

August 20, 2013

MEMORANDUM TO: John B. Giessner, Acting Deputy Director
Division of Reactor Safety
Region III

FROM: Sher Bahadur, Deputy Director */RA/*
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: FINAL RESPONSE TO TASK INTERFACE AGREEMENT 2012-03,
REGARDING PLANT DESIGN AND LICENSING BASIS ON DIESEL
FUEL OIL SUPPLY OF THE EMERGENCY DIESEL GENERATORS
AT MONTICELLO NUCLEAR GENERATING PLANT

By letter dated February 15, 2012 (Agencywide Documents Access and Management System Accession No. ML12046A828), the U.S. Nuclear Regulatory Commission, Region III Office requested technical assistance from the Office of Nuclear Reactor Regulation (NRR) to determine if the diesel fuel oil supply system design at Monticello Nuclear Generating Plant (Monticello) is consistent with current and historical licensing and design basis documents, and/or applicable design requirements. Region III requested NRR's technical assistance to address the above issue by providing answers to the questions noted in Section 1.0 of the enclosed evaluation.

The NRR staff position is that the diesel fuel oil supply system design at Monticello is not consistent with current and historical licensing and design basis documents, and/or applicable design requirements. This position is documented in the enclosed evaluation.

Enclosure:
As stated

CONTACT: Holly D. Cruz, DPR/PLPB
(301) 415-1053

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TASK INTERFACE AGREEMENT 2012-03

PLANT DESIGN AND LICENSING BASIS ON DIESEL FUEL OIL SUPPLY OF THE EMERGENCY DIESEL GENERATORS AT MONTICELLO NUCLEAR GENERATING PLANT

1.0 INTRODUCTION

By letter dated February 15, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12046A828), the U.S. Nuclear Regulatory Commission (NRC), Region III Office (RIII) requested technical assistance from the Office of Nuclear Reactor Regulation (NRR) to determine if the diesel fuel oil supply system design at Monticello Nuclear Generating Plant (Monticello) is consistent with current and historical licensing and design basis documents, and/or applicable design requirements. RIII requested NRR's technical assistance to address the above issue by providing answers to the following questions:

1. Is the intent of current and historical licensing and design basis information to provide a redundant and independent diesel fuel oil supply system from the fuel oil storage tank to the individual emergency diesel generator (EDG) day tanks (i.e., two safety-related pumps that are physically separated and provided with independent piping and safety-related power source)?
2. Did the licensee change its licensing basis, with NRR approval, with respect to single failure of the diesel fuel oil supply system (i.e., from fuel oil storage tank to individual EDG day tanks)?
 - 2.1 If no, is it acceptable for the non-safety-related fuel oil service pump, which requires manual operation for it to be powered by EDG-11 and/or the portable gasoline pump to be credited to meet this requirement?
 - 2.2 If no, is manual action to isolate a passive failure of the fuel oil discharge piping acceptable such that one of the fuel oil pumps will still be able to supply fuel oil to the non-affected EDG's day tank?
 - 2.3 If yes, please indicate where such approval was granted. This approval appears to be in conflict with the licensee's Improved Technical Specification (ITS) Basis 3.8.1, which states that operability of the onsite alternating current (AC) power sources is based upon a worst case single failure (loss of transfer pump or EDG-12 requires reliance of non-safety equipment to meet the EDG mission time) and the NRC's acceptance of the onsite AC sources documented in the safety evaluation report (SER) was determined to be acceptable since no single failure should prevent power from being supplied to the engineering safety features.

RIII staff is concerned that the current fuel oil supply system design is inconsistent with licensing basis documents in regards to single failure as well as Monticello's ITS 3.8.1,

ENCLOSURE

“AC Sources – Operating.” The background and references cited throughout this evaluation provide the historical context of this issue at Monticello along with the applicable licensing documents.

2.0 BACKGROUND

Monticello has an onsite standby diesel generator system that consists of two EDGs, each supported by a dedicated day tank and base tank that maintain sufficient volume to support an 8-hour operation of the associated EDG at full load. Both day tanks are supplied by a common storage tank that maintains sufficient volume to support a 7-day mission time of one EDG operating at full load. The diesel fuel oil is transferred from the common storage tank to the day tanks by the diesel fuel oil supply system, which consists of two pumps: the fuel oil transfer pump and the fuel oil service pump. The safety-related fuel oil transfer pump has a capacity of 25 gallons-per-minute (gpm) and is supplied essential power from the output of EDG-12. The fuel oil service pump, which is nonsafety-related, has a capacity of 10 gpm and is supplied non-essential power from a motor control center that is deenergized on an essential bus transfer load shed signal.

The fuel oil service pump recirculates fuel oil continuously in normal standby conditions, while the fuel oil transfer pump is on standby in the event of loss-of-offsite power (LOOP). The day tank design provides for an overflow pipe that returns any fuel oil not needed to the common storage tank to ensure that the day tanks remain full at all times. The recirculation (overflow) lines are provided with flow switches that would alert the operators in the control room of a “no flow” condition, indicating that the fuel oil transfer system was not keeping the day tanks full. The licensee also has a portable gasoline-powered pump available at Monticello, which can be aligned up to transfer fuel from the common storage tank to the day tanks while both EDGs are operating at full load in the event that neither fuel oil pumps are available. The portable gasoline powered pump is also credited for Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix R, and is available to use as an alternate fuel oil pumping method and can be functional within 8 hours.

On December 4, 2009, RIII inspectors completed a baseline Component Design Basis Inspection (CDBI) at Monticello (ADAMS Accession No. ML100060183). The RIII inspectors questioned whether the diesel fuel oil supply system was designed against a single failure and whether the system trains should be independent or redundant. The inspectors concern of the diesel fuel oil supply system arose from the configuration of the discharge piping for the fuel oil pumps, which can allow each pump the ability to supply both EDGs through cross-connection. The inspectors speculated that a single failure of the fuel oil transfer pump (i.e., the pump fails to start or failure of EDG-12) would result in the loss of both onsite AC electrical power sources, after depletion of diesel fuel stored in the day tank (which would be approximately 8 hours). The inspectors also speculated that a passive failure in the cross-connected fuel oil discharge pipe could result in a loss of fuel oil supply from the common storage tank to both EDGs due to a lack of a redundant/independent diesel fuel oil line to the fuel oil transfer and service pumps. RIII issued the CDBI inspection report, dated January 6, 2010, which documented the inspector’s concern as an unresolved item (URI 05000263/2009007-05 (DRS)).

Regulatory Analysis

Appendix E of Monticello Updated Safety Analysis Report provides a comparative evaluation of the plant design with the proposed 1970 Atomic Energy Commission (AEC), "General Design Criteria" (GDC). Section E.1 states that based on its current understanding of the intent of the 1970 proposed-criteria, the licensee believes that the Monticello, Unit 1, is in conformance with the intent of such proposed criteria.

AEC GDC 39, "Emergency Power for Engineered Safety Features (ESF)," states that alternate power systems shall be provided and designed with adequate independency, redundancy, capacity, and testability to permit the functioning required of the ESF. As a minimum, the onsite power system and the offsite power system shall each, independently, provide this capacity assuming a failure of a single active component in each power system. At Monticello, reliability of electric power supply is insured through two independent connections to the system grid, and a redundant source of emergency power from two diesel generators installed in the facility. Power to the ESF is assured even with the failure of a single active component in each system.

The requirements in 10 CFR 50.36(b), "Technical Specifications [(TSs)]," state that each license authorizing operation of a production or utilization facility will include TSs. Stated in 10 CFR 50.36(b), TSs will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to 10 CFR 50.34. The Commission may include such additional TSs as the Commission finds appropriate. The regulation at 10 CFR 50.36(c)(2)(i) defines TS limiting conditions of operations as the lowest functional capability or performance levels of equipment required for safe operation of a facility.

Stated in 10 CFR 50.71(e), each licensee shall update the final safety analysis report (FSAR) originally submitted as part of the application for the license, to assure that the information included in the report contains the latest information developed. This submittal shall contain all the changes necessary to reflect information and analyses submitted to the Commission by the licensee pursuant to Commission requirement. The submittal shall include the effects of all changes made in the facility or procedures as described in the FSAR. Also, the submittal shall include all safety analyses and evaluations performed by the licensee in support of conclusions that changes did not require a license amendment in accordance with 10 CFR 50.59(c)(2) along with all analyses of new safety issues performed by or on behalf of the licensee at Commission request. The updated information shall be appropriately located within the Updated FSAR (UFSAR).

As stated in 10 CFR 50.59, a licensee may make changes in the facility and procedures as described in the Updated FSAR (UFSAR) without obtaining a license amendment. A licensee may make changes in the procedures pursuant to 10 CFR 50.59 if: (1) a change to TSs incorporated in the license is not required and (2) a change does not result in more than a minimal increase in the consequences of a malfunction of a systems, structures, and components important to safety previously evaluated in the UFSAR.

Licensee's Position

In the July 13, 2012, letter to the NRR staff, the licensee indicated that the redundancy and single failure criteria for Monticello diesel fuel oil supply system starts at the day tanks of the EDGs. The licensee provided references in the letter dated July 13, 2012, to support its position that the current fuel oil supply design is acceptable, with respect to single failure, because redundancy of the diesel fuel oil system begins at the EDG day tank and continues downstream to the respective EDGs. The licensee also indicated that each day tank contains 8 hours of fuel, which will supply the respective EDG without operator action. According to the licensee, 8 hours is sufficient to restore flow to the EDG day tanks by: (1) restarting the fuel oil transfer pump; (2) restoring power to the fuel oil service pump and restarting it; or (3) connecting the portable gasoline pump from the common storage tank to the day tanks.

Section 8.4.1.3 of the Monticello Updated Safety Analysis Report (USAR) states that operator action may be required within 8 hours to establish fuel oil transfer capability from the storage tank to the day tank. The licensee also stated in the July 13, 2012, letter that Operations Manual B.08.11-05, "Diesel Oil System," provides instructions for operators by breaker manipulation to re-energize power to the non-safety fuel oil service pump from a motor control center powered from the output of EDG-11.

3.0 EVALUATION

The NRR responses to the Region III questions regarding the diesel fuel oil supply design in context with historical licensing and design basis documents, and/or applicable design requirements at Monticello are presented below.

Question 1: Is the intent of current and historical licensing and design basis information to provide a redundant and independent diesel fuel oil supply system from the fuel oil storage tank to the individual EDG day tanks (i.e., two safety-related pumps that are physically separated and provided with independent piping and safety-related power source)?

Yes. In response to Question 1, NRR staff reviewed the AEC's SER for Monticello, dated March 18, 1970. The NRR staff also reviewed correspondences between AEC, Advisory Committee on Reactor Safeguards (ACRS) and the licensee for Monticello regarding the EDG system, dating from April 13, 1967, through January 10, 1970.

The AEC conducted a site audit in 1967, in which the NRC staff recommended to the licensee in its April 13, 1967, letter, an additional EDG with associated day tank and components as a redundant source of onsite AC power. The licensee provided the Monticello's USAR on October 15, 1969, which documented the inclusion of an additional EDG, along with a diesel fuel oil service pump and day tank to the existing EDG system. The ACRS documented in a letter, dated January 10, 1970, to AEC that the recommendations to the EDG system were made by the licensee by installing an additional EDG. The AEC documented and accepted the EDG system in its SER of Monticello on March 18, 1970. The SER describes the EDGs as follows:

The diesel generators are separate and independent with respect to physical location, cooling systems, air start systems, control and sequential loading circuits and **fuel supplies** [Emphasis added].

The March 18, 1970 SER concludes that:

...the onsite emergency electrical power system is acceptable since no single failure should prevent power from being supplied to the engineered safety features from onsite sources.

As stated in the Monticello USAR, Appendix E, the plant was designed to be in compliance with the 1970 AEC proposed GDC. AEC criterion 39 delineates the requirements for onsite and offsite power systems. The NRR staff finds that the as-built configuration for the diesel fuel oil transfer system at Monticello does not meet its historical licensing basis. The EDGs are described as separate and independent in the 1970 AEC SER. This is consistent with the original Monticello plant USAR, dated October 15, 1969, EDG description (Section 4.0, Plant Standby Diesel Generator Systems) which states:

Two independent diesel generators provide redundant standby power sources. Each diesel generator is capable of providing sufficient power to safely shut down the reactor upon the loss of all outside power simultaneous with the design basis accident.

The diesel generator sets shall be complete package units with all auxiliaries necessary to make them self-sufficient power sources capable of automatic start at any time and capable of continued operation at rated full load and frequency until either manually or automatically shutdown.

Other auxiliaries required to ensure continuous [EDG] operation shall be supplied from the essential buses or control power transformers associated with the engine generator.

The NRR staff determined that "other auxiliaries" applies to the EDG fuel supply necessary to support the mission time established for EDG operation. As stated in Section 4.0 of the October 15, 1969, Monticello USAR, each EDG has a local day tank that is fed from the common backup storage tank, in which one week (or 7 days) of fuel oil is capable of supplying one EDG at full load capacity. No specific information was provided in the March 18, 1970, AEC SER regarding the piping configuration of fuel oil pump discharge pipe or the power supplies to the fuel oil transfer pumps. However, the NRR staff finds that the EDG system description provided in the October 15, 1969, Monticello SAR indicates that each EDG has the capability of performing at full load, including the accessibility of fuel oil from the common backup storage tank as needed, without any potential interference from the other EDG; therefore establishing independent operation. The AEC found the separate and independent EDG description from the October 15, 1969, Monticello SAR acceptable in the March 18, 1970, safety evaluation and Monticello was licensed with the current configuration on September 8, 1970.

The NRR staff could not find an exception in the historical licensing basis that excluded certain portions of the EDG system, specifically the diesel fuel oil supply system, from the general descriptions of "independent" and "redundant" as stated in Section 4.0 of the October 15, 1969,

Monticello SAR. Therefore, the NRR staff concludes that the intent of the Monticello current and historical licensing and design basis requires a redundant and independent diesel fuel oil supply system from the fuel oil storage tank to the individual EDG day tanks (i.e., two safety-related pumps that are physically separated and provided with independent piping and safety-related power source).

Question 2: Did the licensee change its licensing basis, with NRR approval, with respect to single failure of the diesel fuel oil supply system (i.e., from the fuel oil storage tank to individual EDG day tanks)?

No. In response to Question 2, the NRR staff reviewed Section 8.4.1 of the original 1969 Monticello USAR, "Safeguards Emergency Diesel Generator Systems," which described how the licensee contends with the loss of one EDG. On December 27, 1995, the licensee completed its 10 CFR 50.59 evaluation for Section 8.4.1, in which the licensee included a clarification on how to address the loss of the diesel fuel oil transfer function for the EDG system. In a request for additional information (RAI), dated April 5, 2012, NRR staff questioned inclusion of this clarification statement in the Monticello USAR absent the NRC's review. The licensee responded by letter dated July 13, 2012, that the initial design basis prior to the AEC review implied that manual action would be needed to restore the fuel oil transfer function and provided the EDG design basis in the original 1969 Monticello USAR. The "clarification" to the license basis addressed single failure criteria for the fuel oil system during a design basis accident with a LOOP. However, 10 CFR 50.59(c)(2)(iv) states that a license amendment should be obtained if the change "[r]esult in more than a minimal increase in the consequences of a malfunction of an SSC [structures, systems, and components] important to safety previously evaluated in the final safety analysis report (as updated)..." The NRR staff review of the original licensing documentation did not find any information related to the EDG fuel oil system single failure vulnerability or the need for manual action to restore the fuel oil transfer function in the event of a fuel oil piping failure. The AEC review focused on the availability of multiple EDGs and associated components, which concluded that the onsite emergency power system was acceptable since "... no single failure should prevent power [from the EDGs] from being supplied to the engineered safety features from onsite sources."

The NRR staff concludes from review of the licensing documents that the original licensing documentation does not imply or otherwise state that manual action is required to restore the fuel oil transfer function. Therefore, it is NRR staff's position that the original licensing basis does not include the need for manual actions to maintain or restore the fuel oil transfer function for the EDGs during design-basis accidents and that the licensee changed the basis to include a necessary manual action in order to compensate for the original single failure piping configuration without prior staff approval.

Question 2.1: If no, is it acceptable for the nonsafety-related fuel oil service pump, which requires manual operation for it to be powered by EDG-11 and/or the portable gasoline pump to be credited to meet this requirement?

No. In response to Question 2.1, the NRR staff reviewed the licensee's RAI response in the July 13, 2012, letter, which described how power from EDG-11 to the fuel oil service pump is configured, using an approved procedure, in the event of a LOOP. As discussed in the

Licensee's Position section, the licensee also has a procedure to align a portable gas pump to perform the transfer function if power cannot be restored to either the fuel oil transfer or service pump.

The NRR staff finds that using these manual actions in the current plant procedures to align the EDG-11 to the nonsafety-related fuel oil service pump during a LOOP event is unacceptable because these manual actions are not stated or implied in the design basis and have not been reviewed and approved by the NRR staff. At full load, the EDG-11 will exhaust the combined fuel oil contents of day tank and base tank in about 8-hours unless manual action to replenish this fuel oil is taken. The AEC SER states in Section 4.1, Diesel Generator Systems Design Basis: "The diesel Generator sets [EDGs] shall be complete package units with all auxiliaries necessary to make them self-sufficient power sources capable of automatic start at any time and capable of continued operation at rated full load voltage and frequency until either manually or automatically stopped." Contrary to this statement the EDGs are not self-sufficient because a single failure of EDG-12 or its associated safety related bus results in a loss of fuel transfer function to EDG-11.

In SRI #91-034, "Clarification of Diesel Oil Transfer System Redundancy Criteria," dated December 27, 1995, the licensee addressed the fuel oil system single failure vulnerability by adding a "clarification" to the Monticello USAR to state that manual operator actions may be necessary to reestablish the fuel oil transfer function in the event that the fuel oil transfer function becomes inoperable during a LOOP. It should be noted that the EDG fuel oil transfer pump does not have automatic start capability and must be started by the operators, as directed by procedure(s), from the control room to replenish EDG day tank fuel oil inventory during a LOOP event. The licensee also established procedures which provide operator guidance to manually align the fuel oil service pump or a portable gas-powered pump, in the event that the safety-related fuel oil transfer pump is not available during the LOOP event. The clarification to the license basis addressed single failure criteria of the fuel oil system during a design-basis accident concurrent with a loss of offsite power. However, 10 CFR 50.59(c)(2)(iv) states that a license amendment should be obtained if the change "[r]esult in more than a minimal increase in the consequences of a malfunction of an SSC important to safety previously evaluated in the final safety analysis report (as updated)..." The NRR staff questioned the licensee's applicability of 10 CFR 50.59 regarding the manual actions for the fuel oil service pump alignment in RAI-2 of the April 5, 2012, email to the licensee. The licensee responded by letter, dated July 13, 2012, that the no changes were made to the licensing basis for Monticello consistent with 10 CFR 50.59(c)(1) and that the clarification to the USAR was additional detail regarding the fuel oil transfer design that was not specified in the original licensing basis. The licensee also stated in its RAI response that although the fuel oil transfer system was designed to utilize manual actions to establish the fuel oil service pump, that level of detail was not provided in the original 1969 Monticello USAR or the AEC SER.

The NRC staff disagrees with the licensee's position that these manual actions are part of the licensing basis for Monticello EDGs. A review of USAR proposed change using 10 CFR 50.59 should have prompted the licensee to consider that the addition of manual actions, as part or in lieu of a safety-related function, requires NRC staff approval. The omission of detail regarding the fuel oil transfer system or piping configuration in the original licensing basis and the EDG

description contained in the March 18, 1970, AEC SER does not imply or constitute the staff's approval of any manual actions intended to compensate for design limitations for an inoperable fuel oil transfer system. The SER describes the EDGs as follows:

The diesel generators are separate and independent with respect to physical location, cooling systems, air start systems, control and sequential loading circuits and fuel supplies.

Furthermore, the AEC SER concludes that;

... the onsite emergency electrical power system is acceptable since no single failure should prevent power from being supplied to the engineered safety features from onsite sources.

Therefore, it is NRR staff's position that the licensee cannot credit the use of manual actions to use the portable gas pump to provide the fuel oil transfer function during a LOOP event.

It should also be noted that when the ITS for Monticello were implemented in 2006, the licensee did not fully consider the requirements of TS 3.8.1 on Monticello's EDG fuel oil system during normal operation of the plant. Monticello TS 3.8.1 Bases states that "[t]he portion of the fuel oil transfer system from the fuel oil storage tank to the day tanks must have two OPERABLE pumps for both EDGs to be considered OPERABLE." However, during the LOOP event, only the EDG-12 powered fuel oil transfer pump is Operable. If EDG-12 or its associated safety-related electrical bus(es) are not Operable, the fuel oil transfer pump becomes inoperable and the fuel oil transfer function is lost. Since the fuel oil transfer pump is required to support Operability of both EDGs, once the fuel oil transfer pump function is lost, both EDGs become inoperable. If this occurs, Condition E of TS 3.8.1 requires one EDG to be restored to Operable within 2 hours. If an EDG is not restored to Operable within 2 hours required by Condition E, a plant shutdown is required by TS 3.8.1 Condition F.

Question 2.2: If no, is manual action to isolate a passive failure of the fuel oil discharge piping acceptable such that one of the fuel oil pumps will still be able to supply fuel oil to the non-affected EDG's day tank?

No. A failure of the common cross-connect piping would result in a loss of fuel oil transfer capability from the storage tank to both EDG day tanks. In response to Question 2.2, the NRR staff reviewed the current configuration of the EDG system and as described in the responses to Question 2 and 2.1, the licensee has procedures in place in the event that either the safety-related fuel oil transfer pump or service pump are not available during a LOOP event to provide the fuel oil transfer function to either EDG day tank. However, these manual actions to align EDG-11 to the fuel oil service pump, for the purpose of fuel oil transfer in the event of a LOOP, were not reviewed by the NRC staff. As stated in the response to Question 2.1, the NRC staff should review manual actions to restore the fuel oil transfer function in the event of a LOOP in accordance with 10 CFR 50.59. Formally establishing manual actions to provide a safety function, which were previously unknown to the NRC staff, constitutes a change in licensing basis. Therefore, at this time, using manual actions to isolate a passive failure of the fuel oil discharge cross-connect piping is considered outside the current licensing bases by the NRC staff.

Question 2.3: If yes, please indicate where such approval was granted. This approval appears to be in conflict with the licensee's ITS Basis 3.8.1, which states that operability of the onsite AC power sources is based upon a worst case single failure (loss of transfer pump or EDG-12 requires reliance of non-safety equipment to meet the EDG mission time) and the NRC's acceptance of the onsite AC sources documented in the SER was determined to be acceptable since no single failure should prevent power from being supplied to the engineering safety features.

The NRC staff concluded that the Question 2 answer is "No." Therefore, the answer to Question 2.3 is not applicable.

4.0 CONCLUSION

The NRR staff indicated in its response to Question 2 that the NRC staff has not approved any changes to the licensee's current licensing basis to allow manual operator actions to restore the fuel oil transfer function for the EDG system at Monticello. As indicated in the responses to Questions 2.1 and 2.2, the licensee has not provided a license amendment request to the NRC staff to assess the acceptability of utilizing compensatory manual actions to align the fuel oil service pump to EDG-11 during a LOOP event to establish the safety-related function of fuel oil transfer. Condition E of TS 3.8.1 is limiting in regards to restoring the EDGs to operable status when the safety-related fuel oil transfer pump becomes non-functional. Condition E of TS 3.8.1 would not be met if the licensee exceeded the 2 hour Completion Time since both EDGs would be considered inoperable once the fuel oil transfer pump become non-functional and the licensee would have 12 hours to be in Mode 3 and 36 hours to be in Mode 4, as required by TS 3.8.1, Condition F. The licensee indicates in the Monticello USAR that up to 8 hours are available (which is the amount of fuel oil provided in the day tanks to either EDG without the fuel oil transfer function) to restore power to the fuel oil service pump or align the portable gas pump. The NRR staff recommends that the licensee review its current fuel oil design and TS 3.8.1 requirements in order to resolve the EDG fuel oil transfer pump limitations to avoid having to enter into Condition E of TS 3.8.1 whenever the fuel oil transfer pump function is lost.

The NRR staff finds that the use of manual actions to align the nonsafety-related fuel oil service pump to EDG-11 to establish the fuel oil transfer function during a LOOP event or use of a portable gasoline driven fuel oil pump is not an implied or stated action in the licensing basis and, therefore, is not part of the design basis. Based on its review of the questions provided in TIA 2012-03, the NRR staff finds that the diesel fuel oil supply system design at Monticello is not consistent with current and historical licensing and design basis documents, and/or applicable design requirements. Therefore, the licensee is noncompliant with the NRC-approved plant design.

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Date: August 20, 2013