

PORTLAND GENERAL ELECTRIC COMPANY
EUGENE WATER & ELECTRIC BOARD
AND
PACIFIC POWER & LIGHT COMPANY

Operating License NPF-1
Docket 50-344
License Change Application 202

This License Change Application (LCA) 202 requesting amendment to Operating License NPF-1 revises the Reactor Coolant System flow requirements and portions of the Bases.

PORTLAND GENERAL ELECTRIC COMPANY

By James E. Cross
J. E. Cross
Vice President
Nuclear

Subscribed and sworn to before me this 13th day of July, 1990.

Diana M. Boursaw
Notary Public of Oregon

My Commission Expires: March 22, 1991



9007180372 900713
FDR ADOCK 05000344
P PDC

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 202, to the Operating License for Trojan Nuclear Plant, dated July 13, 1990, have been served on the following by hand delivery or by deposit in the United States mail, first class, this 13th day of July, 1990:

State of Oregon
Department of Energy
625 Marion St NE
Salem OR 97310

Mr. Michael J. Sykes
Chairman of County Commissioners
Columbia County Courthouse
St. Helens OR 97051

S. A. Bauer

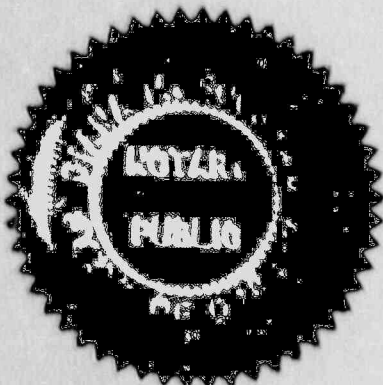
S. A. Bauer, Manager
Nuclear Regulation Branch
Nuclear Safety & Regulation

Subscribed and sworn to before me this 13th day of July, 1990.

Diana M. Boursaw
Notary Public of Oregon

My Commission Expires:

March 22, 1994



Reason for Change

Incorporate revised Reactor Coolant System (RCS) flow requirements of 348,000 gpm into Technical Specifications to reflect the current safety analysis and Plant operating conditions. The measured Reactor Coolant Flow has decreased over the past 15 years of Plant operation in part due to increased steam generator tube plugging levels. The Nuclear Steam Supply System (NSSS) Vendor indicates that the accident analysis did not support the Trojan Technical Specifications (TTS) for RCS flow values less than 371,700 gpm. Thus, although the TTS and Bases appear to allow operation at lower flowrates, this is not supported by the analysis, and the Technical Specifications must be changed.

In addition, the lower flowrate will slightly alter the core exit boiling lines, resulting in changes to TTS Figure 2.1-1, "Reactor Core Safety Limit - Four Loops in Operation". Other editorial changes, such as deletion of items related to three loop operation (which is already prohibited by License Condition 2.C.3) are included to clean up the TTS.

Description of Change

The primary change is deletion of TTS Figure 3.2-3, "Flow vs FAH", and the adaptation of a single flowrate in Table 3.2-1, "DNB Parameters". Associated with this are changes to the wording of TTS 3.2-3 to eliminate the flowrate dependency, changes to TTS 3.2-5, "DNB Parameters", and changes to the Bases. The Reactor Core Safety Limit, TTS Figure 2.1-1 is changed slightly because core exit boiling limits are changed due to slightly higher core exit temperature. The flow value that is the baseline for the low flow trip is also changed in TTS Table 2.2-1, "Reactor Trip System Instrumentation Trip Setpoints". The marked up TTS changes are provided in Attachment B.

Significant Hazards Determination

A determination of no significant hazards considerations may be made if operations in accordance with the proposed change would not:

1. involve a 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; or
3. involve a significant reduction in margin of safety.

The specific concerns of the above items are addressed as follows:

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The change in flow is 1 percent, and this small change remains well within the flow limits originally considered in the FSAR. Pump operation will be within the normal range, and no increase in the probability of an accident is expected from normal operation. The Reactor Coolant System (RCS) flow reduction was evaluated and found to meet the approved limits for accident consequences. Thus it is concluded that there is no significant increase in the probability or consequences of previously evaluated accidents.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The change to the RCS flow limit has been evaluated, and adherence to the evaluated RCS flow requirement restricts the possibility of new or different accidents. The new flow is within the range of flow values considered in the FSAR. It is concluded that the change in flow does not create the possibility of a new or different kind of accident from those previously evaluated.

3. Does the change involve a significant reduction in a margin of safety?

The margin of safety associated with a change to a Plant parameter is maintained by ensuring the existing safety limits are met. The DNBR margin of safety is the difference between the Nuclear Regulatory Commission (NRC) approved design limit of 1.30 and a DNBR of 1.00. The DNBR margin of conservatism (also termed the safety analysis margin) is the difference between the NRC approved design limit DNBR of 1.36 and the transient analysis limit of 1.59 (per License Change Application 161) less rod bow penalties of 1.5 percent. The reduction in RCS flow has been analyzed by Westinghouse consistent with WCAP 8567, "Improved Thermal Design Procedure", and a 1.5 percent penalty was incurred against the available 12.9 percent DNBR margin of conservatism. The analysis for reduced RCS flow effectively lowered the margin of conservatism but did not affect the margin of safety.

In the March 6, 1986 Federal Register, the NRC published a list of examples of amendments that are not likely to involve a significant hazards consideration. Example vi. from this list states:

- (vi.) "A change which either may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan, eg, a change resulting from the application of a small refinement of a previously used calculational model or design method."

The reduction in RCS flow of 1 percent has been analyzed and shown to meet the existing safety limits. The revised RCS flow limit does not change the safety analysis acceptance criteria, and the analytical methods used were previously found acceptable and have not changed.

In conclusion, the changes associated with reduced RCS flow at Trojan do 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. The review determined that the proposed changes do not create an unreviewed safety question based on prior discussions with the staff, nor do they create an unreviewed environmental question.

Implementation Consideration

It is requested that effective date of the amendment be thirty days after issuance by the NRC.

Many of these proposed changes will be superseded by a subsequent submittal for the use of fuel by a different vendor. This submittal is planned for later in this month.

GRA/bsh
5187W.0790