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LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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INSTRUMENTATION

Not Used

3/4.3.4 TURBINE OVERSPEED PROTECTION

LIMITING CONDITION FOR OPERATION

3.3.4 At least one Turbine Overspeed Protection System shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

- a. With one stop valve or one governor valve per high pressure turbine steam line inoperable and/or with one reheat stop valve or one reheat intercept valve per low pressure turbine steam line inoperable, restore the inoperable valve(s) to OPERABLE status within 72 hours, or close at least one valve in the affected steam line(s) or isolate the turbine from the steam supply within the next 6 hours.
- b. With the above required Turbine Overspeed Protection System otherwise inoperable, within 6 hours isolate the turbine from the steam supply.

SURVEILLANCE REQUIREMENTS

4.3.4.1 The provisions of Specification 4.0.4 are not applicable.

4.3.4.2 The above required Turbine Overspeed Protection System shall be demonstrated OPERABLE:

- a. At least once per 31 days in MODES 1 and 2 when the main turbine is operating by cycling each of the following valves through at least one complete cycle from the running position:
 - 1) Four high pressure turbine stop valves,
 - 2) Four high pressure turbine governor valves,
 - 3) Six low pressure turbine reheat stop valves, and
 - 4) Six low pressure turbine reheat intercept valves.
- b. At least once per 31 days in MODES 1 and 2 when the main turbine is operating by direct observation of the movement of each of the above valves through one complete cycle from the running position,
- c. At least once per 18 months by performance of a CHANNEL CALIBRATION on the Turbine Overspeed Protection Systems, and
- d. At least once per 40 months by disassembling at least one of each of the above valves and performing a visual and surface inspection of valve seats, disks, and stems and verifying no unacceptable flaws or excessive corrosion. If unacceptable flaws or excessive corrosion are found, all other valves of that type shall be inspected.*

*Disassembly and inspection of the low pressure turbine reheat intercept valves are not required prior to the end of the first 40 month interval.

INSTRUMENTATION

BASES

3/4.3.3.6 ACCIDENT MONITORING INSTRUMENTATION (Continued)

quadrant. The unit specific response to Item II.F.2 of NUREG-0737 further discusses the core exit thermocouples. Two sets of two thermocouples ensure a single failure will not disable the ability to determine the radial temperature gradient. The subcooling margin monitor requirements are not affected by allowing 2 thermocouples/channel/quadrant as long as each channel has at least four operable thermocouples in any quadrant (e.g., A Train has four operable thermocouples in one of the quadrants, and C Train has four operable thermocouples in the same quadrant or any other quadrant.). This preserves the ability to withstand a single failure.

3/4.3.3.7 (Not Used)

3/4.3.3.8 (Not Used)

3/4.3.3.3.9 (Not Used)

3/4.3.3.10 DELETED

3/4.3.3.11 EXPLOSIVE GAS MONITORING INSTRUMENTATION

This instrumentation includes provisions for monitoring (and controlling) the concentrations of potentially explosive gas mixtures in the GASEOUS WASTE PROCESSING SYSTEM.

3/4.3.4 TURBINE OVERSPEED PROTECTION

(Not Used)

This specification is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety-related components, equipment, or structures.

Technical Requirements Manual Pages Enclosed

3/4.3-5
B 3/4.3-1

INSTRUMENTATION

3/4.3.4 TURBINE OVERSPEED PROTECTION

LIMITING CONDITION FOR OPERATION

NOTE

THIS TRM REQUIREMENT DUPLICATES THE REQUIREMENTS OF TECHNICAL SPECIFICATION 3/4.3.4. THE REQUIREMENTS AND ACTIONS OF THE TECHNICAL SPECIFICATIONS GOVERN UNTIL THE NRC APPROVES THE RELOCATION AS REQUESTED IN NOC-AE-000263.

3.3.4 At least one Turbine Overspeed Protection System shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

- a. With one stop valve or one governor valve per high pressure turbine steam line inoperable and/or with one reheat stop valve or one reheat intercept valve per low pressure turbine steam line inoperable, restore the inoperable valve(s) to OPERABLE status within 72 hours, or close at least one valve in the affected steam line(s) or isolate the turbine from the steam supply within the next 6 hours.
- b. With the above required Turbine Overspeed Protection System otherwise inoperable, within 6 hours isolate the turbine from the steam supply.

SURVEILLANCE REQUIREMENTS

4.3.4.1 The provisions of Specification 4.0.4 are not applicable.

4.3.4.2 The above required Turbine Overspeed Protection System shall be demonstrated OPERABLE:

- a. At least once per 31 days in MODES 1 and 2 when the main turbine is operating by cycling each of the following valves through at least one complete cycle from the running position:
 - 1) Four high pressure turbine stop valves,
 - 2) Four high pressure turbine governor valves,
 - 3) Six low pressure turbine reheat stop valves, and
 - 4) Six low pressure turbine reheat intercept valves.
- b. At least once per 31 days in MODES 1 AND 2 when the main turbine is operating by direct observation of the movement of each of the above valves through one complete cycle from the running position,
- c. At least once per 18 months by performance of a CHANNEL CALIBRATION on the Turbine Overspeed Protection Systems, and
- d. At least once per 40 months by disassembling at least one of each of the above valves and performing a visual and surface inspection of valve seats, disks, and stems and verifying no unacceptable flaws or excessive corrosion. If unacceptable flaws or excessive corrosion are found, all other valves of that type shall be inspected.*

* Disassembly and inspection of the low pressure turbine reheat intercept valves are not required prior to the end of the first 40 month interval.

INSTRUMENTATION

BASES

3/4.3.3.3 SEISMIC INSTRUMENTATION

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility to determine if plant shutdown is required pursuant to Appendix A of 10 CFR Part 100. The instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes," April 1974.

3/4.3.3.7 CHEMICAL DETECTION SYSTEMS

DELETED

3/4.3.4 TURBINE OVERSPEED PROTECTION

This specification is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety-related components, equipment, or structures.