PLANT SYSTEMS

CONDENSATE STORAGE TANK

LIMITING CONDITION FOR OPERATION

3.7.1.4 The condensate storage tank shall be OPERABLE with a minimum contained volume of 222,000 gallons of water.*

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

With the condensate storage tank inoperable, within 4 hours either:

a. Restore the condensate storage tank to OPERABLE status or be in HOT SHUTDOWN within the next 12 hours, or

b. Demonstrate the OPERABILITY of the Service Water System as a backup supply to the auxiliary feedwater pumps and restore the condensate storage tank to OPERABLE status within 7 days or be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.4.1 The condensate storage tank shall be demonstrated OPERABLE at least once per 12 hours by verifying the water level is within its limit when the tank is the supply source for auxiliary feedwater pumps.

4.7.1.4.2 The Service Water System shall be demonstrated OPERABLE at least once per 12 hours by verifying that at least one Service Water System train is operating and that the Service Water System-feedwater isolation valves are either open or OPERABLE whenever the Service Water System is the supply source for the auxiliary feedwater pumps.

* Until modifications to the Auxiliary Feedwater System, including alterations to prevent spurious low suction pressure trips for the safety-related auxiliary feedwater pumps, are completed a minimum condensate storage tank level of 70 percent (325,000 gallons) shall be maintained.

3/4.7.1.4 CONDENSATE STORAGE TANK

The OPERABILITY of the condensate storage tank with the minimum water volume ensures that sufficient water is available to maintain the RCS at HOT STANDBY conditions for 2 hours with steam discharge at atmosphere concurrent with total loss of offsite power. The minimum contained volume accounts for: (1) water volume required to be delivered to the steam generators (196,000 gallons), (2) unusable volume in the bottom of the condensate storage tank (16,000 gallons), and (3) instrument error (9,500 gallons), rounded off to 222,000 gallons.

Temporarily, a minimum volume of 325,000 gallons (70-percent indicated level) is being maintained in the condensate storage tank to reduce the likelihood of low suction pressure trips when both safety-related auxiliary feedwater pumps are started simultaneously. Following Auxiliary Feedwater System modifications that provide alternate means of preventing common mode failure of the safety-related auxiliary feedwater pumps due to loss of suction, and alterations to prevent spurious low suction pressure trips, a minimum CST level of 70 percent will no longer be required.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
PORTLAND GENERAL ELECTRIC COMPANY,	)	Docket 50-344
THE CITY OF EUGENE, OREGON, AND	)	Operating License NPF-1
PACIFIC POWER & LIGHT COMPANY	)	
	)	
(TROJAN NUCLEAR PLANT)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of License Change Application 134 to the Operating License for Trojan Nuclear Plant, dated October 29, 1985, have been served on the following by hand delivery or by deposit in the United States mail, first class, this 29th day of October 1985:

Mr. Lynn Frank, Director
State of Oregon
Department of Energy
Labor & Industries Bldg, Rm 102
Salem OR 97310

Mr. Robert L. King
Chairman of County Commissioners
Columbia County Courthouse
St. Helens OR 97051

For G. A. Zimmerman, Manager
Nuclear Regulation Branch
Nuclear Safety & Regulation

Subscribed and sworn to before me this 29th day of October 1985.

Carole A. Hodgdon
Notary Public of Oregon

My Commission Expires: August 9, 1987

REASON FOR CHANGE

Recent difficulties with the Auxiliary Feedwater (AFW) System have indicated that the safety-related AFW pumps are prone to low suction pressure trips on startup if the condensate storage tank (CST) level is less than 60 percent, particularly if both pumps are started simultaneously. A Temporary Plant Test verified that both pumps could be started simultaneously from an automatic initiation signal, and would continue to run and perform their design functions, if minimum CST level (when the pumps are started) was limited to 60 percent indicated. The minimum allowable level (for Modes 1, 2, and 3) was increased to 70 percent to account for instrument error and for the static head provided by the water in the suction pressure transmitter reference leg. From the Control Room Curves and Tables Manual, 70-percent level corresponds to a minimum contained volume of 325,000 gallons.

As stated in our letter of August 12, 1985, we do not consider this Technical Specification change to be necessary. A minimum CST level of 70 percent is being incorporated into Plant operating procedures as a limit below which one AFW pump will be declared inoperable, and the Action Statement of Technical Specification 3.7.1.2, Auxiliary Feedwater System will be implemented. Action Statement a of Technical Specification 3.7.1.2 requires that, with one of the two safety-related AFW pumps inoperable, the inoperable pump must be restored to operable status within 72 hours or the Plant placed in hot shutdown within the next 12 hours.

Submittal of this Technical Specification change (to a minimum CST level of 60 percent) was requested by the USNRC in your letter of September 13, 1985 (E. J. Butcher to B. D. Withers).

DESCRIPTION OF CHANGE

Page 3/4 7-8, TTS 3.7.1.4, Condensate Storage Tank

The minimum contained volume in the CST during operation in Modes 1, 2, and 3 is changed from 196,000 to 222,000 gallons. As described in the revised Bases for Technical Specification 3.7.1.4, the specification mandating 196,000 gallons does not account for instrument error and the unusable volume in the CST. A footnote is added to Technical Specification 3.7.1.4 explaining that an interim minimum CST level of 70 percent (325,000 gallons) will be maintained in the CST until modifications to the AFW System, including alterations to prevent spurious low suction pressure AFW pump trips, are completed.

Page B 3/4 7-2a, Bases 3/4.7.1.4

The Bases section for Technical Specification 3.7.1.4 has been expanded to identify the components of the 222,000 gallons minimum CST level. The interim minimum CST level of 70 percent (325,000 gallons) is also explained in the revised Bases.

SIGNIFICANT HAZARDS CONSIDERATION

In a letter to the NRC of August 12, 1985 (B. D. Withers to E. J. Butcher), PGE has already committed to maintaining ≥60-percent level in the CST by administrative controls. As noted in that letter, increasing the minimum operating level in the CST to 60 percent does not constitute an unreviewed safety question because the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report is not increased. Raising the CST minimum water level to 60 percent decreases the probability and the consequences of an accident or malfunction of equipment important to safety. A level of 60 percent provides greater assurance that both AFW pumps will automatically start and operate, and provides a greater volume of water in the CST for heat removal. These discussions also apply to increasing the minimum operating level in the CST to 70 percent.

The possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report is not created by increasing the minimum CST level to 70 percent. A minimum level of 70 percent provides additional conservatism and does not create the possibility for an accident or a malfunction of a different type than evaluated previously.

Also, the margin of safety defined in the basis for any Technical Specification has not been reduced by this increase in minimum CST level. The margin of safety is increased by this change.

Based on the above, this Technical Specification change does not involve a significant hazards consideration.

SAFETY/ENVIRONMENTAL EVALUATION

Safety and environmental evaluations were performed as required by 10 CFR 50 and the Trojan Technical Specifications. This review determined that an unreviewed safety question does not exist since Plant operations remain consistent with the Updated FSAR, adequate surveillance is maintained, and there is no conceivable impact upon the environment.

SCHEDULE CONSIDERATIONS

None.

PLANT SYSTEMS

CONDENSATE STORAGE TANK

LIMITING CONDITION FOR OPERATION

3.7.1.4 The condensate storage tank shall be OPERABLE with a minimum contained volume of 222,000 gallons of water.*

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

With the condensate storage tank inoperable, within 4 hours either:

a. Restore the condensate storage tank to OPERABLE status or be in HOT SHUTDOWN within the next 12 hours, or

b. Demonstrate the OPERABILITY of the Service Water System as a backup supply to the auxiliary feedwater pumps and restore the condensate storage tank to OPERABLE status within 7 days or be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.4.1 The condensate storage tank shall be demonstrated OPERABLE at least once per 12 hours by verifying the water level is within its limit when the tank is the supply source for auxiliary feedwater pumps.

4.7.1.4.2 The Service Water System shall be demonstrated OPERABLE at least once per 12 hours by verifying that at least one Service Water System train is operating and that the Service Water System-feedwater isolation valves are either open or OPERABLE whenever the Service Water System is the supply source for the auxiliary feedwater pumps.

* Until modifications to the Auxiliary Feedwater System, including alterations to prevent spurious low suction pressure trips for the safety-related auxiliary feedwater pumps, are completed a minimum condensate storage tank level of 70 percent (325,000 gallons) shall be maintained.

3/4.7.1.4 CONDENSATE STORAGE TANK

The OPERABILITY of the condensate storage tank with the minimum water volume ensures that sufficient water is available to maintain the RCS at HOT STANDBY conditions for 2 hours with steam discharge at atmosphere concurrent with total loss of offsite power. The minimum contained volume accounts for: (1) water volume required to be delivered to the steam generators (196,000 gallons), (2) unusable volume in the bottom of the condensate storage tank (16,000 gallons), and (3) instrument error (9,500 gallons), rounded off to 222,000 gallons.

Temporarily, a minimum volume of 325,000 gallons (70-percent indicated level) is being maintained in the condensate storage tank to reduce the likelihood of low suction pressure trips when both safety-related auxiliary feedwater pumps are started simultaneously. Following Auxiliary Feedwater System modifications that provide alternate means of preventing common mode failure of the safety-related auxiliary feedwater pumps due to loss of suction, and alterations to prevent spurious low suction pressure trips, a minimum CST level of 70 percent will no longer be required.