June 28, 2006

Mr. Mano K. Nazar
Senior Vice President and
Chief Nuclear Officer
Indiana Michigan Power Company
Nuclear Generation Group
One Cook Place
Bridgman, MI 49106

SUBJECT: D. C. COOK NUCLEAR PLANT, UNITS 1 AND 2 - RELIEF REQUESTS FOR THE FOURTH 10-YEAR PUMP AND VALVE INSERVICE TESTING PROGRAM INTERVAL (TAC NOS. MC9455 AND MC9456)

Dear Mr. Nazar:

By letter dated December 28, 2005, Indiana Michigan Power Company (I&M) submitted relief requests for the fourth 10-year inservice testing program interval at D.C. Cook Nuclear Plant, Units 1 and 2, from requirements of the American Society of Mechanical Engineers Code (ASME Code). In a letter dated June 2, 2006, I&M withdrew Relief Request REL-001 and revised Relief Request REL-003.

The Nuclear Regulatory Commission staff has completed its review of relief requests REL-003, REL-PP1, REL-PP2, REL-PP3 and REL-PP4. Relief requests REL-PP2, REL-003, REL-PP3 and REL-PP4 are authorized pursuant to 10 CFR 50.55a(a)(3)(i) on the basis that the proposed alternatives provide an acceptable level of quality and safety. Relief request REL-PP1 is authorized pursuant to 10 CFR 50.55a(a)(3)(ii) based on the determination that compliance with the specified Code requirements results in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Relief Request REL-002 remains to be evaluated, pending further discussion with I&M. If you have any questions, please call the Project Manager, Mr. Peter Tam at 301-415-1451.

Sincerely,

/RA/

L. Raghavan, Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-315 and 50-316

Enclosure:
As stated

cc w/encl: See next page

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

INSERVICE TESTING PROGRAM, FOURTH 10-YEAR INTERVAL

DONALD C. COOK NUCLEAR PLANT, UNITS 1 AND 2 (DCCNP-1 AND DCCNP-2)

INDIANA MICHIGAN POWER COMPANY

DOCKET NOS. 50-315 AND 50-316

1.0 INTRODUCTION

By letter dated December 28, 2005 (Accession No. ML060060110), Indiana Michigan Power Company (the licensee) submitted relief requests for the fourth 10-year inservice testing (IST) program interval at DCCNP-1 and DCCNP-2. The licensee requested relief from certain inservice test requirements of the 2001 Edition through 2003 Addenda of the American Society of Mechanical Engineers (ASME) Code for Operation and Maintenance of Nuclear Power Plants (OM Code). The fourth 10-year IST interval for the units is scheduled to commence on July 1, 2006. In response to the Nuclear Regulatory Commission (NRC) staff's February 27, 2006, request for additional information (Accession No. ML060590089), the licensee submitted additional information to the NRC in a letter dated June 2, 2006 (Accession No. ML061640312). In this letter, the licensee withdrew relief request REL-001 and revised Relief Request REL-PP3.

The NRC staff's evaluation of Relief Requests REL-003, REL-PP1, REL-PP2, REL-PP3, and REL-PP4 are contained herein. The remaining Relief Request (REL-002) associated with the licensee's fourth 10-year IST program interval will be addressed in a future safety evaluation.

2.0 REGULATORY EVALUATION

Title 10 of the *Code of Federal Regulations*, 10 CFR 50.55a, requires that IST of certain ASME Code Class 1, 2, and 3 pumps and valves be performed at 120-month (10-year) IST program intervals in accordance with the specified ASME Code incorporated by reference in the regulations, 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 each 120-month IST program interval. In accordance with 50.55a(f)(4)(iv), 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. 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 to grant relief from ASME Code requirements upon making necessary findings. NRC guidance contained in Generic Letter (GL) 89-04, "Guidance on Developing Acceptable Inservice Testing Programs," provides alternatives to Code requirements which are acceptable. Further guidance is given in GL 89-04, Supplement 1, and NUREG-1482, Revision 1, "Guidance for Inservice Testing at Nuclear Power Plants."

The licensee stated that the DCCNP-1 and DCCNP-2 fourth 10-year IST interval will commence on July 1, 2006. The licensee's program was developed in accordance with the 2001 Edition through 2003 Addenda of the ASME OM Code.

The NRC staff's review of the licensee's relief requests follows.

3.0 TECHNICAL EVALUATION

3.1 Valve Relief Request REL-003

3.1.1 Code Requirements

ISTA-3130(b) states: "Code Cases shall be applicable to the edition and addenda specified in the test plan." The edition and addenda specified in the test plan for the fourth 10-year interval for the DCCNP-1 and DCCNP-2 is the 2001 Edition through the OMb-2003 Addenda.

3.1.2 Licensee's Basis for Requesting Relief

The licensee states:

> Code Case OMN-1, "Alternate Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light-Water Reactor Power Plants," contains no applicability statement. In the latest edition/addenda incorporated by reference in 10 CFR 50.55a(b)(3) (i.e., the 2001 Edition with Addenda through OMb-2003), the expiration date given for OMN-1 is March 30, 2004. Code Case OMN-1 is included in the 2004 Edition of the OM Code with a new expiration date of March 30, 2007; however, the 2004 Edition of the OM code has not been incorporated by reference in 10 CFR 50.55a(b)(3). Paragraph 10 CFR 50.55a(b)(6) references Regulatory Guide 1.192, "Operations and Maintenance Code Case Acceptability, ASME OM Code," which conditionally approves the use of Code Case OMN-1 "in lieu of the provisions for stroke-time testing in Subsection ISTC of the 1995 Edition up to and including the 2000 Addenda of the ASME OM Code." Relief is requested pursuant to 10 CFR 50.55a(a)(3)(i) based on the proposed alternative providing an acceptable level of quality and safety.

3.1.3 Licensee's Proposed Alternative Testing

The licensee states:

> Donald C. Cook Nuclear Plant will apply the requirements of OMN-1, "Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated

Valve Assemblies in Light-Water Reactor Power Plants," including the conditions specified in Table 2 of USNRC Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code," in lieu of the rules for preservice and inservice testing in ASME OM Code, Subsection ISTC, except for ISTC-3600 of the 2001 Edition up to and including the OMb-2003 Addenda of the ASME OM Code.

3.1.4 Evaluation

The licensee requested relief from ASME OM Code paragraph ISTA-3130(b) that requires Code Cases be applicable to the edition specified in the test plan. Specifically, the licensee's IST program is based upon the 2001 Edition through 2003 Addenda of the OM Code, and the Code Case OMN-1 contained in this edition states that it shall expire on March 30, 2004, unless previously annulled or reaffirmed.

Code Case OMN-1 was reaffirmed in its entirety and without revision in the 2004 Edition of the OM Code with a new expiration date of March 30, 2007. Application of ASME OM Code cases is addressed in 10 CFR 50.55a(b)(6) through reference to Regulatory Guide 1.192, which lists acceptable and conditionally acceptable Code Cases for implementation in IST programs. Regulatory Guide 1.192, Table 2, conditionally approves the use of Code Case OMN-1 in lieu of provisions for stroke-time testing of motor-operated valves in subsection ISTC of the ASME OM Code and references the 1995 Edition up to and including the 2000 Addenda of the Code. This reference does not intend to preclude the use of Code Case OMN-1 with later editions and addenda of the Code. Code Case OMN-1 provides an acceptable level of quality and safety for testing of motor-operated valves and is an acceptable alternative for use in the licensee's IST program.

The licensee proposed to apply Code Case OMN-1 subject to the conditions contained in Table 2 of Regulatory Guide 1.192. Through inclusion in Regulatory Guide 1.192, the NRC staff has recognized OMN-1 as an acceptable alternative to stroke-time testing for assessing the operational readiness of certain motor-operated valves. Application of Code Case OMN-1, with the conditions specified in Regulatory Guide 1.192, is also consistent with guidance contained in NUREG-1482, Revision 1. The NRC staff finds that the application of Code Case OMN-1 provides an acceptable level of quality and safety for the testing of motor-operated valves during the licensee's fourth 10-year IST interval.

3.1.5 Conclusion

Based on the above evaluation, the NRC staff concludes that the licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(i) on the basis that the proposed alternative provides an acceptable level of quality and safety for testing of motor-operated valves. The licensee's alternative provides reasonable assurance of the operational readiness of motor-operated valves in the IST program. This alternative is authorized for the fourth 10-year IST interval.

3.2 Pump Relief Request REL-PP1

3.2.1 Code Requirements

ASME OM Code ISTB-3540(a) requires that on centrifugal pumps, except vertical line shaft pumps, measurements shall be taken in a plane approximately perpendicular to the rotating shaft in two approximately orthogonal directions on each accessible pump-bearing housing. Measurements shall also be taken in the axial direction on each accessible pump thrust bearing housing.

3.2.2 Licensee's Basis for Requesting Relief

The licensee states that by design, the only accessible point for taking axial vibration measurements is the outboard motor bearing for the following pumps:

1-PP-46-1	Boric Acid Storage Tanks Transfer Pump #1
1-PP-46-2	Boric Acid Storage Tanks Transfer Pump #2
2-PP-46-3	Boric Acid Storage Tanks Transfer Pump #3
2-PP-46-4	Boric Acid Storage Tanks Transfer Pump #4

The licensee further states:

> It is unsafe to monitor the axial direction vibration on the inboard pump bearing due to the proximity of the rotating shaft, and there is no position for monitoring the outboard pump bearing housing because of the presence of heat tracing. Modifications to the coupling shield to allow access were attempted. However, the modified shield did not provide sufficient clearance to allow individuals performing the measurement to safely place their hands near the rotating shaft. Relief is requested pursuant to 10 CFR 50.55a(3)(i) based on the proposed alternative providing an acceptable level of quality and safety.

3.2.3 Licensee's Proposed Alternative Testing

The licensee states:

> Axial vibration will be measured at the outboard motor bearing. The vibration limits contained in ASME OM Code Table ISTB-5100-1, will be applied to the vibration levels monitored at the outboard motor bearing during both the Group A test and Comprehensive test.

3.2.4 Evaluation

The boric acid transfer pumps have a safety requirement to pump a boric acid solution from the boric acid storage tank to the suction of the charging pumps. The Code requires the vibration measurements for centrifugal pumps be taken in two orthogonal directions on each accessible pump bearing housing. The licensee states that access to the thrust bearing housing is impeded by a coupling guard and thermal insulation. Attempts to modify the pump to allow axial vibration measurement of the thrust bearing have not been successful. Additionally, the licensee states that modifications to allow access for vibration measurement would create a

safety hazard to test personnel due to the proximity of rotating equipment. This condition is considered to be a hardship with regard to performing the code-required measurement.

The licensee proposes to take axial vibration measurement on the outboard pump motor bearing and apply the vibration ranges given in Table ISTB-5100-1 of the ASME OM Code. Although the axial vibration measurement would now include noise from the motor, that contribution would be minimal considering that the pump is directly coupled to the motor and all significant axial contributors to vibration should originate from the pump. Therefore, the proposed location to take axial vibration measurements, coupled with continued use of the vibration ranges given in Table ISTB-5100-1 of the ASME OM Code, provide an acceptable level of quality and safety.

3.2.5 Conclusion

Based on the above evaluation, the NRC staff concludes that the licensee's proposed alternative is authorized pursuant to 10 CFR 50.55a(a)(3)(ii) on the basis that compliance with the specified requirement results in hardship or unusual difficulty without a compensating increase in the level of quality and safety. The licensee's proposed alternative provides reasonable assurance of the operational readiness of the boric acid pumps. This alternative is authorized for the fourth 10-year IST interval.

3.3 Pump Relief Request REL-PP2

3.3.1 Code Requirements

ISTB-3510(a) requires that instrument accuracy shall be within the limits of Table ISTB-3500-1.

Table ISTB-3500-1 states that the required accuracy for vibration instruments during pump tests is +/- 5 percent.

ISTB-3510(e) requires that the frequency response range of the vibration measuring transducers and their readout system shall be from one-third minimum pump shaft rotational speed to at least 1000 Hertz (Hz).

3.3.2 Licensee's Basis for Requesting Relief

This request for relief applies to the following pumps:

1-PP-7E	East Essential Service Water (ESW) Pump
1-PP-7W	West Essential Service Water (ESW) Pump
2-PP-7E	East Essential Service Water (ESW) Pump
2-PP-7W	West Essential Service Water (ESW) Pump

The licensee states:

> The Code requires vibration equipment to be calibrated at +/- 5% across the frequency range, which includes the minimum frequency response of 1/3 pump shaft speed. For the ESW pumps this is 288 rpm or 4.8 Hz. The vibration meters used at DC Cook can only be calibrated at +/- 5% down to and including 6 Hz. Below 6 Hz the accuracy is >5%, however the calibration lab strives to

maintain accuracy below 6 Hz as low as reasonably achievable for the required frequency response range.

The average velocity for an IST test is a single, average energy reading. The effect of this change in accuracy, when averaged into the overall reading, is quite small. It would only be a concern if a single frequency in the spectrum were being evaluated between 4-6 Hz. Furthermore, detection of pump degradation via vibration data is based on changes in vibration measurement from one test to another. Thus, if the calibration accuracy is consistent, then the change in vibration measurement from one test to another is appropriate information for trending purposes.

Existing vibration equipment will provide adequate trending information and may be used for ESW pump vibration data collection.

3.3.3 Licensee's Proposed Alternative Testing

The licensee states:

Vibration data for the ESW pumps will be taken with equipment calibrated from 6 Hz to at least 1000 Hz at the Code specified accuracy of +/- 5%. The calibration accuracy between 4.8 Hz (1/3 pump shaft speed) and 6 Hz will be maintained as low as reasonably achievable (to the required 5%) for this small 1.2 Hz portion of the required frequency response range.

3.3.4 Evaluation

The Code requires that the vibration instrumentation frequency response range used in pump testing be from one-third pump shaft rotational speed to 1000 Hz. One-third pump rotational speeds are 288 rpm (4.8 Hz) for the essential service water (ESW) pumps. The licensee has instrumentation calibrated to within the accuracy required by the Code in a range of 6 to 1000 Hz. This instrumentation does not satisfy the Code requirements for accuracy and lower limit of frequency response range for ESW pumps.

The required frequency response range of instruments used for measuring vibration of the ESW pumps is 4.8 to 1000Hz. The instruments currently available at the plant can only be calibrated to within the Code-required accuracy of +/- 5 percent in a frequency response range of 6 to 1000 Hz. Although vibration data will be taken down to the bounding lower frequency of 4.8 Hz, the accuracy of vibration measuring equipment cannot be assured to be within the +/- 5 percent accuracy band specified by the Code over the 1.2 Hz interval below 6 Hz. In-calibration readings as low as 6 Hz cover the range of speeds down to approximately 0.4 times pump shaft rotational speed. Most pump performance problems are detected at vibration frequencies at one-half pump rotational speed or above. Vibrations at frequencies below one-half pump rotational speed are only able to detect a limited set of conditions related to journal bearing degradation (oil film whirl or whip, bearings loose in housing). Trended low frequency vibration measurements outside of the Code-required calibration accuracy down to one-third pump rotational speed will still provide a means to detect these conditions. Ensuring calibration within +/- 5 percent for the lowest 1.2 Hz frequency band does not add significantly to the detection capability for bearing problems. Furthermore, potential inaccuracies in the narrow 1.2 Hz band below 6 Hz will not produce a noticeable effect on average vibration readings recorded

for IST since the contribution from this range is small when averaged into the reading over the entire energy spectrum.

The licensee proposed to use the instruments currently available at the plant. The licensee will calibrate the instruments to within Code requirements down to 6 Hz and will maintain accuracy as close as reasonably achievable to Code requirements down to 4.8 Hz. The proposed alternative provides an adequate level of quality and safety because the deviation from the Code requirement is small (only related to calibration accuracy over a 1.2 Hz range) and trending of low frequency results outside of the +/- 5 percent accuracy range required by Table ISTB-3500-1 will still provide adequate pump monitoring. The NRC staff determines that the proposed alternative testing will provide a reasonable assurance of the operational readiness of the ESW pumps.

3.3.5 Conclusion

Based on the above evaluation, the NRC staff concludes that the licensee's proposed alternative to the Code vibration instrument frequency response range and accuracy requirements for the ESW pumps is authorized pursuant to 10 CFR 50.55a(a)(3)(i) on the basis that the alternative provides an adequate level of quality and safety. The licensee's proposed alternative provides reasonable assurance of the operational readiness of the ESW pumps. This alternative is authorized for the fourth 10-year IST interval.

3.4 Pump Relief Request PP-3

3.4.1 Code Requirements

ISTB-3510(b)(1) requires that the full-scale range of each analog instrument shall not be greater than three times the reference value.

3.4.2 Licensee's Basis for Requesting Relief

This request for relief applies to the following pumps:

1-PP-35E	East Residual Heat Removal (RHR) Pump
1-PP-35W	West Residual Heat Removal (RHR) Pump
2-PP-35E	East Residual Heat Removal (RHR) Pump
2-PP-35W	West Residual Heat Removal (RHR) Pump

The licensee states:

> The range of the analog discharge pressure test gauges used during the performance of RHR pump surveillance testing during unit shutdowns does not meet the range limitation imposed by ISTB-3510(b)(1) in that the instrument range exceeds the respective reference value by greater than a factor of three. The maximum acceptable gauge range in accordance with ISTB-3510(b)(1) would be 0 - 500 pounds per square inch gauge (psig) (lowest reference value is 174 psig). The full scale accuracy for the Code allowed gauge range is +/- 2% or 10.0 psig for the Group A test (+/- 0.5% or 2.5 psig for the Comprehensive test). The test gauge used has a range of 0 - 600 psig and is calibrated to a full scale accuracy of 0.1% or 0.6 psig.

The combination of the range and accuracy of the 0 - 600 psig test gauge yields a reading more accurate than the readings achieved from an instrument that meets the requirements as stated in ISTB-3510(b)(1) for the Group A test and the Comprehensive test.

The range of the installed analog flow instrument used during the performance of RHR pump surveillance testing does not meet the range limitation imposed by ISTB-3510(b)(1) in that the instrument range exceeds the respective reference value by greater than a factor of three during testing on minimum flow. The installed Unit 1 gauge has a range of 0 - 1500 gallons per minute (gpm) and is calibrated to a full scale accuracy of 1.0% or 15 gpm. The installed Unit 2 gauge has a range of 0 - 1700 gpm and is calibrated to a full scale accuracy of 1.0% or 17 gpm. The full scale accuracy of the Code allowed gauge is +/- 2% or 22.5 gpm when evaluated against the RHR pump minimum operating point of 375 gpm with an allowed maximum gauge range of 1125 gpm.

The combination of the range and accuracy of the installed flow gauges yields a reading more accurate than the readings achieved from the instruments that meet the requirements as stated in ISTB-3510(b)(1) for the Group A test.

3.4.3 Licensee's Proposed Alternative Testing

The licensee states that resident heat remover (RHR) pump discharge pressures will be measured via available test gauges meeting the alternative requirements, as identified in the Basis for Requesting Relief, with a range of 0 - 600 psig and calibrated to a full-scale accuracy of +/- 0.1 percent or +/- 0.6 psig for Group A and Comprehensive pump tests.

The licensee also states that RHR pump flow will be measured via installed 0 - 1500 gpm (DCCNP-1) and 0 - 1700 gpm (DCCNP-2) flow instruments calibrated to a full-scale accuracy of +/- 1.0 percent for Group A pump tests.

3.4.4 Evaluation

The Code requires that analog instruments used in Subsection ISTB pump testing have a full-scale range that is not greater than three times the reference value for the measured parameter. The available test gauges for RHR pump discharge pressure at the plant have a full-scale range of 0 - 600 psig, which is greater than three times the discharge pressure reference value of 174 psig. Additionally, installed flow instruments for the RHR pumps have ranges of 0 - 1500 gpm (Unit 1) and 0 - 1700 gpm (Unit 2), which are greater than three times the pump flow reference value of 325 gpm. As such, the available test instrumentation at the plant does not meet the requirement stated in ISTB-3510(b)(1).

NUREG-1482, Revision 1, "Guidelines for Inservice Testing at Nuclear Power Plants," Section 5.5.1 states that the NRC staff may grant relief from Code requirements regarding analog instrument range when the combination of the range and accuracy yields a result that is at least equivalent to that achieved using instruments that meet the Code requirements. The licensee proposes to use 0 - 600 psig test gauges with an accuracy of +/- 0.1 percent for measurement of RHR pump discharge pressure during Group A and Comprehensive pump tests. The combination of range and accuracy for this gauge is +/- 0.6 psig. A test gauge meeting Code requirements for a reference value of 174 psig would have a nominal range of 0 - 500 psig and

required accuracies of +/- 2 percent and +/- 0.5 percent for the Group A and Comprehensive tests, respectively. The combination of range and accuracies for this gauge would be +/- 10 psig for the Group A test and +/- 2.5 psig for the Comprehensive test. Therefore, the alternative proposed by the licensee yields readings that exceed the overall accuracy associated with instruments meeting Code requirements.

The licensee proposes to use installed flow instruments with full-scale ranges of 0 - 1500 gpm (DCCNP-1) and 0 - 1700 gpm (DCCNP-2) and accuracies of +/- 1.0 percent for measurement of RHR pump flow during Group A pump testing. The combination of range and accuracy for these instruments are +/- 15 gpm and +/- 17 gpm for DCCNP-1 and DCCNP-2, respectively. A flow instrument meeting Code requirements for a reference flow value of 375 gpm would have a maximum full-scale range of 0 - 1125 gpm and an accuracy of +/- 2 percent for Group A pump testing. The combination of range and accuracy for this instrument would be +/- 22.5 gpm. Therefore, the alternative proposed by the licensee yields readings that exceed the overall accuracy associated with an instrument meeting Code requirements.

The licensee's alternatives for measuring RHR discharge pressure during Group A and Comprehensive tests and RHR pump flow during Group A tests provide an acceptable level of quality and safety since the alternatives will achieve readings with overall higher accuracies than instruments that meet minimum Code requirements.

3.4.5 Conclusion

Based on the above evaluation, the NRC staff concludes that the licensee's proposed alternatives to requirements of the ASME OM Code regarding the use of analog instrument ranges in measuring pump test parameters are authorized pursuant to 10 CFR 50.55a(a)(3)(i) on the basis that the alternatives provide an acceptable level of quality and safety. These alternatives are authorized for the fourth 10-year IST interval.

3.5 Pump Relief Request REL-PP4

ISTB-3510(b)(2) requires that digital instruments shall be selected such that the reference value does not exceed 70 percent of the calibrated range of the instrument.

ISTA-3130 specifies that Code Cases shall be applicable to the edition and addenda specified in the test plan.

3.5.1 Licensee's Basis for Requsting Relief

The licensee states:

> Code Case OMN-6, "Alternate Rules for Digital Instruments", is unconditionally approved for use by Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability", ASME OM Code, dated June 2003. This Code Case allows the selection of digital instruments such that the reference value does not exceed 90% of the calibrated range of the instrument in lieu of the 70% required by the Code. The applicability of this Code Case is to the ASME OM Code-1990 Edition through ASME OMb-1997 Addenda. The Donald C. Cook Nuclear Plant is updating to the latest Edition and Addenda of the OM Code approved for use by incorporation in 10 CFR 50.55a(b). ASME OM Code-2001 Edition with

Addenda through OMb-2003 will be utilized during the Fourth 10 Year IST Interval. Pursuant to the guidelines provided in NUREG 1482, Revision 1, Section 2.1.1, Donald C. Cook Nuclear Plant is requesting permission to use Code Case OMN-6 during the Fourth 10-Year IST Interval. This Relief is requested pursuant to 10 CFR 50.55a(a)(3)(i) based on the proposed alternative providing an acceptable level of quality and safety.

3.5.2 Licensee's Proposed Alternative Testing

The licensee proposes that digital instruments shall be selected such that the reference value does not exceed 90 percent of the calibrated range of the instrument.

3.5.3 Evaluation

Code Case OMN-6, "Alternate Rules for Digital Instruments," allows the selection of digital instruments for use in IST such that the reference value does not exceed 90 percent of the calibrated range of the instrument. This Code Case is listed in Table 1 of RG 1.192 as acceptable to the NRC. Although the edition and addenda of the OM Code forming the basis for the licensee's IST program are not listed in the applicability statement for OMN-6, application of Code Case OMN-6 in the licensee's IST program provides an adequate level of quality and safety. Code Case OMN-6 was reaffirmed by the ASME OM Code Committee through
March 30, 2007.

3.5.4 Conclusion

Based on the above evaluation, the NRC staff concludes that the licensee's proposed alternative to requirements of the ASME OM Code regarding the use of digital instruments in measuring pump test parameters is authorized pursuant to 10 CFR 50.55a(a)(3)(i) on the basis that the alternative provides an acceptable level of quality and safety. This alternative is authorized for the fourth 10-year IST interval.

4.0 CONCLUSION

Based on the evaluation above, the NRC staff concludes that the licensee's proposed alternatives in relief requests REL-PP2, REL-003, REL-PP3, and REL-PP4 are authorized pursuant to 10 CFR 50.55a(a)(3)(i) on the basis that the proposed alternatives provide an acceptable level of quality and safety. These alternatives are authorized for the fourth 10-Year IST program interval at DCCNP-1 and DCCNP-2.

In addition, based on the evaluation above, the NRC staff concludes that the licensee's proposed alternatives in relief request REL-PP1 is authorized pursuant to
10 CFR 50.55a(a)(3)(ii) based on the determination that compliance with the specified Code requirements results in hardship or unusual difficulty without a compensating increase in the level of quality and safety. These alternatives are authorized for the fourth 10-Year IST program interval at DCCNP-1 and DCCNP-2.

Principal Contributor: J. McHale

Date: June 28, 2006

cc:

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