March 28, 2003

Mr. Lew W. Myers
Chief Operating Officer
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1 - REQUESTS FOR RELIEF FROM THE THIRD 10-YEAR PUMP AND VALVE INSERVICE TESTING (IST) PROGRAM (TAC NO. MB3909)

Dear Mr. Myers:

By letter dated January 11, 2002 (Serial Number 2751), FirstEnergy Nuclear Operating Company (the licensee) submitted the third 10-year IST program plan for pumps and valves at Davis-Besse Nuclear Power Station. The submittal included seven relief requests. Additional information was submitted in your letter dated December 6, 2002 (Serial Number 2818). This submittal also included one additional relief request.

The staff's evaluation of the eight relief requests is enclosed.

For relief requests RP-1, RP-2, and RP-4, the staff finds that the licensee's proposed alternatives provide an acceptable level of quality and safety. Relief is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the third 10-year interval.

For relief request RP-5, the staff finds that compliance with the specified requirement would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The licensee's proposed alternative pump testing program provides reasonable assurance that the components are operationally ready. The licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(ii) for the third 10-year interval.

For relief request RP-3, the staff finds that compliance with the Code test requirements are impractical. The licensee's proposed alternative pump testing program provides reasonable assurance that the components are operationally ready. The granting of relief pursuant to 10 CFR 50.55a(f)(6)(i) is authorized by law and will not endanger life or property or the common defense and security, and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility. Relief is granted pursuant to 10 CFR 50.55a(f)(6)(i) for the third 10-year interval.

For relief requests RG-1, RV-1, and RV-2, the staff approves the use of portions of later Code Editions and Addenda pursuant to 10 CFR 50.55a(f)(4)(iv) for the third 10-year interval based on incorporation by reference of the 1998 Edition up to and including the 2000 Addenda of the American Society of Mechanical Engineers OM Code.

This completes the staff's activities associated with TAC No. MB3909.

Sincerely,

/RA/

Anthony J. Mendiola, Chief, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure: Safety Evaluation

cc w/encl: See next page

This completes the staff's activities associated with TAC No. MB3909.

Sincerely,
/RA/
Anthony J. Mendiola, Chief, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosures: Safety Evaluation

cc w/encl: See next page

DISTRIBUTION:

PUBLIC	PDIII-2 R/F	WRuland	AMendiola	OGC	ACRS
JHopkins	THarris	DTerao	JStrnisha	GHill(2)	
HNieh	GGrant, RIII				

ADAMS ACCESSION NO. ML030790183

OFFICE	PM:LPD3	LA:LPD3	SC:EMEB	OGC	SC:LPD3
NAME	JHopkins	THarris	DTerao*	RHoefling	AMendiola
DATE	03/ 13 /03	03/ 11 /03	01/23/03	03/ 19 /03	03/ 28 /03

*Memo from D. Terao to A. Mendiola dated 01/23/03

OFFICIAL RECORD COPY

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

THIRD 10-YEAR PUMP AND VALVE INSERVICE TESTING (IST) PROGRAM

REQUEST FOR RELIEF NOS. RG-1, RP-1 THROUGH RP-5, RV-1 AND RV-2

FIRSTENERGY NUCLEAR OPERATING COMPANY

DAVIS-BESSE NUCLEAR POWER STATION

DOCKET NO. 50-346

1.0 INTRODUCTION

By letter dated January 11, 2002, the licensee submitted its third 10-year IST program plan for pumps and valves at the Davis-Besse Nuclear Power Station (DBNPS). The third 10-year interval for DBNPS began on February 1, 2002, and is scheduled to end on September 12, 2010. The program included seven requests for relief from certain IST requirements for pumps and valves. In response to the staff's request for additional information, the licensee submitted additional information to the Nuclear Regulatory Commission (NRC) in its letter dated December 6, 2002. This submittal also included a new relief request RP-5. NRC evaluation of the licensee's eight relief requests are contained herein.

2.0 REGULATORY EVALUATION

Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.55a, requires that IST of certain American Society of Mechanical Engineers (ASME) Code Class 1, 2, and 3 pumps and valves be performed at 120-month (10-year) IST program intervals in accordance with a specified ASME Code and applicable addenda, except where alternatives have been authorized or relief has been requested by the licensee and granted by the NRC pursuant to paragraphs (a)(3)(i), (a)(3)(ii), or (f)(6)(i) of 10 CFR 50.55a. In accordance with 10 CFR 50.55a(f)(4)(ii), licensees are required to comply with the requirements of the latest edition and addenda of the ASME Code incorporated by reference in the regulations 12 months prior to the start of subsequent 120-month IST program intervals. Davis-Besse's third 10-year IST interval is based on the 1995 Edition and the 1996 Addenda of the ASME *Code for Operation and Maintenance of Nuclear Power Plants* (ASME OM Code). Licensees whose 120-month IST program end on or after October 28, 2003 are required to implement the 1997 Addenda and the 1998 Edition through the 2000 Addenda of the ASME OM Code. In proposing alternatives or requesting relief, the licensee must demonstrate that (1) the proposed alternatives provide an acceptable level of quality and safety, (2) compliance would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety, or (3) conformance is impractical for the facility. Section 50.55a authorizes the NRC to approve alternatives and grant relief from ASME Code requirements upon making the necessary findings. NRC guidance in Generic Letter (GL) 89-04, "Guidance on Developing Acceptable Inservice Testing

ENCLOSURE

Program," provides acceptable alternatives to the Code requirements. Further guidance is given in GL 89-04, Supplement 1, and NUREG-1482, "Guidelines for Inservice Testing at Nuclear Power Plants."

The second 10-year interval for DBNPS was scheduled to end on September 12, 2000. By letter dated January 5, 2000, the FirstEnergy Nuclear Operating Company (the licensee) requested to extend the start of its third 10-year inservice test interval for DBNPS until February 1, 2002, in order to develop a risk-informed inservice test program for air-operated valves. The NRC approved this request by letter dated February 10, 2000. Since that time, the NRC developed Draft Regulatory Guide DG-1089 which proposes to endorse ASME OM risk-informed Code Cases. Once issued, the Regulatory Guide will allow licensees to develop risk-informed IST programs without the need for NRC staff review and approval. On this basis, Davis-Besse requested withdrawal of their air-operated risk-informed program by letter dated June 10, 2002. The NRC approved withdrawal of the program by letter dated June 27, 2002. Therefore, all components meeting the scoping criteria for inclusion in the DBNPS third 10-year IST Program will meet the requirements of the ASME OM Code-1995 Edition and the 1996 Addenda.

3.0 TECHNICAL EVALUATION

3.1 General Relief Request RG-1

3.1.1 Code Requirements

The licensee requested relief from the requirements of ISTA 1.4(f), 1.5, and 2.1 to eliminate involvement of the Authorized Nuclear Inservice Inspector (ANII) in the development and implementation of the IST program.

3.1.2 Licensee's Basis for Requesting Relief

> In the ASME OMb Code-1997 Addenda to the ASME OM Code-1995 Edition for Operation and Maintenance of Nuclear Power Plants, ISTA 1.4, Owner's Responsibility was rewritten deleting the requirement for possession of an arrangement with an Authorized Inspection Agency. ISTA 1.5 was written to eliminate reference to access provisions for the Inspector, but the requirements for access provisions for examination personnel and equipment remain. ISTA 2.1, which detailed specific requirements for access for the Inspector, qualification of the Authorized Inspection Agencies, Inspectors and Supervisors and the duties of the Inspector, has been deleted in its entirety. The above is also true for ASME OM Code-1998 Edition, through the 2000 addenda.
>
> On August 3, 2001, the NRC published in the *Federal Register* the proposed rule change for 10 CFR 50.55a, RIN 3150-AF61. The proposed revision to 10 CFR 50.55a endorses ASME OMb Code-1997 Addenda, ASME OM Code-1998 Edition, through the 2000 Addenda without exception, as it pertains to the deletion of the activities to the ANII.

American National Standards Institute (ANSI) Part N626.1 describes the qualifications and duties for ANIIs, which are applicable to Section XI. This part specifically addresses the duties to verify nondestructive tests, welding, heat treatment, and repairs and replacements; but is silent on the responsibilities concerning IST. Furthermore, ANII review of IST programs is far less comprehensive than the reviews performed on inservice inspection activities.

The ANII inspection of inservice test programs consists of a review of the inservice test plan and a records review of tests performed. The licensee's Quality Assurance Program also performs these inspections and oversight functions. These inspection activities are being duplicated by the two separate organizations. There is no added safety or quality-related benefit in this duplication.

3.1.3 Licensee's Proposed Alternative to Code Testing Requirements

Specific requirements for Access for the Inspector; Qualification of the Authorized Inspection Agencies, Inspectors; and the Duties of the Inspector (ANII), will not be addressed in the IST Program. The licensee's Quality Assurance Program processes provide an equivalent, or greater, level of quality and safety.

3.1.4 Staff Evaluation

The 1995 Edition and the 1996 Addenda of the ASME OM Code requires that test activities be verified by an ANII. Specifically, ISTA 1.4(f) requires the Owner to possess an arrangement with an Authorized Inspection Agency to provide inspection services, ISTA 1.5 requires examination access provisions for the Inspector, and ISTA 2.1 requires duties of the Inspector; qualification of the Authorized Inspection Agencies, Inspectors and Supervisors; and access requirements for the Inspector. It is the ANII's duty to perform a detailed review of the inservice test plan prior to testing, review revisions to the test plan, verify that inservice tests and examinations have been completed and the results recorded, and verify examinations are performed in accordance with Code requirements. ANSI N626.1 describes the ANII qualifications and duties applicable to ASME Section XI. ANSI N626.1 specifically addresses the duties to verify nondestructive tests, welding, heat treatment, and repairs and replacements for inservice inspection but does not specify any ANII duties for IST.

The licensee proposes to eliminate involvement of the ANII in all phases of the IST program on the basis that the licensee's quality assurance program also performs these inspections and oversight functions required by the ANII in ISTA 1.5 and ISTA 2.1. The licensee states that these inspection activities are being duplicated by the licensee's quality assurance program and the ANII, and that there is no added safety or quality-related benefit in this duplication. Furthermore, ANIIs generally do not have the training or background experience to determine the safety functions of components in order to verify the scope of the test plan or to assess the operational readiness of components based on test results.

The requirement for ANII involvement in IST program has been removed from the 1997 Addenda of the ASME OM Code. Section 50.55a(f)(4)(iv) states that IST of pumps and valves may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in 10 CFR 50.55a(b), subject to NRC approval. Portions of editions or addenda may be used provided that all related requirements of the respective editions and addenda are met. The 1997 Addenda as well as the 1998 Edition up to and including the 2000 Addenda of the ASME OM Code, were incorporated by reference in 10 CFR 50.55a(b) on September 26, 2002 (67 FR 60520), with no modifications or limitations placed on the removal of ANII involvement in the IST program.

3.1.5 Conclusion

The staff concludes that the licensee's proposed use of later Code requirements related to the elimination of ANII requirements in ISTA 1.4(f), ISTA 1.5, and ISTA 2.1, is approved pursuant to 10 CFR 50.55a(f)(4)(iv) for the third 10-year interval on the basis that the 1997 Addenda and 1998 Edition up to and including the 2000 Addenda of the ASME OM Code have been incorporated by reference into 10 CFR 50.55a(b).

3.2 Pump Relief Request RP-1

3.2.1 Code Requirements

The licensee requested relief from ISTB 4.7.1(b)(2), which states that digital instruments shall be selected such that the reference value shall not exceed 70 percent of the calibrated range of the instrument. This request applies to ASME Code Class 2 and Class 3 pumps.

3.2.2 Licensee's Basis for Relief

> Plant process computer points are used for instrumentation in IST of pumps. The computer points are used in lieu of the associated analog indicators in order to meet ASME Code instrument accuracy requirements. In addition to using computer points, temporary digital instruments (M&TE) are also used in pump testing. In many cases the reference values exceed 70 percent of the computer point or temporary digital instrument range. The basis for the 70 percent originated from ASME Section XI (IWA 5264), which provided requirements for pressure testing instrumentation ranges and to ensure readings in the required action range would be on scale. Since the computer points use permanent plant instrumentation as input, the ranges, by design, are selected to account for all expected operating and testing conditions. Surveillance tests are written such that the temporary instrumentation (digital or analog) is not over-ranged. In addition, digital instrumentation is significantly less susceptible to damage from over ranging and the accuracy of a digital instrument is precise throughout its full-calibrated range.
>
> Tables ISTB 5.2.1-2 and 5.2.2-1, which list the acceptance criteria for quarterly testing, state that the maximum acceptable value of the measured parameter is 110 percent of the reference value. Table ISTB 5.2.3-1, which list the acceptance criteria for comprehensive testing, states that the maximum acceptable value of the measured parameter is 103 percent of the reference value.

3.2.3 Licensee's Proposed Alternative to Code Testing Requirements

Digital instruments used to verify the required action levels of Tables ISTB 5.2.1-2 and 5.2.2-1 will be selected such that the reference value shall not exceed 90 percent of the calibrated range.

Digital instruments used to verify the required action levels of Table ISTB 5.2.3-1 will be selected such that the reference value shall not exceed 97 percent of the calibrated range.

3.2.4 Staff Evaluation

The 1995 Edition up to and including the 1996 Addenda of the OM Code, ISTB 4.7.1(b)(2) requires that reference values of digital instruments do not exceed 70 percent of the calibrated range of the instrument. The licensee states that the plant process computer points are used for instrumentation in IST of pumps. The computer points are used in lieu of the associated analog indicators in order to meet ASME Code instrument accuracy requirements. In addition to using computer points, temporary digital instruments (M&TE) are also used in pump testing. In many cases the reference values exceed 70 percent of the computer point or temporary digital instrument range. The basis for the 70 percent originated from ASME Section XI (IWA 5264), which provided requirements for pressure testing instrumentation ranges and to ensure readings in the required action range would be on scale. Because the computer points use permanent plant instrumentation as input, the ranges, by design, are selected to account for all expected operating and testing conditions. Surveillance tests are written such that the temporary instrumentation (digital or analog) is not over-ranged. In addition, digital instrumentation is significantly less susceptible to damage from over ranging and the accuracy of a digital instrument is precise throughout its full-calibrated range.

ISTB 4.7.1(b)(3) states that vibration instruments are excluded from meeting the requirements of not exceeding 70 percent of the calibrated range. Thus, only Tables ISTB 5.2.1-2, 5.2.2-1, and 5.2.3-1 for hydraulic pump testing are required to meet this criteria. The requirement for not exceeding 90 percent of the calibrated range is based on the maximum required action range of 110 percent in Tables ISTB 5.2.1-2 and 5.2.2-1. This ensures when the digital instrument is reading the maximum action level of 110 percent of the reference value, it is still within the calibrated range. In the case involving Table 5.2.3-1 where the maximum action level is 103 percent of the reference value, the instrument may be selected such that the reference value does not exceed 97 percent of the calibrated range. This ensures when the digital instrument is reading the maximum action level of 103 percent of the reference value, it is also within the calibrated range.

Tables ISTB 5.2.1-2 and 5.2.2-1, which list the acceptance criteria for quarterly testing, state the maximum acceptable value of the measured parameter is 110 percent of the calibrated range of the instrument. For this case, the reference value shall not exceed 90 percent of the calibrated range of the instrument. Table ISTB 5.2.3-1 states that the maximum acceptable value of the measured parameter is 103 percent of the reference value. For this case, the reference value shall not exceed 97 percent of the calibrated range of the instrument.

On the basis of the above evaluation, the staff finds the licensee's proposed alternative provides an acceptable level of quality and safety.

3.2.5 <u>Conclusion</u>

The staff concludes the licensee's proposed alternative to the Code requirements of ISTB 4.7.1(b)(2) for selection of digital instruments such that the reference value does not exceed 90 percent of the instruments calibrated range for Tables ISTB 5.2.1-2 and 5.2.2-1 and for selection of digital instruments such that the reference value does not exceed 97 percent of the instruments calibrated range for Tables ISTB 5.2.3-1 is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the third 10-year interval, based on the alternative providing an acceptable level of quality and safety.

3.3 <u>Pump Relief Request RP-2</u>

3.3.1 <u>Code Requirements</u>

The licensee requested relief for Component Cooling Water Pumps P43-1, P43-2, and P43-3 from the Code requirements below. The component cooling water pumps are Group A, centrifugal, horizontally mounted pumps.

> ISTB 5.2.1(b) -The resistance of the system shall be varied until the flow rate equals the reference point. The differential pressure shall then be determined and compared to the reference value.
>
> ISTB 5.2.1(d) - Vibration (displacement or velocity) shall be determined and compared with the reference value.
>
> ISTB 5.2.1(e) - All deviations from the reference values shall be compared with the ranges of tables ISTB 5.2.1-1 and 5.2.1-2.

3.3.2 <u>Licensee's Basis for Relief</u>

> The CCW system was not designed with installed pump test lines. To achieve the same operating point for each test, manual butterfly valves (which are not designed to throttle flow) would be used. In addition, repeatability using these valves to throttle is poor. Depending on plant operating and climatic conditions, the cooling requirements range from minimum cooling loads (3000 GPM) to 100 percent (8000 GPM). System operating conditions do not allow adjusting system resistance without significant impact on the plant's thermal stability.
>
> A fixed flow rate through the pump aligned to the essential and non-essential loads cannot be accomplished because system resistances are continuously varying and flows to parallel loads are dependent on each other. Spent Fuel Cooling and Boric Acid Evaporators have temperature control valves, which vary demand on the CCW system according to heat load. Component cooling water flow to the Reactor Coolant Pump coolers varies dependent on the throttle valve positions on the supply lines for the four pumps. Component cooling water flow to the Control Rod Drives pass through filters whose flow will change dependent on filter loading.

ISTB 4.5, "Establishment of Additional Set of Reference Values," provides for multiple sets of reference values. A pump curve is merely a graphical representation of the fixed response of the pump to an infinite number of flow conditions, which are based on some finite number of reference values verified by measurement. Based on the lack of designed throttling capability, damage to the plant's equipment or a plant transient/trip could occur if the resistance of the system is varied to achieve a single reference point for testing.

3.3.3 Licensee's Proposed Alternative to Code Testing Requirements

Pump reference curves (developed per the guidelines in NUREG-1482, Section 5.2, "Use of Variable Reference Values for Flow Rate and Differential Pressure During Pump Testing") will be used to compare flow rate with developed pump head at the flow conditions dictated by Component Cooling Water System loads each quarter. Baseline vibration data obtained at various flow points on the pump curve will be used to develop a vibration verses flow curve.

All deviations from the reference curves shall be compared with the ranges of tables ISTB 5.2.1-1 and 5.2.1-2.

3.3.4 Staff Evaluation

The 1995 Edition with the 1996 Addenda of the OM Code requires that pump flow rate, differential pressure, and vibration be evaluated against reference values to monitor pump condition and to allow detection of hydraulic degradation. ISTB 5.2.1(b) requires flow rate and differential pressure tests for Group A pumps. ISTB 5.2.1(d) specifies that vibration (displacement or velocity) shall be determined and compared to the reference value for Group A pumps. ISTB 5.2.1(e) specifies that all deviations from the reference values shall be compared with the ranges of tables ISTB 5.2.1-1 and 5.2.1-2.

The Primary Component Cooling Water Pumps P43-1, P43-2, and P43-3 operate under varying flow and differential pressure conditions, depending on the load requirements. It would not be practical to establish a fixed reference point for testing the component cooling pumps because of system constraints that could result in plant transient or trip and damage to equipment.

When it is unsound to test a pump at a reference value of flow and differential pressure, testing in the "as-found" condition and comparing values to an established reference curve may be an acceptable alternative. Pump curves represent a set of infinite reference points of flow rate and differential pressure. Establishing a reference curve for the pump when it is known to be operating acceptably, and basing the acceptance criteria on this curve, can permit evaluation of pump condition and detection of degradation.

The licensee proposed to follow the NRC guidelines specified in NUREG-1482, Section 5.2, to develop pump reference curves to compare flow with developed pump head (differential pressure) at the flow conditions dictated by Component Cooling Water System loads each quarter for Group A tests. Baseline vibration data obtained at various flow points on the pump curve will be used to develop a vibration verses flow curve for Group A tests. All deviations from the reference curves shall be compared with the ranges of tables ISTB 5.2.1-1 and 5.2.1-2. This proposed alternative testing will provide reasonable assurance that the

Component Cooling Water Pumps are operationally ready and, thus, is an acceptable alternative to the Code requirements.

3.3.5 Conclusion

The staff concludes that the licensee's proposed alternative to the Code reference value requirements of paragraphs ISTB 5.2.1(b), ISTB 5.2.1(d), and ISTB 5.2.1(e) for CCW Pumps P43-1 and P43-2 is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the third 10-year interval, based on the alternative providing an acceptable level of quality and safety.

3.4 Pump Relief Request RP-3

3.4.1 Code Requirements

The licensee requested relief for emergency diesel generator (EDG) fuel oil transfer pumps P195-1 and P195-2 from the Code requirements below. The EDG pumps are Group A, centrifugal, horizontally mounted pumps.

> ISTB 5.1 – An IST shall be run on each pump as specified in Table 5.1-1 (IST Frequency: Quarterly for Group A Test, Biennially for Comprehensive Test).
>
> ISTB 5.2.1(b) and ISTB 5.2.3(b) – For centrifugal and vertical line shaft pumps, the resistance of the system shall be varied until the flow rate equals the reference point. The differential pressure shall then be determined and compared to the reference value.
>
> ISTB 5.2.1(c) and ISTB 5.2.3(c) – Where system resistance cannot be varied, flow rate and pressure shall be determined and compared to their respective reference values.
>
> ISTB 5.2.1(d) and ISTB 5.2.3(d) – Vibration (displacement or velocity) shall be determined and compared to the reference value.
>
> ISTB 5.2.1(e) and ISTB 5.2.3(e) – All deviations from the reference values shall be compared with the ranges of Tables ISTB 5.2.1-1 and ISTB 5.2.1-2 and corrective action taken as specified in paragraphs ISTB 6.2. Vibration measurements shall be compared to both the relative and absolute criteria shown in the alert and required action ranges of Table ISTB 5.2.1-1.
>
> Table ISTB 5.1-1 – IST Frequency (Quarterly)
>
> Table ISTB 5.2.1-1 – Group A and Comprehensive Tests and Vibration Acceptance Criteria
>
> Table ISTB 5.2.1-2 – Group A Test Hydraulic Acceptance Criteria
>
> Table ISTB 5.2.3-1 – Comprehensive Test Hydraulic Acceptance Criteria

3.4.2 Licensee's Basis for Relief

In accordance with 10 CFR 50.55a(f)(5)(iii), relief is requested from the above requirements (differential pressure, flow rate, vibration, and test frequency) on the basis that compliance with the Code requirements is impractical and that the proposed alternatives will provide reasonable assurance the components are operationally ready.

10 CFR 50.55a(f)(2) requires that Class 1 and 2 components be designed and provided with access to enable testing if the construction permit was issued between January 1, 1971, and July 1, 1974. The DBNPS construction permit was issued on March 24, 1971.

However, the EDG fuel oil transfer system is Class 3, and therefore, was not required to be designed to permit performance of Code IST. The EDG fuel oil transfer pumps are canned rotor pumps, submerged inside the underground EDG fuel oil storage tank, and not accessible for vibration measurements. There are no installed flow instrumentation, pressure instrumentation, valve test connections, or recirculation lines.

The EDG fuel oil storage tanks configuration consists of a safety-related 40,000 gallon 7-day capacity underground storage tank for each EDG. Each of the 17-day underground storage tanks has an internally mounted submerged EDG fuel oil transfer pump normally supplying the corresponding 6000 gallon 20-hour gross capacity day tank. In addition, the supply lines from the EDG day tanks can be cross-connected to each which permits either EDG to be supplied with fuel oil from either tank in an emergency. Each EDG day tank also has the capability of emergency fill from the non-safety-related 100,000 gallon diesel fuel oil storage tank using flexible hose. Because of the large capacity of the day tanks, and the three diverse methods of replenishing the day tanks during EDG operation (100,000 gallon tanks, 40,000 gallon tanks, and safety-related fill connection), the DBNPS EDG fuel oil transfer pumps are of lower safety significance than in a fuel oil transfer system with relatively small day tanks.

The EDG fuel oil transfer pumps are low flow pumps, rated at 10 gpm. They automatically start on a low EDG day tank level of approximately 17 feet (approximately 5050 gallons), then automatically shut off at approximately 7 ½ feet; this corresponds to approximately 250 gallons pumped. This safety feature maintains a minimum level as required per Technical Specification 3.8.1.1.

The EDG day tanks are elevated to provide gravity to flow to the suction of the diesel fuel pumps for the EDG engines. The EDG fuel use design is approximately 4.5 gpm; therefore, each day tank can last approximately 22 hours. Periodic verification of the fuel level in the EDG day tank is sufficient to allow offsite fuel oil delivery directly into the day tanks.

The EDG fuel oil transfer pumps do not have installed instrumentation to measure either flow or discharge pressure. Discharge pressure cannot be varied since there are no isolation valves.

The only possible flow measurement is by measuring EDG day tank volume change over time. Error in measuring this volume is dependent on fuel oil temperature and a limited change in level indication because the EDG day tank has a large upper circular section. Flow rate is dependent upon EDG fuel oil storage tank level and fuel oil viscosity, which varies with environmental temperature conditions. There are no recirculation pathways nor designed drainage pathways.

It is impractical to take vibration measurements on these pumps. The pumps and motors are located inside the EDG fuel oil storage tanks, are not accessible during operation, and are submersed in the fuel oil being pumped.

To date no corrective maintenance has been required for these pumps. The pumps have successfully started and delivered fuel upon demand. The latest flow test indicated pump design flow rates are being met.

It is estimated that modification of the fuel oil transfer system to accommodate Code flow, differential pressure and vibration measurements would cost approximately $500,000. This modification would involve replacement of the existing pumps and their relocation external to the tanks, installation of flow test loops, and installation of flow and pressure instrumentation. DBNPS considers an expenditure of this magnitude unwarranted considering the reduced safety significance of the DBNPS fuel oil transfer system as compared to typical designs.

To perform the Code testing would require extensive plant modifications. The performance of the Code testing requirements without a major modification to plant structure is impractical.

3.4.3 Licensee’s Proposed Alternative to Code Testing Requirements

Since the EDG fuel oil transfer pumps are inaccessible, no vibration monitoring (ISTB 5.2.1(e) and 5.2.3(e)) will be performed.

Pump flow functional testing is performed each month as required per Technical Specification 4.8.1.1.2. The 22 hours supply is sufficient to allow off-site fuel oil delivery service directly to the EDG day tanks, if necessary. Periodic operation of the EDGs for testing purposes require automatic operation of the EDG fuel oil transfer pumps in order to maintain the required level in the EDG day tanks.

Pump flow rate tests are performed each cycle. A predetermined oil level above the transfer pump is set prior to testing. The flow rate is obtained by measuring the change in EDG day tanks level over time. An EDG day tank level change of approximately 150 gallon or more is timed to determine flow rate.

Flow rate is calculated from the known increase in EDG day tanks level. Pump suction pressure is preset by fuel oil level adjustment. Pump discharge is consistent since there are no throttle valves. Based upon these conditions, pump flow rates should be repeatable and capable of predicting pump degradation.

As stated above, the EDG fuel oil transfer pumps rated at 10 gpm. A low required action range of less than 6 gpm will be used in lieu of Table 5.2.1-2 and Table 5.2.3-1. This range will ensure the EDG fuel oil transfer pumps do not degrade below required design system flow requirements. Pump flow rates will be trended for degradation. In lieu of alert levels specified, required actions will be performed if pump flow rate is determined to be outside the acceptable range.

Periodically, the EDG fuel oil storage tanks are drained, cleaned, and filled with fresh oil. The EDG day tanks are also drained, cleaned, and inspected. At these times, a long term pump duration test is possible. The transfer pump will be required to consecutively pump 1000 gallons of fuel from the EDG fuel oil storage tank to the EDG day tank. Flow rate will be measured and evaluated for degradation.

3.4.4 Staff Evaluation

The 1995 Edition with the 1996 Addenda of the OM Code requires that pump flow rate, differential pressure, and vibration be evaluated against reference values to monitor pump condition and to allow detection of hydraulic degradation. ISTB 5.2.1 specifies the Group A test criteria and ISTB 5.2.3 specifies the comprehensive test criteria. Test frequencies are specified in Table 5.1-1.

The construction permit for DBNPS was issued on March 24, 1971, therefore, 10 CFR 50.55a(f)(2) applies for design and accessibility. 10 CFR 50.55a(f)(2) requires that Class 1 and 2 components be designed and be provided with access to enable testing if the construction permit was issued between January 1, 1971, and July 1, 1974. Class 3 components are not required to meet this criteria. The EDG fuel oil transfer system is Class 3, therefore, is not designed to permit performance of Code IST. The EDG fuel oil transfer pumps are canned rotor pumps, submerged inside the underground EDG fuel oil storage tank. These pumps are not accessible during operations. There are no installed flow or pressure instrumentation or recirculation lines available to perform the Code-required testing. Therefore, it is impractical to perform flow rate and differential pressure tests or to take vibration measurements on these pumps.

DBNPS EDG fuel oil storage tank configuration consists of a safety-related 40,000 gallon 7-day capacity underground storage tank for each EDG. Each of the 7-day underground storage tanks has an internally mounted submerged EDG fuel oil transfer pump normally supplying the corresponding 6000 gallon 20-hour gross capacity day tank. In addition, the supply lines from the EDG day tanks can be cross-connected to each which permits either EDG to be supplied with fuel oil from either tank in an emergency. Each EDG day tank also has the capability of emergency fill from the non-safety-related 100,000 gallon diesel fuel oil storage tank using flexible hose. Because of the large capacity of the day tanks, and the three diverse methods of replenishing the day tanks during EDG operation (100,000 gallon tanks, 40,000 gallon tanks, and safety-related fill connection), the DBNPS EDG fuel oil transfer pumps are of lower safety significance than in a fuel oil transfer system with relatively small day tanks.

The alternative testing proposed by the licensee includes monthly functional pump tests per Technical Specification 4.8.1.1.2, pump flow rate tests (based on a flow of approximately 150 gallons) at each refueling, and, periodic maintenance pump flow rate tests (based on a flow of 1000 gallons or more). The flow rate tests will be performed under preset and repeatable system conditions. The pump flow rates will be analyzed and trended for indications of degradation. A required action range for pump flow rate of less than 6 gpm will be established in lieu of Table 5.2.1-2 and Table 5.2.1-3 for corrective action by the licensee. The alternative test provides an adequate means of monitoring these pumps for degrading conditions.

Based on the above information, the staff finds that compliance with the Code tests for flow rate, differential pressure, and vibration at the reference value for Group A is impractical. The staff further finds the licensee's proposed method to test and trend the pumps to predict degradation provides reasonable assurance of the pump's operational readiness.

3.4.5 Conclusion

The staff finds that compliance with the Code Group A and Comprehensive Pump Tests for flow rate, differential pressure, and vibration at the reference value for the EDG fuel oil transfer pumps P195-1 and P195-2 is impractical and relief is granted pursuant to 10 CFR 50.55a(f)(6)(i) for the third 10-year interval contingent upon the pumps being tested as proposed by the licensee. The proposed testing provides reasonable assurance that the pumps are operationally ready. The granting of relief pursuant to 10 CFR 50.55a(f)(6)(i) is authorized by law and will not endanger life or property or the common defense and security, and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on the facility.

3.5 Pump Relief Request RP-4

3.5.1 Code Requirements

The licensee requested relief for Service Water Pumps P3-1, P3-2, and P3-3 from the Code requirements below. The service water pumps are Group A, centrifugal, vertical line shaft pumps.

> ISTB 5.2.1(b) - For centrifugal and vertical line shaft pumps, the resistance of the system shall be varied until the flow rate equals the reference point. The differential pressure shall then be determined and compared to the reference value.
>
> ISTB 5.2.1(d) - Vibration (displacement or velocity) shall be determined and compared with the reference value.

3.5.2 Licensee's Basis for Relief

> The service water system is in continuous operation during all modes of plant operation whose flow varies with the temperature requirement of the various safety and non-safety related loads. The system was not designed with installed pump test lines. System operating conditions do not allow adjusting system resistance without significant impact on the plants thermal stability. Depending on plant operating and climatic conditions, the cooling requirements range from minimum cooling loads (≈6000 GPM) to 100 percent (≈10000 GPM) with many of the loads automatically placed in operation in response to local temperature requirements. Operating experience has shown that plant conditions due to heat loads requiring cooling by the service water system preclude setting the service water pumps to the exact flow rate for a specific reference value.

ISTB 4.5, "Establishment of Additional Set of Reference Values," provides for multiple sets of reference values. A pump curve is merely a graphical representation of the fixed response of the pump to an infinite number of flow conditions, which are based on some finite number of reference values verified by measurement.

3.5.3 Licensee's Proposed Alternative to Code Testing Requirements

Pump reference curves (developed per the guidelines in NUREG-1482, Section 5.2, "Use of Variable Reference Values for Flow Rate and Differential Pressure During Pump Testing") will be used to compare flow rate with developed pump head at the flow conditions dictated by service water system loads each quarter. Baseline vibration data obtained at various flow points on the pump curve will be used to develop a vibration verse flow curve.

All deviations from the reference curves shall be compared with the ranges of tables ISTB 5.2.1-1 and 5.2.1-2.

3.5.4 Staff Evaluation

The 1995 Edition with the 1996 Addenda of the OM Code requires that pump flow rate, differential pressure, and vibration be evaluated against reference values to monitor pump condition and to allow detection of hydraulic degradation. ISTB 5.2.1(b) requires flow rate and differential pressure tests for Group A pumps. ISTB 5.2.1(d) specifies that vibration (displacement or velocity) shall be determined and compared to the reference value for Group A pumps. The service water pumps P3-1, P3-2, and P3-3 operate under varying flow and differential pressure conditions, depending on the load requirements. It would not be sound to establish a fixed reference point for testing the component cooling pumps because of system constraints that could result in plant transient or trip and damage to equipment.

When it is impractical to test a pump at a reference value of flow and differential pressure, testing in the "as-found" condition and comparing values to an established reference curve may be an acceptable alternative. Pump curves represent a set of infinite reference points of flow rate and differential pressure. Establishing a reference curve for the pump when it is known to be operating acceptably, and basing the acceptance criteria on this curve, can permit evaluation of pump condition and detection of degradation.

The licensee proposes to follow the NRC guidelines specified in NUREG-1482, Section 5.2, to develop pump reference curves to compare flow with developed pump head at the flow conditions dictated by Component Cooling Water System loads each quarter for Group A tests. Baseline vibration data obtained at various flow points on the pump curve will be used to develop a vibration verses flow curve for Group A tests. All deviations from the reference curves shall be compared with the ranges of tables ISTB 5.2.1-1 and 5.2.1-2. This proposed alternative testing will provide reasonable assurance that the service water pumps are operationally ready and therefore is a reasonable alternative to the Code requirements.

3.5.5 Conclusion

The staff concludes that the licensee's proposed alternative to the Code reference value requirements of paragraphs ISTB 5.2.1(b) and ISTB 5.2.1(d) for service water pumps P3-1, P3-

2, and P3-3 is authorized pursuant to 10 CFR 50.55a(a)(3)(i) for the third 10-year interval, based on the alternative providing an acceptable level of quality and safety.

3.6 Pump Relief Request RP-5

3.6.1 Code Requirements

The licensee requested relief for high pressure injection pumps P58-1 & P58-2 from the Code requirements below. The high pressure pumps are ASME Code Class 2, Group A, centrifugal pumps.

ISTB 5.1 – An IST shall be run on each pump as specified in Table ISTB 5.1-1 (IST Frequency: Quarterly for Group A Test, Biennially for Comprehensive Test).

3.6.2 Licensee's Basis for Relief

> The high-pressure injection (HPI) system is equipped with a flow test line that is not designed to withstand a flow rate within 20 percent of the HPI pump design flow rate, as required to fulfill the comprehensive testing requirements of ISTB 4.3(e)(1). In order to achieve the necessary flow rate, the HPI pumps are lined up to discharge into the reactor coolant system with the reactor head removed and with water in the refueling canal. These plant conditions are established only during an outage in which a refueling occurs, and are not typically established during a maintenance outage.
>
> Table ISTB 5.1-1 requires the comprehensive pump test to be performed biennially. Since the plant is on a 24-month fuel cycle, compliance with this requirement is normally achievable. However, if the plant experiences maintenance shutdowns, the added time between refueling outages could jeopardize compliance with this testing requirement.
>
> Removal of the reactor head solely to perform the comprehensive pump test is impractical since it would substantially increase the scope and duration of a maintenance shutdown and result in associated radiation exposure.

3.6.3 Licensee's Proposed Alternative to Code Testing Requirements

> The HPI pumps comprehensive test will be performed each refueling outage. The HPI pumps classification will be changed from Group B to Group A in order to include Table 5.2.1-1 vibration acceptance criteria during the quarterly pump test.

3.6.4 Staff Evaluation

The HPI pumps inject water into the reactor coolant system to mitigate the consequences of a loss-of-coolant accident. These pumps were originally categorized by the licensee as Group B pumps since they are in a standby system that is not operated routinely except for testing. The Code required testing for these HPI pumps is a quarterly Group B pump test and a biennial Comprehensive pump test. The biennial Comprehensive pump test requires that these pumps be tested within 20 percent of the pump design flow rate biennially. The HPI system is equipped with a flow test line that is not designed to withstand a flow rate within 20 percent of the HPI pump design flow rate, as required to fulfill the comprehensive testing requirements of

ISTB 4.3(e)(1). In order to achieve the necessary flow rate, the HPI pumps are lined up to discharge into the reactor coolant system with the reactor head removed and with water in the refueling canal. These plant conditions are established only during an outage in which a refueling occurs, and are not typically established during a maintenance outage. Since the plant is on a 24-month fuel cycle, compliance with this requirement is normally achievable. However, if the plant experiences maintenance shutdowns, the added time between refueling outages could jeopardize compliance with this testing requirement. Removal of the reactor head solely to perform the comprehensive pump test would result in hardship since it would substantially increase the scope and duration of a maintenance shutdown and result in associated radiation exposure.

The licensee proposed to perform the comprehensive test each refueling outage in lieu of biennially. The licensee also proposed to reclassify HPI pumps from Group B to Group A in order to include ISTB 5.2.1(d), 5.2.1(e), and Table 5.2.1-1 vibration test requirements during the quarterly pump tests. The Group A pump tests performed quarterly between refueling outages will provide reasonable assurance that the HPI pumps are operationally ready.

3.6.5 Conclusion

The staff concludes that compliance with the Code required comprehensive pump test frequency of biennially as required in Table 5.1-1 for the HPI pumps P58-1 & P58-2 would result in hardship without compensating increase in the level of quality and safety. On this basis, the licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(ii) for the third 10-year interval.

3.7 Valve Relief Request RV-1

3.7.1 Code Requirements

The licensee requested relief from Appendix 1, I 1.3.7(b) which states that leak tests shall be performed on all ASME Code Class 2 and Class 3 containment vacuum relief valves at each refueling outage or every 2 years, whichever is sooner, unless historical data requires more frequent testing. This request applies to ASME Code Class 2, Category AC, Containment Vacuum Relief Valves CV5080, CV5081, CV5082, CV5083, CV5084, CV5085, CV5086, CV5087, CV5088, and CV5089.

3.7.2 Licensee's Basis for Relief

> These vacuum relief check valves are functionally tested every refueling outage in accordance with Appendix I, I 1.3.7(a) and I 7.3.8(a). This testing ensures that the vacuum relief check valves prevent the containment vessel from exceeding its external design pressure.
>
> In addition to their primary function of protecting the containment from an under-pressure condition, these valves also serve as primary containment isolation valves and are required to be tested for leakage on a periodic basis. 10 CFR Part 50 Appendix J, which sets forth the rules and conditions for containment leakage rate testing, has a section designated Option B-Performance Based Requirements. This section permits leakage rate testing to be performed at intervals of up to 5 years, based

on the valve's performance history. Option B eliminated the prescriptive requirements that were deemed marginal to safety, and allowed a components past performance to be the determining factor for the testing interval.

ASME OM Code-1998, 1999 Addenda, Appendix I, Section I-1380 [formerly I 1.3.7], Test Frequency, Class 2 and Class 3 Primary Containment Vacuum Relief Valves, was modified to accept 10 CFR Part 50 Appendix J for leak testing requirements.

On August 3, 2001, the NRC published in the *Federal Register* (Vol. 66 No. 150) the proposed rule change for 10 CFR 50.55a, RIN 3150-AF61. The proposed revision to 10 CFR 50.55a endorses these revisions to the ASME OM Code, without exception, as it pertains to relief valve leak testing.

3.7.3 Licensee's Proposed Alternative to Code Testing Requirements

The leakage rate testing of the containment vacuum relief check valves will be performed in accordance with the requirements of 10 CFR Part 50 Appendix J, Option B (Performance-Based Requirements).

3.7.4 Staff Evaluation

These valves open as required to limit containment internal vacuum and close for containment isolation. The 1995 Edition and the 1996 Addenda of the OM Code, Appendix I, I 1.3.7(b) requires leak tests to be performed every two years unless historical data indicates a requirement for more frequent testing. In addition, these valves are required by ISTC 4.3.2 to be tested in accordance with 10 CFR 50, Appendix J. 10 CFR Part 50, Appendix J specifies both the frequency and method for testing various types of containment isolation valves

The 1999 Addenda of the OM Code, Appendix I, Section I-1380(b) [formerly I 1.3.7(b)], was revised to state that leak tests be performed on all Class 2 and Class 3 containment vacuum relief valves at a frequency designated by the Owner in accordance with Table ISTC-3500-1. For Category A valves, Table ISTC-3500-1 refers to ISTC-3600 which specifies the leak test requirements of 10 CFR Part 50, Appendix J. This Code revision specifies the 10 CFR Part 50, Appendix J leak test criteria and frequency for both containment isolation valves and containment vacuum relief valves.

Section 50.55a(f)(4)(iv) states that IST of pumps and valves may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in 10 CFR 50.55a(b), subject to NRC approval. Portions of editions or addenda may be used provided that all related requirements of the respective editions and addenda are met. The 1997 Addenda up to and including the 2000 Addenda of the ASME OM Code were incorporated by reference in 10 CFR 50.55a(b) on September 26, 2002 (67 FR 60520), with no modifications or limitations placed on Section I-1380(b) [formerly I 1.3.7(b)] of the 1999 Addenda for leak test criteria and frequency of containment vacuum relief valves.

3.7.5 Conclusion

The NRC staff concludes that the licensee's proposed use of later Code requirements related to leak testing containment vacuum relief valves in accordance with 10 CFR Part 50, Appendix J requirements is approved pursuant to 10 CFR 50.55a(f)(4)(iv) for the third 10-year interval, based on the incorporation by reference of the 1997 Addenda and 1998 Edition up to and including the 2000 Addenda of the ASME OM Code into 10 CFR 50.55a(b).

3.8 Valve Relief Request RV-2

3.8.1 Code Requirements

The licensee requested relief for manual globe valves SW232, SW233, SW234, and SW236 from the exercising test requirements of ISTC 4.2.1 which states that active Category A and B valves shall be tested nominally every 3 months. The service waters valves are ASME Code Class 3, Category B.

3.8.2 Licensee's Basis for Relief

> The affected manual valves are 1" globe valves that are normally closed and not normally operated during plant operation. These valves are only required if the normal non-safety related makeup source becomes unavailable and the seismically qualified component cooling water system has lost inventory needing makeup, during a seismic event.
>
> The predominant degradation and failure mechanisms (motor failures, electrical failures, switch settings, etc.) associated with power operated valves do not exist for manual valves. These valves have been tested every two years since November 1994, and every quarter since December 2000, with no failures or observable degradation.
>
> These valves are located in a non-harsh environment. Testing has demonstrated that a 2-year exercising frequency is adequate to ensure the safety-related function of these valves has not degraded.
>
> The 1999 addenda to 1998 Edition of the ASME OM Code, added ISTC-3540, Manual Valves, to the Code allowing a 5 year frequency for exercising manual valves located in a non-harsh environment.
>
> On August 3, 2001, the NRC published in the Federal Register (Vol. 66, No.150, 40640) the proposed rule change for 10 CFR 50.55a, RIN 3150-AF61. In this proposed rule, the NRC took exception to ISTC-3540 and required a 2-year exercising frequency for manual valves in 10 CFR 50.55a(b)(3)(vi).

3.8.3 Licensee's Proposed Alternative to Code Testing Requirements

> Valves SW232, SW233, SW234 and SW236 will be exercised every 2 years.

3.8.4 Staff Evaluation

These valves must be capable of being manually opened to provide a safety grade backup makeup water source to the CCW surge tank in the event the normal non-safety grade makeup water source is unavailable. The 1995 Edition and the 1996 Addenda of the OM Code requires that active Category A and B valves be exercised to their safety position once every three months.

The licensee proposed that active manual valves be full-stroke exercised at a frequency of 2 years. The proposed testing results in approximately an 85 percent reduction in the testing of the specified manual valves, and therefore a corresponding reduction in the burden of testing these valves, while performing an exercise test at a nominal interval of 2 years.

The ISTC 4.2.1 exercising frequency of every three months was revised in the 1999 Addenda of the OM Code, paragraph ISTC-3540. ISTC-3540 states that “manual valves shall be full-stroke exercised at least once every 5 years, except where adverse conditions may require the valve to be tested more frequently to ensure operational readiness. Any increased testing frequency shall be specified by the owner. The valve shall exhibit the required change of obturator position.”

Section 50.55a(f)(4)(iv) states that IST of pumps and valves may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in 10 CFR 50.55a(b), subject to NRC approval. Portions of editions or addenda may be used provided that all related requirements of the respective editions and addenda are met. The 1997 Addenda up to and including the 2000 Addenda of the ASME OM Code were incorporated by reference in 10 CFR 50.55a(b) on September 26, 2002 (67 FR 60520), but the NRC placed a limitation to require that manual valves be exercised at a frequency of 2 years, not 5 years as stated in the Code. Therefore, the rule change to 10 CFR 50.55a(b)(3)(vi) set the maximum exercise interval for safety-related manual valves at 2 years, provided adverse conditions do not require more frequent testing. Adverse conditions are defined in ISTC 3540 as: “Harsh service environments, lubricant hardening, corrosive or sediment laden process fluid, or degraded valve components are some examples of adverse conditions.”

3.8.5 Conclusion

The NRC staff concludes that the licensee’s proposed use of later Code requirements in ISTC 4.2.1 related to the exercise frequency for manual valves is approved pursuant to 10 CFR 50.55a(f)(4)(iv) for the third 10-year interval based on incorporation by reference of the 1997 Addenda up to and including the 2000 Addenda of the ASME OM Code in 10 CFR 50.55a(b). The licensee’s proposed use also meets the modification required by the NRC in 10 CFR 50.55a(b)(3) and is, thus, acceptable.

4.0 CONCLUSIONS

The staff concludes for relief requests RP-1, RP-2, and RP-4, the licensee’s proposed alternative is authorized pursuant to10 CFR 50.55a(a)(3)(i) for the third 10-year interval based on the alternative providing an acceptable level of quality and safety. For relief request RP-5, the licensee’s proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(ii) for the third 10-year interval, based on compliance with the specified requirement would result in hardship without compensating increase in the level of quality and safety. For relief request RP-3, relief is granted pursuant to 10 CFR 50.55a(f)(6)(i) for the third 10-year interval based on the staff finding that compliance with the Code test requirements are impractical. For relief requests RG-1, RV-1, and RV-2, the staff approves the use of portions of later Code Editions and Addenda pursuant to 10 CFR 50.55a(f)(4)(iv) for the third 10-year interval based on incorporation by reference of the 1998 Edition up to and including the 2000 Addenda of the ASME OM Code.

Principal Contributor: J. Strnisha, NRR

Date: March 28, 2003

Davis-Besse Nuclear Power Station, Unit 1

cc:

Mary E. O'Reilly
FirstEnergy Corporation
76 South Main St.
Akron, OH 44308

Manager-Regulatory Affairs
First Energy Nuclear Operating Company
Davis-Besse Nuclear Power Station
Oak Harbor, OH 43449-9760

Director
Ohio Department of Commerce
Division of Industrial Compliance
Bureau of Operations & Maintenance
6606 Tussing Road
P.O. Box 4009
Reynoldsburg, OH 43068-9009

Regional Administrator
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60523-4351

Michael A. Schoppman
Framatome ANP
1911 N. Ft. Myer Drive
Rosslyn, VA 22209

Resident Inspector
U.S. Nuclear Regulatory Commission
5503 North State Route 2
Oak Harbor, OH 43449-9760

Plant Manager, Randel J. Fast
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
5501 North State - Route 2
Oak Harbor, OH 43449-9760

Dennis Clum
Radiological Assistance Section Supervisor
Bureau of Radiation Protection
Ohio Department of Health
P.O. Box 118
Columbus, OH 43266-0118

Carol O'Claire, Chief, Radiological Branch
Ohio Emergency Management Agency
2855 West Dublin Granville Road
Columbus, OH 43235-2206

Zack A. Clayton
DERR
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43266-0149

State of Ohio
Public Utilities Commission
180 East Broad Street
Columbus, OH 43266-0573

Attorney General
30 East Broad Street
Columbus, OH 43216

President, Board of County
Commissioners of Ottawa County
Port Clinton, OH 43252

President, Board of County
Commissioners of Lucas County
One Government Center, Suite 800
Toledo, Ohio 43604-6506

David Lochbaum, Nuclear Safety Engineer
Union of Concerned Scientists
1707 H Street NW, Suite 600
Washington, DC 20006

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML030790183.wpd

ORIGINATOR NAME: B. Moroney

SECRETARY NAME: Y. Edmonds

SUBJECT: Davis_Besse Relief Requests for Third 10-year IST Program

NAME	DATE
1. B. Moroney	3/ /03

CONSIDERED OTHERS IMPACTED BY STAFF ACTION (2.206 PETITIONS, OPEN ALLEGATIONS, CONGRESSIONAL OR PUBLIC INQUIRIES, SIGNIFICANT ENFORCEMENT ACTIONS, INSPECTION ACTIVITIES, COMMISSION POLICIES, STAFF POSITIONS, OWNERS GROUP ACTIVITIES): YES____ NO____ INITIAL: PM____ SC____
COMMUNICATED W/IDENTIFIED STAKEHOLDER(S): YES____ NO____ INITIAL: PM____ SC____
CONSIDERED APPROPRIATENESS OF ASSESSMENT OF EXCEPTIONALLY GOOD OR WEAK LICENSEE PERFORMANCE:
INITIAL: PM____ PD____

2. T. Harris	3/ /03
3. J. Hopkins	3/ /03
4. OGC	3/ /03
5. A. Mendiola	3/ /03
6.	3/ /03
7.	3/ /03
8.	3/ /03
9.	3/ /03
SECRETARY FOR DISPATCHING	3/ /03

PLEASE DO NOT REMOVE THIS SHEET FROM PACKAGE