vessel weld is impractical to examine volumetrically considering access for examination equipment, the necessity of insulation removal, personnel exposure to a 150-200 mrem general area radiation field in the range of 1 rem on contact with insulation, and the amount of time required to obtain acceptable results. With insulation removed, close proximity radiation readings are expected to be considerably higher. This weld is not considered part of the Section XI, Class 1 (IWB) boundary under the rules of the 1980 Edition, and therefore would be exempt from volumetric examination requirements.

### Evaluation

The ANO construction permit was issued before the effective date of implementation for ASME Section XI, and thus the plant was not designed to meet the requirements of inservice inspection; therefore, 100% compliance is not feasible or practical. Providing enough access for the examination equipment in the support skirt-to-vessel weld region is not practical considering the time involved in a high radiation field.

Personnel exposure to the 150-200 mrem radiation field would be significantly reduced by performing a visual examination, which is required by later Code editions, as an alternative to the required volumetric examination. In consideration of the modified examination requirements of later Code editions, radiation exposure during volumetric examination and the expiration of the first 10-year inspection interval, relief should be granted. The licensee should, however, comply with the later Code-required examination early in the next inspection interval.

### Conclusions and Recommendations

Based on the above evaluation, it is concluded that for the weld discussed above, the Code requirement is impractical. Therefore, it is recommended that relief from the required volumetric examination of the reactor vessel support skirt weld be granted provided the licensee complies with the visual examination requirements early in the second inspection interval.

References

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Reference 2, 8, and 9.

# 3. Closure Head and Vessel Cladding, Categories B-I-1 and B-I-2, Items Bl.13, Bl.14, B2.9 and B3.8

#### Code Requirement

The examinations performed during each inspection interval shall cover 100% of the patch areas. The areas shall include at least six patches (each 36 sq. in.) evenly distributed in the closure head, six patches (each 36 sq. in.) evenly distributed in accessible sections of vessel shell, and one patch (36 sq. in.) near each manway in the primary side of vessels other than reactor vessels. The examination shall be (1) visual and surface or (2) volumetric for the closure head cladding, and visual for the vessel cladding.

### Code Relief Request

Relief is requested from making a cladding examination of clad patch areas of the reactor vessel, pressurizer, and steam generator.

### Proposed Alternative Examination

Visually inspect the accessible areas of the internal pressure boundary surfaces of the reactor vessel. This is consistent with the Summer 1978 Addenda to Section XI, 1977 Edition.

## Licensee's Basis for Requesting Relief

Four reactor vessel closure head patches have been examined visually and with liquid penetrant. In addition, one steam generator clad patch has been visually examined. No evidence of clad degradation has been found. The accessible areas of the reactor vessel interior will be visually examined. This will cover a significant amount of cladding in critical areas of the primary pressure boundary to provide assurance that the general condition of the cladding has not deteriorated. This position is consistent with the latest Section XI Code addenda in which cladding examinations have been deleted.

### Evaluation

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The 1977 Edition of Section XI has been referenced in 10 CFR 50.55a and inservice examinations may meet the requirements of this

edition in lieu of those from previous editions with the following provisions:

- (a) Commission approval is required to update to the more recent edition (pursuant to 10 CFR 50.55a(g)(4)(iv)).
- (b) When applying the 1977 Edition, all of the addenda through Summer 1978 Addenda must be used.
- (c) Any requirement of the more recent edition which is related to the one(s) under consideration must also be met.

The requirements for examining closure-head cladding and vessel cladding are deleted from the 1977 Edition with addenda through Summer 1978.

### Conclusions and Recommendations

Pursuant to 10 CFR 50.55a(g)(4)(iv), approval should be granted to update to the requirements of the 1977 Edition, Summer 1978 Addenda, for Category B-I-1 and B-I-2 items. This approval would delete the requirement to examine these items.

#### References

Reference 2.

### B. Pressurizer

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### 1. Pressurizer - Vessel Cladding, Category B-I-2, Item B2.9

This relief request is addressed in Section I.A.3 of this report.

### C. Heat Exchangers and Steam Generators

1. Steam Generator - Vessel Cladding, Category B-I-2, Item B3.8

This relief request is addressed in Section I.A.3 of this report.

### D. Piping Pressure Boundary

### 1. Branch Connection Welds, Category B-J, Items B4.6 and B4.7

### Code Requirements

Volumetric examination of longitudinal and circumferential welds and base metal for one wall thickness beyond the edge of the weld is required for branch pipe connections exceeding 6-in. diameter. Branch pipe connections 6 in. in diameter and smaller require a surface examination of the same area required for the larger pipe size. The examinations performed during each inspection interval shall cover all of the area of 25% of the circumferential joints including the adjoining one-foot sections of longitudinal joints and 25% of pipe branch connection joints.

### Code Relief Request

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Relief is requested to examine branch connection welds to the requirements of the 1977 Edition of ASME Section XI, with Addenda through Summer 1978.

### Proposed Alternative Examination

The examination methods and examination areas for all Class 1 piping branch connection welds will be chosen from Table IWB-2500-1 of the 1977 Edition of ASME Section XI with Addenda through Summer 1978.

### Licensee's Basis for Requesting Relief

Because of weld and nozzle configurations for branch connections, complete volumetric examination required by the 1974 Edition of Section XI cannot be accomplished. This impracticality was recognized and revisions to the examination requirements were incorporated in the 1977 Edition, Summer 1978 Addenda. The examination requirements of the Summer 1978 Addenda provide adequate assurance that pipe branch connection welds and base metal remain structurally sound.

### Evaluation

The 1977 Edition of Section XI has been referenced in 10 CFR 50.55a and inservice examinations may meet the requirements of this edition in lieu of those from previous editions with the following provisions:

- (a) Commission approval is required to update to the more recent edition (pursuant to 10 CFR 50.55a(g)(4)(iv)).
- (b) When applying the 1977 Edition, all of the addenda through Summer 1978 must be used.
- (c) Any requirement of the more recent edition which is related to the one(s) under consideration must also be met.

### Conclusions and Recommendations

Pursuant to 10 CFR 50.55a(g)(4)(iv), approval should be granted to update to the requirements of the 1977 Edition, Summer 1978 Addenda, for Category B-J, Items B4.6 and B4.7.

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Reference 2.

#### E. Pump Pressure Boundary

### 1. Pressure-Retaining Welds on Pump Casings, Category B-L-1, Item B5.6

### Code Requirement

Volumetric examination is required of at least one pump casing weld in each group of pumps performing similar functions in the system. The areas shall include the weld metal and the base metal for one wall thickness beyond the edge of the weld. The examination may be performed at or near the end of the inspection interval.

### Code Relief Request

Relief is requested from performing a volumetric examination of the reactor coolant pump casing during the first inspection interval.

### Proposed Alternative Examination

A volumetric examination of 95% of the pressure-retaining weld using MINAC will be performed during the first cycle of the second inspection interval.

### Licensee's Basis for Requesting Relief

A malfunction of the MINAC system during the last cycle of the first interval resulted in a failure to obtain a volumetric examination during the scheduled outage.

The recirculation pump casing material, cast stainless steel, is widely used in the nuclear industry and has performed well. The MINAC has been used at Ginna, Turkey Point, Point Beach, and Robinson, and no notable indications were found in any of the pumps examined.

### Evaluation

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As the licensee pointed out, the recirculation pump casing material, cast stainless steel, is widely used in the nuclear industry and has performed well. The MINAC has been used at Ginna, Turkey Point, Point Beach, and Robinson, and no notable indications were found in any of the pumps examined. The licensee has committed to using examination techniques utilizing state-of-the-art equipment, which can be expected to encounter some difficulties. The licensee's commitment to perform the required examination early in the second interval will provide adequate assurance of the pump weld integrity.

### Conclusions and Recommendations

Based on the evaluation, it is concluded that for the weld discussed above, adherence to the Code required schedule is impractical. It is further concluded that the proposed examinations will provide necessary assurance of structural reliability. Therefore, relief is recommended as requested, provided the licensee performs the alternative examination early in the second inspection interval.

#### References

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References 2, 4, and 5.

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#### Code Requirement

Visual (VT-3) examination of pump casing internal surfaces of at least one pump in each group of pumps performing similar functions shall be performed.

### Code Relief Request

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Relief is requested from performing visual inspections of pump casing internal pressure boundary surfaces.

### Proposed Alternative Examination

Partial surface replication, defined in Paragraph IWA-2211 of the Code, is obtainable from casing weld volumetric examination, which will be performed during the first cycle of the second inspection interval.

#### Licensee's Basis for Requesting Relief

Pump casing internal surfaces are inaccessible without dismantling the pump. To do the required visual inspection of the pump's internal surfaces, large amounts of radiation exposure and time would be required. This was demonstrated at a similar nuclear station, where an expenditure of approximately 1000 man-hours and 50 man-rem were required to complete the visual inspection of a similarly designed pump. The large expenditure of man-rem and man-hours to complete the visual inspection of a perfectly good pump solely for the purpose of inspection is impractical and not commensurate to the increased safety achieved by the inspection.

The licensee believes that adequate safety margins are inherent in the basic pump design and that the health and safety of the public will not be adversely affected by not performing the visual examination of the pump casing internal surfaces solely for the purpose of inspection.

### Fvaluation

The visual examination is to determine whether unanticipated severe degradation of the casing is occurring due to phenomena such as erosion, corrosion, or cracking. However, previous experience during examinations of pumps at other plants has not shown any significant degradation of casings.

The disassembly of the reactor recirculation pumps to the degree necessary to inspect the internal pressure retaining surfaces is a major effort, involving large personnel exposures and the generation of large amounts of radioactive waste. In view of the effort required to disassemble a pump, the information returned from visual examination of its internal surfaces would be marginal.

A partial surface replication obtainable from casing weld volumetric examination will provide a significant amount of information about the pump interior surface conditions. This examination is more stringent than most licensees are performing. However, if a pump requires disassembly for maintenance, an examination should be done by the most feasible means. The alternative examination coupled with the pump test data should provide adequate information about the pump interior surface.

### Conclusions and Recommendations

Based on the evaluation, it is concluded that for the internal surfaces discussed above, the Code requirement is impractical. It is further concluded that the alternative examination discussed above will provide the necessary assurance of structural reliability. Therefore, the following are recommended:

- (a) Relief from the Code-required visual examination of the interior surfaces of the pump should be granted.
- (b) The partial surface replication obtained from the casing weld volumetric examination should be accepted as an alternative examination of the internal pump casing surfaces.
- (c) If a pump requires disassembly for maintenance or any other reason, then the Code-required visual examination should be performed.

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### References

References 2, 4, and 5.

F. Valve Pressure Boundary

No relief requests.

### II. CLASS 2 COMPONENTS

- A. Heat Exchangers and Steam Generators
  - <u>Class 2 Pressure-Retaining Nozzle Welds in Vessels, Examination</u> Category C-B, Item Cl.2

### Code Requirement

Volumetric examination of 100% of the nozzle-to-vessel attachment weld is required.

#### Code Relief Request

Relief is requested from volumetric examination of the nozzleto-vessel weld for the five nozzles in each of the two Decay Heat Removal Coolers.

### Proposed Alternative Examination

A surface examination will be performed on the nozzle-tocollar fillet welds and collar-to-vessel shell fillet welds.

### Licensee's Basis for Requesting Relief

The subject welds have reinforcing collars installed. Therefore, there are no welds under Item Cl.2, Category C-B, which are accessible for examination.

### Evaluation

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The ANO construction permit was issued before the effective date of implementation for ASME Section XI, and thus the plant was not designed to meet the requirements of inservice inspection. Therefore, 100% compliance is not feasible or practical. A volumetric examination of a fillet weld would provide no meaningful data on the weld condition. However, a surface examination would detect fillet weld defects.

The alternative examination of a surface examination coupled with the visual (VT-2) examination during pressure testing will provide adequate assurance of the weld integrity. The visual (VT-2) examination would provide initial evidence of seepage from a through-wall perforation.

# Conclusions and Recommendations

Based on the above evaluation, it is concluded that the Code required examinations are impractical and that the alternative examination will provide adequate assurance of weld integrity. Therefore, it is concluded that relief should be granted provided the fillet welds are surface examined as proposed and the required visual (VT-2) examination during pressure tests are performed as required.

References

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Reference 2 and 9.

B. Piping Pressure Boundary

 <u>Class 2 Piping Welds for Pipes With Wall Thickness 0.5 In. and Less</u>, Categories C-F and C-G, Items C2.1, C2.2, and C2.3

#### Code Requirement

Volumetric examination of 100% of the weld including weld metal and base metal for one wall thickness beyond the edge of the weld is required for Class 2 pressure-retaining welds in piping, pumps, and valves, regardless of pipe wall thickness. In systems which circulate reactor coolant, areas of examination shall cover all of the areas listed below. For systems which circulate other than reactor coolant, 50% of those areas are to be examined.

- (a) circumferential butt welds at structural discontinuities,
  - (b) circumferential butt welds in piping within 3 pipe diameters of the centerline of rigid pipe anchors, or anchors at the penetration of the primary reactor containment, or at rigidly anchored components,
  - (c) longitudinal weld joints in pipe fittings (i.e., in tees, elbows, reducers),
  - (d) branch connection weld joints,
  - (e) pump casing and valve body weld joints.

### Code Relief Request

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Relief is requested from volumetric examination of Class 2 piping welds in pipes with nominal wall thickness 0.5 inch and less.

### Proposed Alternative Examinations

The examination methods and examination areas of all Class 2 piping welds for pipes with wall thickness 0.5 inch and less will be made according to the rules of the 1977 Edition of ASME Section XI, with Addenda through Summer 1978. The 1977 Edition requires a surface examination on those welds with thickness 0.5 inch and less.

### Licensee's Basis for Requesting Relief

Reliability for detection and characterization of flaws in thin-wall piping using the procedures of the 1975 Summer Addenda is poor. This is mainly due to resolution problems inherent with the ultrasonic technique, weld joint configurations, and material properties in the case of austenitic welds. In some cases, the Code required calibration reflector is over 50% of the pipe wall.

The 1977 and later Editions of Section XI (including addenda) require a surface examination of Class 1 piping weldments with less than 4 inches nominal pipe diameter and of Class 2 piping weldments 0.5 inch and less in thickness. Non-volumetric examination is required for these welds.

A surface examination (magnetic particle or liquid penetrant) provides better sensitivity for detecting and sizing surface initiating flaws in this thickness range.

### Evaluation

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The 1977 Edition of Section XI has been referenced in 10 CFR 50.55a and inservice examinations may meet the requirements of this edition in lieu of those from previous editions with the following provisions:

- (a) Commission approval is required to update to the more recent edition (pursuant to 10 CFR 50.55a(g)(4)(iv)).
- (b) When applying the 1977 Edition, all of the addenda through Summer 1978 must be used.
- (c) Any requirement of the more recent edition which is related to the one(s) under consideration must also be met.

As the licensee states, surface is a better examination for piping 0.5 in. or less. This is recognized in later versions of the Code. Therefore, the licensee should be allowed to update to requirements of the later Code.

The regulation (10 CFR 50.55a(b)(2)(iv)(A)), however, specifies that the extent of examination for C-F and C-G welds in the Residual Heat Removal, Emergency Core Cooling, and Containment Heat Removal systems must be determined by the requirements of Paragraph INC-1220, Table IWC-2520, and Paragraph IWC-2411 in the 1974 Edition and Addenda through Summer 1975. Thus, the licensee may use the examination methods and schedule from the new version of the Code, but the extent is still determined by the 1974 S75 Code. For C-F and C-G welds outside these emergency systems, the licensee has the choice of which Code to use to determine extent.

#### Conclusions and Recommendations

Pursuant to 10 CFR 50.55a(g)(4)(iv), approval should be granted to update to use the examination methods of the 1977 Edition, Summer 1978 Addenda, for Categories C-F and C-G, Items C2.1, C2.2, and C2.3. However, the extent of examination for C-F and C-G welds in the Residual Heat Removal, Emergency Core Cooling, and Containment Heat Removal systems must be determined by the requirements of Paragraph IWC-1220, Table IWC-2520, and Paragraph IWC-2411 in the 1974 Edition with Addenda through Summer 1975.

#### References

Reference 2.

### III. CLASS 3 COMPONENTS

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No relief requests.

IV. PRESSURE TESTS

No relief requests.

### V. GENERAL

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### A. Examination Techniques

1. Ultrasonic Examination of the Reactor Vessel, Pressurizer, and Steam Generator

#### Code Requirements

ASME Code Section XI (1974 Edition), Paragraph IWA-2232, Un trasonic Examination: "Un trasonic examination shall be conducted in accordance with the provisions of Appendix I."

### Code Relief Request

For reactor vessel, pressurizer, and steam generator welds, relief is requested from the requirement that ultrasonic examinations be conducted in accordance with the provisions of Appendix I.

### Proposed Alternative Examination

Article 4 of Section V, 1977 Edition, including Addenda through Summer 1978, will be used to establish the ultrasonic examination methods for the referenced components.

# Licensee's Basis for Requesting Relief

An improved reactor vessel inspection program is being prepared for ANO-1 which is based on USNRC Regulatory Guide 1.150. This Guide refers to Article 4 of Section V, 1977 Edition through Summer 1978 Addenda for ultrasonic examination methods. Article 4 of Section V is equivalent to Appendix I and would provide an inspection program for the major components that is compatible and consistent with future Code-required ultrasonic examinations.

### Evaluation

The 1977 Edition of Section XI has been referenced in 10 CFR 50.55a and inservice examinations may meet the requirements of this edition in lieu of those from previous editions with the following provisions:

- (a) Commission approval is required to update to the more recent edition (pursuant to 10 CFR 50.55a(g)(4)(iv)).
- (b) When applying the 1977 Edition, all of the addenda through Summer 1978 Addenda must be used.
- (c) Any requirement of the more recent edition which is related to the one(s) under consideration must also be met.

Article 4 of Section V was incorporated into Paragraph IWA-2232 of the 1977 Edition through Summer 1978 Addenda of Section XI. To meet the requirements of (c) above, Paragraph IWA-2232(a) in the Summer 1978 Addenda, 1977 Edition, should be adopted by the licensee. This paragraph requires that ultrasonic examination of Class 1 and 2 vessel welds in ferritic material greater than 2 in. in thickness shall be conducted in accordance with Article 4 of Section V.

### Conclusions and Recommendations

Pursuant to 10 CFR 50.55a(g)(4)(iv), approval should be granted to update to the requirements of Paragraph IWA-2232(a) in the 1977 Edition, Summer 1978 Addenda.

### References

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Reference 2.

### REFERENCES

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- Science Applications, Inc., Arkansas Nuclear One-Unit 1, Inservice Inspection Program Technical Evaluation Report, SAI Report No. 186-028-39, September 17, 1982.
- Letter, J. R. Marshall (AP&L) to J. F. Stolz (NRC), November 12, 1982; response to request for additional information including seven new relief requests for the first interval.
- J. F. Stolz (NRC) to W. Cavanaugh III (AP&L), March 2, 1982; request for additional information for the first interval.
- J. T. Enos (AP&L) to J. F. Stolz (NRC), November 19, 1984; two first-interval relief requests on pump casings and internal surfaces.
- J. T. Enos (AP&L) to J. F. Stolz (NRC), December 19, 1984; modification of relief requests in November 19, 1984, letter.
- Letter, J. F. Stolz (NRC) to J. M. Griffin (AP&L), November 20, 1984; request for additional information on first and second interval ISI.
- Letter, J. F. Stolz (NRC) to J. M. Griffin (AP&L), May 6, 1985; request for additional information on first and second interval ISI.
- Letter, J. T. Enos (AP&L) to J. F. Stolz (NRC), January 31, 1985; response to request for additional information on first and second interval IS<sup>-</sup>.
- Letter, J. T. Enos (AP&L) to J. F. Stolz (NRC), June 24, 1985; response to request for additional information.

### CONCLUSION

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Based on the review summarized, we conclude that relief granted from the examination and testing requirements and alternate methods set forth above give reasonable assurance of the piping and component pressure boundary and support structural integrity, that granting relief where the Code requirements are impractical is authorized by law and will not endanger life or property, or the common defense and security, and is otherwise in the public interest considering the burden that could result if they were imposed on the facility.

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Contributers to this SE: George Johnson, Guy S. Vissing Dated: April 10, 1986