Northeast
Nuclear Energy

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The Northeast Utilities System

APR 19 2000

Docket No. 50-423
B17933

Re: 10 CFR 50.90

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Millstone Nuclear Power Station, Unit No. 3
Technical Specifications Change Request 3-10-99
Electrical Equipment Protective Devices

Pursuant to 10 CFR 50.90, Northeast Nuclear Energy Company (NNECO) hereby proposes to amend Operating License NPF-49 by incorporating the attached proposed changes into the Technical Specifications of Millstone Unit No. 3. NNECO is proposing to change Technical Specifications 3.8.4.1, "Electrical Power Systems - Containment Penetration Conductor Overcurrent Protective Devices;" 3.8.4.2.1, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protection;" and 3.8.4.2.2, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protection Not Bypassed." The Bases for these Technical Specifications will be modified to address the proposed changes.

The proposed changes will relocate the requirements for containment penetration conductor overcurrent and motor operated valve thermal overload protective devices from Technical Specifications to the Technical Requirements Manual.

Attachment 1 provides a discussion of the proposed changes and the Safety Summary. Attachment 2 provides the Significant Hazards Consideration. Attachment 3 provides the marked-up version of the appropriate pages of the current Technical Specifications. Attachment 4 provides the retyped pages of the Technical Specifications.

Environmental Considerations

NNECO has reviewed the proposed License Amendment Request against the criteria of 10 CFR 51.22 for environmental considerations. The proposed changes do not significantly increase the type and amounts of effluents that may be released off site. In addition, this amendment request will not significantly increase individual or cumulative occupational radiation exposures. Therefore, NNECO has determined the proposed changes will not have a significant effect on the quality of the human environment.

A001

Conclusions

The proposed changes do not involve a significant impact on public health and safety (see the Safety Summary provided in Attachment 1) and do not involve a Significant Hazards Consideration pursuant to the provisions of 10 CFR 50.92 (see the Significant Hazards Consideration provided in Attachment 2). In addition, we have concluded the proposed changes are safe.

Plant Operations Review Committee and Nuclear Safety Assessment Board

The Plant Operations Review Committee and Nuclear Safety Assessment Board have reviewed and concurred with the determinations.

Schedule

We request issuance of this amendment for Millstone Unit No. 3 prior to November 30, 2000, with the amendment to be implemented within 60 days of issuance. This will support work scheduled for the next Millstone Unit No. 3 refueling outage.

State Notification

In accordance with 10 CFR 50.91(b), a copy of this License Amendment Request is being provided to the State of Connecticut.

There are no regulatory commitments contained within this letter.

If you should have any questions on the above, please contact Mr. Ravi Joshi at (860) 440-2080.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Raymond P. Necci
Vice President - Nuclear Technical Services

Sworn to and subscribed before me

this 19 day of April, 2000

Notary Public

My Commission expires Jun 30 2004

cc: See next page

Attachments (4)

cc: H. J. Miller, Region I Administrator
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3

Director
Bureau of Air Management
Monitoring and Radiation Division
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79 Elm Street
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Docket No. 50-423
B17933

Attachment 1

Millstone Nuclear Power Station, Unit No. 3

Technical Specifications Change Request 3-10-99
Electrical Equipment Protective Devices
Discussion of Proposed Changes

Technical Specifications Change Request 3-10-99
Electrical Equipment Protective Devices
Discussion of Proposed Changes

Northeast Nuclear Energy Company (NNECO) hereby proposes to amend Operating License NPF-49 by incorporating the attached proposed changes into the Technical Specifications of Millstone Unit No. 3. NNECO is proposing to change Technical Specifications 3.8.4.1, "Electrical Power Systems - Containment Penetration Conductor Overcurrent Protective Devices;" 3.8.4.2.1, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protection;" and 3.8.4.2.2, "Electrical Power Systems - Motor-Operated Valves Thermal Overload Protection Not Bypassed." The Bases for these Technical Specifications will be modified to address the proposed changes.

The proposed changes will relocate the requirements for containment penetration conductor overcurrent and motor operated valves thermal overload protective devices from the Millstone Unit No. 3 Technical Specifications to the Technical Requirements Manual (TRM), a Licensee controlled document. The information contained in the associated Bases will also be relocated to the TRM. The proposed changes will not adversely affect the operation of this equipment and the functions it performs. Changes to the TRM are controlled in accordance with 10 CFR 50.59.

Technical Specification Changes

Index Pages

Changes to the Index Pages are necessary as a result of the proposed changes to Technical Specifications 3.8.4.1, 3.8.4.2.1, and 3.8.4.2.2 which will be discussed. The entries for these specifications on Index Page xi will be replaced with the word "DELETED." The entry for Bases Section 3/4.8.4 on Index Page xv will also be replaced with the word "DELETED."

Technical Specification 3.8.4.1

The requirements of Technical Specification 3.8.4.1 will be relocated to the TRM. The requirements contained in this specification do not meet any of the criteria contained in 10 CFR 50.36c(2)(ii) for items that must be in Technical Specifications as discussed in the Safety Summary. The phrase "THIS PAGE INTENTIONALLY LEFT BLANK" will be added to Pages 3/4 8-19 and 3/4 8-20.

Technical Specification 3.8.4.2.1

The requirements of Technical Specification 3.8.4.2.1 will be relocated to the TRM. The requirements contained in this specification do not meet any of the criteria

contained in 10 CFR 50.36c(2)(ii) for items that must be in Technical Specifications as discussed in the Safety Summary. The phrase "THIS PAGE INTENTIONALLY LEFT BLANK" will be added to Page 3/4 8-21.

Technical Specification 3.8.4.2.2

The requirements of Technical Specification 3.8.4.2.2 will be relocated to the TRM. The requirements contained in this specification do not meet any of the criteria contained in 10 CFR 50.36c(2)(ii) for items that must be in Technical Specifications as discussed in the Safety Summary. The phrase "THIS PAGE INTENTIONALLY LEFT BLANK" will be added to Page 3/4 8-22.

Technical Specification Bases

The Bases for Technical Specifications 3.8.4.1, 3.8.4.2.1, and 3.8.4.2.2 will be relocated to the TRM to reflect the proposed changes to the respective specifications.

Safety Summary

10 CFR 50.36c(2)(ii) contains the requirements for items that must be in Technical Specifications. This regulation provides four (4) criteria that can be used to determine the requirements that must be included in the Technical Specifications. Items not meeting any of the four criteria can be relocated from Technical Specifications to a Licensee controlled document. The Licensee can then change the relocated requirements, if necessary, in accordance with 10 CFR 50.59. This should result in significant reductions in time and expense to modify requirements that have been relocated while not adversely affecting plant safety. The criteria, and an evaluation of each Technical Specification proposed for relocation are provided below.

Technical Specification 3.8.4.1

The containment penetration conductor overcurrent protective devices are installed to minimize the damage from a fault in a component inside containment, or in cabling which penetrates containment. This prevents an electrical penetration from being damaged in such a way that the containment structure could be breached.

Criterion 1 Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

This criterion addresses instrumentation installed to detect excessive Reactor Coolant System (RCS) leakage. Technical Specification 3.8.4.1, which addresses the containment penetration conductor overcurrent protective devices, does not cover installed instrumentation that is used to detect, and indicate in the control room, a significant degradation of the

reactor coolant pressure boundary. This requirement does not satisfy Criterion 1.

Criterion 2 A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The purpose of this criterion is to capture those process variables that have initial values assumed in the design basis accident and transient analyses, and which are monitored and controlled during power operation. This criterion also includes active design features (e.g., high pressure/low pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients.

The containment penetration conductor overcurrent protective devices do help preserve the assumptions of the accident analysis by enhancing proper equipment operation. However, they are not a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The containment penetration conductor overcurrent protective devices do not satisfy Criterion 2.

Criterion 3 A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The purpose of this criterion is to capture only those structures, systems, and components that are part of the primary success path of the safety analysis (an examination of the actions required to mitigate the consequences of the design basis accidents and transients). The primary success path of a safety analysis consists of the combinations and sequences of equipment needed to operate, so that the plant response to the design basis accidents and transients limits the consequences of these events to within the appropriate acceptance criteria. Also captured by this criterion are those support and actuation systems that are necessary for items in the primary success path to successfully function, but it does not include backup and diverse equipment.

The containment penetration conductor overcurrent protective devices are installed to minimize the damage from a fault in a component inside containment, or in conductors which penetrate containment. However,

the containment penetration conductor overcurrent protective devices are not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design bases accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The containment penetration conductor overcurrent protective devices do not satisfy Criterion 3.

Criterion 4 A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The purpose of this criterion is to capture only those structures, systems, and components that operating experience or probabilistic risk assessment has shown to be significant to public health and safety. Requirements proposed for relocation do not contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are commonly found to dominate risk.

The containment penetration conductor overcurrent protective devices are not a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to the public health and safety. The Maintenance Rule (10 CFR 50.65) does not require these protective devices to be monitored for unavailability. In addition, a review of industry operating experience did not produce any examples where containment penetration breakers have had a significant adverse effect on public health and safety. The containment penetration conductor overcurrent protective devices do not meet Criterion 4.

The requirements contained in this specification for the containment penetration conductor overcurrent protective devices do not meet any of the 10 CFR 50.36c(2)(ii) criteria for items that must be in Technical Specifications. Therefore, the Technical Specification requirements can be relocated.

Technical Specification 3.8.4.2.1

Motor-operated valve thermal overload protection provides equipment protection in addition to that provided by the design of the distribution system. Bypassing the thermal overload protection of certain motor-operated valves during accident conditions minimizes the potential that the actuation of a thermal overload device could prevent a vital piece of equipment from performing its intended function.

Criterion 1 Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

This criterion addresses instrumentation installed to detect excessive RCS leakage. Technical Specification 3.8.4.2.1, which addresses bypassing the thermal overload protection for certain motor-operated valves during accident conditions, does not cover installed instrumentation that is used to detect, and indicate in the control room, a significant degradation of the reactor coolant pressure boundary. This requirement does not satisfy Criterion 1.

Criterion 2 A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The purpose of this criterion is to capture those process variables that have initial values assumed in the design basis accident and transient analyses, and which are monitored and controlled during power operation. This criterion also includes active design features (e.g., high pressure/low pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients.

Bypassing the motor-operated valve thermal overload protection for certain valves during accident situations helps preserve the assumptions of the accident analysis by enhancing proper equipment operation. However, motor-operated valve thermal overload protection is not a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Motor-operated valve thermal overload protection, and the need to bypass that protection during accident conditions, does not satisfy Criterion 2.

Criterion 3 A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The purpose of this criterion is to capture only those structures, systems, and components that are part of the primary success path of the safety analysis (an examination of the actions required to mitigate the consequences of the design basis accidents and transients). The primary success path of a safety analysis consists of the combinations and sequences of equipment needed to operate, so that the plant response to the design basis accidents and transients limits the consequences of these events to within the appropriate acceptance criteria. Also captured

by this criterion are those support and actuation systems that are necessary for items in the primary success path to successfully function, but it does not include backup and diverse equipment.

Motor-operated valve thermal overload protection is installed to provide equipment protection. Bypassing the thermal overload protection of certain motor-operated valves during accident conditions minimizes the potential that the actuation of a thermal overload device could prevent a vital piece of equipment from performing its intended function. However, the motor-operated valve thermal overload protection is not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Motor-operated valve thermal overload protection, and the need to bypass that protection during accident conditions, does not satisfy Criterion 3.

Criterion 4 A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The purpose of this criterion is to capture only those structures, systems, and components that operating experience or probabilistic risk assessment has shown to be significant to public health and safety. Requirements proposed for relocation do not contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are commonly found to dominate risk.

Motor-operated valve thermal overload protection, and the need to bypass that protection during accident conditions, is not a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to the public health and safety. The Maintenance Rule (10 CFR 50.65) does not require this type of protection to be monitored for unavailability. In addition, a review of industry operating experience did not produce any examples where motor-operated valve thermal overload protection has had a significant adverse effect on public health and safety. Motor-operated valve thermal overload protection, and the need to bypass that protection during accident conditions, does not meet Criterion 4.

The requirements contained in this specification for the motor-operated valve thermal overload protection that is bypassed under accident conditions do not meet any of the 10 CFR 50.36c(2)(ii) criteria for items that must be in Technical Specifications. Therefore, the Technical Specification requirements can be relocated.

Technical Specification 3.8.4.2.2

Motor-operated valve thermal overload protection provides equipment protection in addition to that provided by the design of the distribution system. This additional protection, which is not bypassed during accident conditions, enhances equipment availability.

Criterion 1 Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

This criterion addresses instrumentation installed to detect excessive RCS leakage. Technical Specification 3.8.4.2.2, which addresses motor-operated valve thermal overload protection, does not cover installed instrumentation that is used to detect, and indicate in the control room, a significant degradation of the reactor coolant pressure boundary. This requirement does not satisfy Criterion 1.

Criterion 2 A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The purpose of this criterion is to capture those process variables that have initial values assumed in the design basis accident and transient analyses, and which are monitored and controlled during power operation. This criterion also includes active design features (e.g., high pressure/low pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients.

The motor-operated valve thermal overload protection helps preserve the assumptions of the accident analysis by providing equipment protection and enhancing equipment availability. However, motor-operated valve thermal overload protection is not a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The motor-operated valve thermal overload protection not bypassed during accident conditions does not satisfy Criterion 2.

Criterion 3 A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The purpose of this criterion is to capture only those structures, systems, and components that are part of the primary success path of the safety analysis (an examination of the actions required to mitigate the consequences of the design basis accidents and transients). The primary success path of a safety analysis consists of the combinations and sequences of equipment needed to operate, so that the plant response to the design basis accidents and transients limits the consequences of these events to within the appropriate acceptance criteria. Also captured by this criterion are those support and actuation systems that are necessary for items in the primary success path to successfully function, but it does not include backup and diverse equipment.

Motor-operated valve thermal overload protection is installed to provide equipment protection and enhance equipment availability. However, motor-operated valve thermal overload protection is not a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design bases accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The motor-operated valve thermal overload protection not bypassed during accident conditions does not satisfy Criterion 3.

Criterion 4 A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The purpose of this criterion is to capture only those structures, systems, and components that operating experience or probabilistic risk assessment has shown to be significant to public health and safety. Requirements proposed for relocation do not contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are commonly found to dominate risk.

Motor-operated valve thermal overload protection is not a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to the public health and safety. The Maintenance Rule (10 CFR 50.65) does not require this type of protection to be monitored for unavailability. In addition, a review of industry operating experience did not produce any examples where motor-operated valve thermal overload protection has had a significant adverse effect on public health and safety. The motor-operated valve thermal overload protection not bypassed during accident conditions does not meet Criterion 4.

The requirements contained in this specification for motor-operated valve thermal overload protection that is not bypassed under accident conditions do not meet any of the 10 CFR 50.36c(2)(ii) criteria for items that must be in Technical Specifications. Therefore, the Technical Specification requirements can be relocated.

Technical Specification Changes - Bases

The Bases for Technical Specifications 3.8.4.1, 3.8.4.2.1, and 3.8.4.2.2 will be relocated to the TRM to reflect the proposed changes to the respective specifications. The proposed changes will not result in any new approaches to plant operation.

The relocation of the requirements from Technical Specifications to the TRM will not result in any new approaches to plant operation and will not adversely affect any accident mitigation equipment. The plant response to the design basis accidents will not change. Therefore, the proposed changes will not adversely affect public health and safety. Thus, the proposed changes are safe.

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Attachment 2

Millstone Nuclear Power Station, Unit No. 3

Technical Specifications Change Request 3-10-99
Electrical Equipment Protective Devices
Significant Hazards Consideration

Technical Specifications Change Request 3-10-99
Electrical Equipment Protective Devices
Significant Hazards Consideration

Description of License Amendment Request

The proposed changes will relocate the requirements for containment penetration conductor overcurrent and motor operated valve thermal overload protective devices from Technical Specifications 3.8.4.1, 3.8.4.2.1, and 3.8.4.2.2 to the Technical Requirements Manual (TRM).

Basis for No Significant Hazards Consideration

In accordance with 10 CFR 50.92, NNECO has reviewed the proposed changes and has concluded that they do not involve a significant hazards consideration (SHC). The basis for this conclusion is that the three criteria of 10 CFR 50.92(c) are not compromised. The proposed changes do not involve an SHC because the changes would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

   The proposed changes to relocate the requirements for containment penetration conductor overcurrent and motor-operated valve thermal overload protective devices from Technical Specifications to the TRM will have no adverse effect on plant operation, or the availability or operation of any accident mitigation equipment. The plant response to the design basis accidents will not change. Operation of the containment penetration conductor overcurrent and motor-operated valve thermal overload protective devices are not accident initiators and can not cause an accident. Whether the requirements for the containment penetration conductor overcurrent and motor-operated valve thermal overload protective devices are located in Technical Specifications or the TRM will have no effect on the probability or consequences of any accident previously evaluated. Therefore, there will be no significant increase in the probability or consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

   The proposed changes to relocate the requirements from Technical Specifications to the TRM will not alter the plant configuration (no new or different type of equipment will be installed) or require any new or unusual operator actions. The proposed changes will not introduce any new failure modes that could result in a new accident. Also, the response of the plant and the operators following the

design basis accidents is unaffected by the changes. Therefore, the proposed changes will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Involve a significant reduction in a margin of safety.

The proposed changes will relocate the requirements for containment penetration conductor overcurrent and motor-operated valve thermal overload protective devices from Technical Specifications to the TRM. Any future changes to the relocated requirements will be in accordance with 10 CFR 50.59 and approved station procedures. The proposed changes will have no adverse effect on plant operation, or the availability or operation of any accident mitigation equipment. The plant response to the design basis accidents will not change. In addition, the relocated requirements do not meet any of the 10 CFR 50.36c(2)(ii) criteria on items for which Technical Specifications must be established. Therefore, there will be no significant reduction in a margin of safety.

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Attachment 3

Millstone Nuclear Power Station, Unit No. 3

Technical Specifications Change Request 3-10-99
Electrical Equipment Protective Devices
Marked Up Pages

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

DELETED

ELECTRICAL POWER SYSTEMS

3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

LIMITING CONDITION FOR OPERATION

3.8.4.1 All containment penetration conductor overcurrent protective devices shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With one or more of the containment penetration conductor overcurrent protective device(s) inoperable:

a. Restore the protective device(s) to OPERABLE status or deenergize the circuit(s) by tripping the associated backup circuit breaker or racking out or removing the inoperable circuit breaker within 72 hours, declare the affected system or component inoperable, and verify the backup circuit breaker to be tripped or the inoperable circuit breaker racked out or removed at least once per 7 days thereafter; or

b. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.8.4.1 All containment penetration conductor overcurrent protective devices shall be demonstrated OPERABLE:

a. At least once per 18 months:

1) By verifying that the medium voltage (4-15 kV) circuit breakers are OPERABLE by selecting, on a rotating basis, at least 10% of the circuit breakers of each voltage level, and performing the following:

a) A CHANNEL CALIBRATION of the associated protective relays,

b) An integrated system functional test which includes simulated automatic actuation of the system and verifying that each relay and associated circuit breakers and control circuits function as designed, and

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c) For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.

2) By selecting and functionally testing a representative sample of at least 10% of each type of lower voltage circuit breakers. Circuit breakers selected for functional testing shall be selected on a rotating basis.

Air circuit breaker long-time and short-time delay trip elements shall be tested to verify that the circuit breaker operates within the manufacturer's time delay band width for the specified test current. The instantaneous element shall be tested by injecting a current equal to ± 20% of the pickup value of the element and verifying that the circuit breaker trips instantaneously with no intentional time delay.

Molded case circuit breakers and unitized starters (a frame size of 250 amps or less) shall be tested for long time delay as described above, and in addition tested for the instantaneous trip by injecting a current value which falls within +40% (of the upper limit) and -25% (of the lower limit) of the manufacturers instantaneous trip current range and verifying the breaker trips instantaneously with no intentional time delay. For those molded case circuit breakers/unitized starters used in 480V ungrounded circuits, if single pole instantaneous test results fall outside these tolerances, additional instantaneous testing shall be conducted to determine the breaker's operability using two poles in series, including A-B, B-C and C-A phase combinations. If test results of all two poles in series combinations fall within the specified tolerances, the breaker is considered OPERABLE.

Circuit breakers found inoperable during functional testing shall be restored to OPERABLE status prior to resuming operation. For each circuit breaker found inoperable during these functional tests, an additional representative sample of at least 10% of all the circuit breakers of the inoperable type shall also be functionally tested until no more failures are found or all circuit breakers of that type have been functionally tested.

b. At least once per 60 months by subjecting each circuit breaker to an inspection and preventive maintenance in accordance with procedures prepared in conjunction with its manufacturer's recommendations.

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ELECTRICAL POWER SYSTEMS

MOTOR-OPERATED VALVES THERMAL OVERLOAD PROTECTION

LIMITING CONDITION FOR OPERATION

3.8.4.2.1 Each thermal overload protection bypassed only under accident conditions for safety-related motor-operated valves shall be bypassed by an OPERABLE bypass device integral with the motor starter.

APPLICABILITY: Whenever the motor-operated valve is required to be OPERABLE.

ACTION:

With the thermal overload protection for one or more of the above required valves not bypassed under conditions for which it is designed to be bypassed, restore the inoperable device or provide a means to bypass the thermal overload within 8 hours, or declare the affected valve(s) inoperable and apply the appropriate ACTION Statement(s) of the affected system(s).

SURVEILLANCE REQUIREMENTS

4.8.4.2.1 The thermal overload protection for the above required valves shall be verified to be bypassed by the appropriate accident signal(s) by performance of a TRIP ACTUATION DEVICE OPERATIONAL TEST of the bypass circuitry during COLD SHUTDOWN or REFUELING at least once per 18 months.

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ELECTRICAL POWER SYSTEMS

MOTOR-OPERATED VALVES THERMAL OVERLOAD PROTECTION NOT BYPASSED

LIMITING CONDITION FOR OPERATION

3.8.4.2.2 Each thermal overload protection not bypassed under accident conditions for safety-related motor-operated valves shall be operable.

APPLICABILITY: Whenever the motor-operated valve is required to be OPERABLE.

ACTION:

With the thermal overload protection for one or more of the above required valves inoperable, bypass the inoperable thermal overload within 8 hours; restore the inoperable thermal overload to OPERABLE status within 30 days or declare the affected valve(s) inoperable and apply the appropriate ACTION Statement(s) for the affected system(s).

SURVEILLANCE REQUIREMENTS

4.8.4.2.2.1 The thermal overload protection for the above required valves shall be demonstrated OPERABLE at least once per 18 months by the performance of a CHANNEL CALIBRATION of a representative sample of at least 25% of all thermal overloads for the above required valves.

4.8.4.2.2.2 The thermal overload protection for an above required valve shall be demonstrated OPERABLE following maintenance on its motor starter by the performance of a CHANNEL CALIBRATION.

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3/4.8.4 ~~ELECTRICAL EQUIPMENT PROTECTIVE DEVICES~~ DELETED

Containment electrical penetrations and penetration conductors are protected by either deenergizing circuits not required during reactor operation or by demonstrating the OPERABILITY of primary and backup overcurrent protection circuit breakers during periodic surveillance.

The Surveillance Requirements applicable to lower voltage circuit breakers provide assurance of breaker reliability by testing at least one representative sample of each manufacturer's brand of circuit breaker. Each manufacturer's molded case and metal case circuit breakers are grouped into representative samples which are then tested on a rotating basis to ensure that all breakers are tested. If a wide variety exists within any manufacturer's brand of circuit breakers, it is necessary to divide that manufacturer's breakers into groups and treat each group as a separate type of breaker for surveillance purposes.

Long-time trip elements are tested by injecting a test current (300% of the pickup) in accordance with the manufacturer's specifications and verifying that the circuit breaker operates within the time delay band width for that current as specified by the manufacturer. Short-time trip elements are tested by injecting a test current (150% of the pickup) in accordance with the manufacturer's specifications and verifying that the circuit breaker operates within the time delay band width for that current as specified by the manufacturer.

The molded case circuit breakers and unitized starters will be tested in accordance with Manufacturer's Instructions.

The OPERABILITY of the motor-operated valves thermal overload protection and integral bypass devices ensures that the thermal overload protection will not prevent safety-related valves from performing their function. The Surveillance Requirements for demonstrating the OPERABILITY of the thermal overload protection are in accordance with Regulatory Guide 1.106, "Thermal Overload Protection for Electric Motors on Motor Operated Valves," Revision 1, March 1977.

"Technical Requirements Manual," lists containment penetration conductor overcurrent protective devices and thermal overload protection bypassed only under accident conditions and thermal overload protection not bypassed under accident conditions. The addition or deletion of any device shall be made in accordance with Section 50.59 of 10CFR50 and approved by the Plant Operation Review Committee.

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Attachment 4

Millstone Nuclear Power Station, Unit No. 3

Technical Specifications Change Request 3-10-99
Electrical Equipment Protective Devices
Retyped Pages

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LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

INDEX

BASES

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