

Docket No. 50-336  
B15403

Attachment 2

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications  
Cycle-Specific A.C. Sources Allowed Outage Time Extension

Marked-up Pages

October 1995

3/4.8 ELECTRICAL POWER SYSTEMS3/4.8.1 A.C. SOURCESOPERATINGLIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the switchyard, and
- b. Two separate and independent diesel generators each with a separate fuel oil supply tank containing a minimum of 12,000 gallons of fuel.

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

ACTION:

- a. With one offsite circuit inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1 within 1 hour and at least once per 8 hours thereafter. If either diesel generator has not been successfully tested within the past 24 hours, demonstrate its OPERABILITY by performing Surveillance Requirement 4.8.1.1.2.a.2 separately for each such diesel generator within 24 hours. Restore the offsite circuit to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. \*\*
- b. With one diesel generator inoperable, demonstrate the OPERABILITY of the A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1 within 1 hour and at least once per 8 hours thereafter; and if the diesel generator became inoperable due to any cause other than preplanned preventative maintenance or testing, demonstrate the OPERABILITY of the remaining OPERABLE diesel generator by performing Surveillance Requirement 4.8.1.1.2.a.2 within 24 hours\*; restore the diesel generator to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

\*\* During the Unit 1 Refueling Outage 15 - Restore the electrical cross-tie to Unit 1 to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

\*This test is required to be completed regardless of when the inoperable diesel generator is restored to an OPERABLE status.

May 17, 1995

### 3/4.8 ELECTRICAL POWER SYSTEMS

#### BASES

The OPERABILITY of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for 1) the safe shutdown of the facility and 2) the mitigation and control of accident conditions within the facility. The minimum specified independent and redundant A.C. and D.C. power sources and distribution systems satisfy the requirements of General Design Criteria 17 of Appendix "A" to 10 CFR 50.

The ACTION requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources are consistent with the initial condition assumptions of the accident analyses and are based upon maintaining at least one of each of the onsite A.C. and D.C. power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss of offsite power and single failure of the other onsite A.C. source.

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that 1) the facility can be maintained in the shutdown or refueling condition for extended time periods and 2) sufficient instrumentation and control capability is available for monitoring and maintaining the facility status.

The non-safety grade 125V D.C. Turbine Battery is required for accident mitigation for a main steam line break within containment with a coincident loss of a vital D.C. bus. The Turbine Battery provides the alternate source of power for Inverters 1 & 2 respectively via non-safety grade Inverters 5 & 6. For the loss of a D.C. event with a coincident steam line break within containment, the feedwater regulating valves are required to close to ensure containment design pressure is not exceeded. The feedwater regulating valves require power to close. On loss of a vital D.C. bus, the alternate source of power to the vital A.C. bus via the Turbine Battery ensures power is available to the affected feedwater regulating valve such that the valve will isolate feed flow into the faulted generator. The Turbine Battery is considered inoperable when bus voltage is less than 125 volts D.C, thereby ensuring adequate capacity for isolation functions via the feedwater regulating valves during the onset of a steam line break.

The Turbine Battery Charger is not required to be included in Technical Specifications even though the Turbine Battery is needed to power backup Inverters 5 & 6 for a main steam line break inside containment coincident with a loss of a Class 1E D.C. bus. This is due to the fact that feedwater isolation occurs within seconds from the onset of the event.

\* A probabilistic safety assessment has examined the affect of extending the allowed outage time to seven (7) days for the electrical cross-tie from Unit 1 to Unit 2 during the Unit 1 refueling outage 15. The results show that the increase in risk is acceptable provided that two diesel generators are available.

Attachment 3

Millstone Nuclear Power Station, Unit No. 2

Proposed Revision to Technical Specifications  
Cycle-Specific A.C. Sources Allowed Outage Time Extension

Retyped Version of Current Technical Specifications

October 1995

### 3/4.8 ELECTRICAL POWER SYSTEMS

#### 3/4.8.1 A.C. SOURCES

##### OPERATING

##### LIMITING CONDITION FOR OPERATION

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3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the switchyard, and
- b. Two separate and independent diesel generators each with a separate fuel oil supply tank containing a minimum of 12,000 gallons of fuel.

APPLICABILITY: MODES 1, 2, 3 and 4.

##### ACTION:

- a. With one offsite circuit inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1 within 1 hour and at least once per 8 hours thereafter. If either diesel generator has not been successfully tested within the past 24 hours, demonstrate its OPERABILITY by performing Surveillance Requirement 4.8.1.1.2.a.2 separately for each such diesel generator within 24 hours. Restore the offsite circuit to OPERABLE status within 72 hours\*\* or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With one diesel generator inoperable, demonstrate the OPERABILITY of the A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1 within 1 hour and at least once per 8 hours thereafter; and if the diesel generator became inoperable due to any cause other than preplanned preventative maintenance or testing, demonstrate the OPERABILITY of the remaining OPERABLE diesel generator by performing Surveillance Requirement 4.8.1.1.2.a.2 within 24 hours\*; restore the diesel generator to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

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\*This test is required to be completed regardless of when the inoperable diesel generator is restored to an OPERABLE status.

\*\*During the Unit 1 Refueling Outage 15 — Restore the electrical cross-tie to Unit 1 to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.



### 3/4.8 ELECTRICAL POWER SYSTEMS

#### BASES

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The OPERABILITY of the A.C. and D.C. power sources and associated distribution systems during operation ensures that sufficient power will be available to supply the safety related equipment required for 1) the safe shutdown of the facility and 2) the mitigation and control of accident conditions within the facility. The minimum specified independent and redundant A.C. and D.C. power sources and distribution systems satisfy the requirements of General Design Criteria 17 of Appendix "A" to 10 CFR 50.

The ACTION requirements specified for the levels of degradation of the power sources provide restriction upon continued facility operation commensurate with the level of degradation. The OPERABILITY of the power sources are consistent with the initial condition assumptions of the accident analyses and are based upon maintaining at least one of each of the onsite A.C. and D.C. power sources and associated distribution systems OPERABLE during accident conditions coincident with an assumed loss of offsite power and single failure of the other onsite A.C. source.

The OPERABILITY of the minimum specified A.C. and D.C. power sources and associated distribution systems during shutdown and refueling ensures that 1) the facility can be maintained in the shutdown or refueling condition for extended time periods and 2) sufficient instrumentation and control capability is available for monitoring and maintaining the facility status.\*

The non-safety grade 125V D.C. Turbine Battery is required for accident mitigation for a main steam line break within containment with a coincident loss of a vital D.C. bus. The Turbine Battery provides the alternate source of power for Inverters 1 & 2 respectively via non-safety grade Inverters 5 & 6. For the loss of a D.C. event with a coincident steam line break within containment, the feedwater regulating valves are required to close to ensure containment design pressure is not exceeded. The feedwater regulating valves require power to close. On loss of a vital D.C. bus, the alternate source of power to the vital A.C. bus via the Turbine Battery ensures power is available to the affected feedwater regulating valve such that the valve will isolate feed flow into the faulted generator. The Turbine Battery is considered inoperable when bus

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\*A probabilistic safety assessment has examined the affect of extending the allowed outage time to seven (7) days for the electrical cross-tie from Unit 1 to Unit 2 during the Unit 1 Refueling Outage 15. The results shows that the increase in risk is acceptable provided that two diesel generators are available.

### 3/4.8 ELECTRICAL POWER SYSTEMS

#### BASES

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voltage is less than 125 volts D.C, thereby ensuring adequate capacity for isolation functions via the feedwater regulating valves during the onset of a steam line break.

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