



Portland General Electric Company

James E. Cross
Vice President and Chief Nuclear Officer

March 8, 1994

Trojan Nuclear Plant
Docket 50-344
License NPF-1
VPN-009-94

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

Dear Sir:

Supplemental Information Regarding the Proposed
Permanently Defueled Technical Specifications for the Trojan Nuclear Plant

The purpose of this letter is to transmit supplemental information concerning Portland General Electric Company's (PGE) proposed permanently defueled technical specifications (PDTS) for the Trojan Nuclear Plant which were submitted to the Nuclear Regulatory Commission (NRC) on July 31, 1993. A discussion of proposed changes to the PDTS and the Commission's Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors is provided as Attachment I. Revised pages of the PDTS are provided in Attachment II.

The changes incorporated in this submittal are the result of reviews by and discussions with members of the NRC staff. These changes, which affect only Section 5 of the proposed PDTS, have been reviewed by PGE and determined not to affect the basis or conclusions of the no significant hazards consideration determination provided in the previous submittal.

Also find enclosed a certificate of service and an oath affirming the accuracy of the information provided.

Sincerely,

S. M. Quennoz
for J. E. Cross

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Attachments

Enclosures

c: Mr. Ken Perkins
Acting Regional Administrator, Region V
U. S. Nuclear Regulatory Commission

Mr. David Stewart-Smith
State of Oregon
Department of Energy

Mr. H. D. Chaney
Region V Project Manager
U. S. Nuclear Regulatory Commission

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)

PORTLAND GENERAL ELECTRIC COMPANY,)
THE CITY OF EUGENE, OREGON, AND)
PACIFIC POWER & LIGHT COMPANY)

(TROYAN NUCLEAR PLANT))

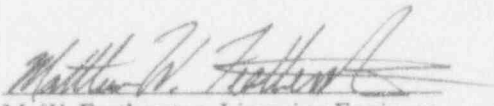
) Docket 50-344
) Possession Only License NPF-1

CERTIFICATE OF SERVICE

I hereby certify that copies of Supplemental Information Regarding the Proposed Permanently Defueled Technical Specifications for the Trojan Nuclear Plant, dated March 8, 1994, have been served on the following by hand delivery or by deposit in the United States mail, first class, this 8th day of March 1994:

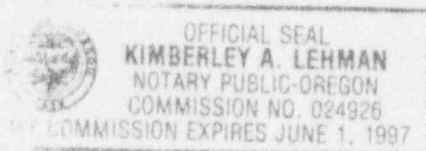
Mr. David Stewart-Smith
State of Oregon
Department of Energy
625 Marion St NE
Salem OR 97310

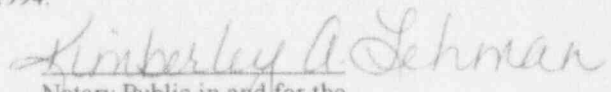
Mr. Michael J. Sykes
Chairman of County Commissioners
Columbia County Courthouse
St. Helens OR 97051


M. W. Featherston, Licensing Engineer
Nuclear Licensing Department
Technical Functions

On this day personally appeared before me M. W. Featherston, to me known to be the individual who executed the foregoing instrument, and acknowledged that he signed the same as his free act.

GIVEN under my hand and seal this 8th day of March 1994.




Notary Public in and for the
State of Oregon

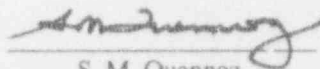
Residing at Columbia County

My commission expires 6-1-97

)
STATE OF OREGON)
)
COUNTY OF COLUMBIA)
)

I, S. M. Quennoz, being duly sworn, subscribe to and say that I am the General Manager, Trojan Plant for Portland General Electric Company, the applicant herein; that I have full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information, and belief the statements made in it are true.

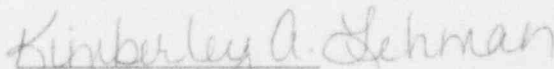
Date March 8, 1994



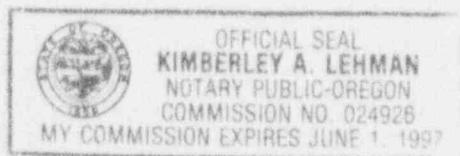
S. M. Quennoz
General Manager
Trojan Plant

On this day personally appeared before me S. M. Quennoz, to me known to be the individual who executed the foregoing instrument, and acknowledged that he signed the same as his free act.

GIVEN under my hand and seal this 8th d^y of March, 1994.



Notary Public in and for the
State of Oregon



Residing at Columbia County
My commission expires 6-1-97

Discussion of Changes

INTRODUCTION

This document is a supplement to Portland General Electric's License Change Application 234, Permanently Defueled Technical Specifications. Since the date of the submittal, two amendments to the Trojan Technical Specifications (TTS) have been approved. These two amendments include relocation of fire protection-related TTS to administrative programs and procedures, and relocation of the radiological effluent TTS to administrative programs and procedures. Additionally, the accident analyses have been updated to reflect the permanently defueled status of the plant, and the Defueled Safety Analysis Report (DSAR) has been established to reflect the current status of the plant. As described in the DSAR, there are no Design Basis Accidents which could result in a release in excess of 10 CFR 100 limits or EPA Protective Action Guidelines. The information contained in this supplement reflects these changes.

The original submittal was based on the goals and criteria specified in the interim Commission Policy Statement for Nuclear Power Reactors dated February 6, 1987. Section I of this document describes conformance of the proposed Defueled Technical Specifications submittal to the final Commission Policy Statement which was issued on July 22, 1993.

Section II of this document provides supplemental information concerning the deletion/relocation of certain existing Trojan Technical Specifications as requested during the NRC review of the previous submittal.

Section III of this document provides a summary of changes to the proposed PDTS. Attachment II to this submittal provides a revised version of the Defueled Technical Specifications incorporating changes made as a result of NRC questions/comments relative to the previous submittal.

SECTION I

PGE used NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," as the basis for the scope and format of the proposed Permanently Defueled Technical Specifications (PDTS). These improved standard technical specifications were developed to meet the goals and criteria set forth in the interim Commission Policy Statement for Nuclear Power Reactors, dated February 6, 1987. The interim Commission Policy Statement established three criteria to define the scope of equipment and parameters included in the improved technical specifications.

The NRC issued its Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors (58 FR 39132) on July 22, 1993. The Final Policy Statement established four criteria to define the scope of equipment and parameters included in the improved technical

specifications. Criteria 1 and 3 of the Final Policy Statement are identical to Criteria 1 and 3 of the interim Commission Policy Statement. Thus the scope of the proposed PDTS for Trojan meets Criteria 1 and 3 as published in the Final Policy Statement. Criterion 2 was modified in the Final Policy Statement so that in addition to process variables, it also includes active design features and operating restrictions needed to preclude unanalyzed accidents and transients. Furthermore, the Staff added a fourth criterion to capture requirements which operating experience or probabilistic safety assessment show to be significant to public health and safety. PGE has reviewed the current Technical Specifications with respect to Criterion 4 and the modified Criterion 2 and determined that no additional Limiting Conditions for Operation beyond those currently contained in the proposed PDTS are required.

SECTION II

The current Trojan Technical Specifications provide the following definition of OPERABLE - OPERABILITY:

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety-related function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electric power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its safety-related function(s) are also capable of performing their rated support function(s).

This definition is applied in the existing Trojan Technical Specifications to selected structures, systems, and components (SSCs). Other Trojan Technical Specifications (39 of 115 in Sections 3.1 through 3.12) stipulate that certain process variables and parameters be within limits, accomplishing the requirements of the specific LCOs without reliance on the definition of OPERABILITY. As can be seen from the application of the existing Trojan Technical Specifications and as discussed further below, use of the definition of OPERABILITY is neither intrinsic to nor necessary to accomplish the requirements of LCOs delineating limits on process variables and parameters. In fact, use of the defined term OPERABLE without reference to specific SSCs required to be OPERABLE in LCOs, presents the possibility for unnecessary complexity and potential confusion during application of the PDTS in the plant.

In the proposed PDTS, the LCOs do not contain a specific provision for OPERABILITY. The PDTS are structured to ensure parameters important to the safe storage of the spent nuclear fuel remain within the envelope established in the Defueled Safety Analysis Report. Specifically, the PDTS specify limits for Spent Fuel Pool temperature and level, which are designed to ensure sufficient inventory is maintained to ensure adequate decay heat removal. During normal conditions, criticality in the Spent Fuel Pool is prevented by the design of the spent fuel racks.

The proposed PDTS specify a requirement to maintain sufficient boron concentration to preclude criticality during abnormal conditions. The PDTS also specify limitations on the loads that may be lifted over the spent fuel assemblies.

These parameters constitute process variables that must be maintained within limits to ensure that the initial conditions for the Design Basis Accidents described in the Defueled Safety Analysis Report are maintained. These variables do not perform an active function preventing or mitigating a Design Basis Accident. Rather, monitoring of these parameters within limits provides assurance that operation of the facility remains bounded by the accident analyses presented in the Defueled Safety Analysis Report. If a parameter exceeds the limits specified in the proposed PDTS, the PDTS specify the actions to be taken to restore the parameter to within the PDTS specified value and the time period during which this action must be accomplished. Analysis has demonstrated that a substantial period of time exists in which actions may be taken to restore these parameters to their specified value. Because of the extensive length of time available, it was concluded that it is unnecessary to specify requirements for availability of specific active equipment that could be used to restore the parameter and that no SSCs are required to be delineated as OPERABLE in the PDTS for the purpose of mitigating an accident. Therefore, it was determined that no change to the Definitions section of the proposed PDTS is necessary.

The majority of the LCOs in Section 3/4.11, Radioactive Effluents, were relocated to the ODCM, and deleted from the TTS in License Amendment 193. TTS 3/4.11.1.4, Temporary Radwaste Storage Tanks, and TTS 3/4.11.2.6, Explosive Gas Mixture, were not deleted in License Amendment 193. TTS 3/4.11.1.4 has been replaced with a requirement for a Storage Tank Radioactivity Monitoring Program in Section 5.7.2.6 in the proposed PDTS. TTS 3/4.11.2.6 contains LCOs and Surveillance Requirements associated with a limitation on the oxygen concentration being discharged by the waste gas compressors to ensure that the concentration of potentially explosive gas mixtures contained in the waste gas treatment system is maintained below the flammability limits for a hydrogen and oxygen mixture. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the release of radioactive materials will be controlled in conformance with the requirements of General Design Criteria 60 of Appendix A to 10 CFR Part 50. The waste gas decay tanks have been vented. Therefore, there is no possibility of a radioactive release beyond the exclusion area boundary which could result in doses that would exceed 10 CFR 100 limits or EPA Evacuation Protective Action Guidelines. This requirement does not meet the screening criteria for inclusion in the improved standard technical specifications or the modified criteria used for determining the scope of the proposed PDTS. Specifically, the limitation on the oxygen concentration does not meet Criterion One since associated instrumentation does not serve to detect degradation of the integrity of the spent fuel pool. Criterion Two is not met since the parameter is not related to any of the initial conditions assumed in any design basis analyses. Criterion Three is not met since the oxygen concentration does not function to prevent or mitigate any design basis accident. This requirement does not meet Criterion 4, which involves items that are shown by operating experience or probabilistic safety assessment to be significant to public health and safety since the

waste gas system has been deactivated. Therefore, this requirement does not meet the criteria for inclusion in the proposed PDTS.

Current TTS contain an LCO prescribing operability requirements for Seismic Monitoring Instrumentation. The basis for excluding seismic instrumentation from the proposed PDTS is described in the previous PDTS submittal. As discussed in the Defueled Safety Analysis Report, the seismic instrumentation for Trojan consists of a multielement seismoscope, acceleration time-history devices and peak recording devices. The seismic instrumentation satisfies 10 CFR 100, Appendix A which requires instrumentation so that the seismic response of features important to safety can be determined promptly to permit comparison of such response with that used as the design basis. Maintenance and use of this instrumentation is governed by plant procedures.

Current TTS requires that each sealed source containing radioactive material either in excess of those quantities of byproduct material listed in 10 CFR 30.71 or $\geq 0.1 \mu\text{Ci}$ shall be free of $\geq 0.005 \mu\text{Ci}$ of removable contamination. Although as discussed in the previous submittal, this item does not meet the criteria for inclusion in the proposed PDTS, the limitation for removable contamination for these sources is being maintained in plant procedures.

SECTION III

Long Term Organization

The originally proposed PDTS contained references to long-term organization titles. These references have been removed throughout Section 5 of the proposed PDTS.

Command and Control

Provisions for designating the line of succession for the operational command and control function has been incorporated into proposed PDTS 5.1.2. The revised PDTS specifies that an operator qualified to stand watch in the Control Room be designated to perform the operational command function whenever the Shift Manager is absent from the Control Room.

Organization

A stipulation that all Shift Managers report to a CERTIFIED FUEL HANDLER has been incorporated into proposed PDTS 5.2.2.g.

Qualifications

A qualifier has been added to proposed PDTS 5.3.1 to accommodate those instances in which the PDTS impose different qualifications.

Review and Audit

Present TTS specify the review and audit functions performed by the Plant Review Board and the Trojan Nuclear Operations Board. In the proposed PDTS, the review and audit functions of these committees have been reassigned to either an Independent Safety Reviewer or a single oversight review committee referred to as the Independent Review and Audit Committee. The proposed PDTS have been modified to include sections on the Composition, Qualifications, and Responsibilities of the Independent Safety Reviewers. The proposed PDTS section describing the review responsibilities of the IRAC has been modified to reflect the fact that the committee review is an after-the-fact independent review of certain items. Proposed PDTS 5.5.3, Records, and 5.9.3, Record Retention, have been modified to require maintenance of the written records of both the Independent Safety Reviewers activities and the IRAC activities.

Procedures

This proposed PDTS requires that certain written procedures be established, implemented and maintained. One of the activities included is quality assurance for effluent and environmental monitoring. This item was modified to reflect that the requirement pertains to radiological effluent and environmental monitoring. Additionally, a requirement was added to establish, implement and maintain procedures for fire protection program implementation.

The originally proposed PDTS 5.7.1.2 contained a requirement for independent review of the safety evaluations for changes to the procedures specified in PDTS 5.7.1.1. The Independent Safety Reviewers are now required to review the safety evaluations for procedures described in the Safety Analysis Report.

Programs and Manuals

The review requirements for the Process Control Program (proposed PDTS 5.7.2.2) and the Offsite Dose Calculation Manual (proposed PDTS 5.7.2.3) were revised to reflect that review and approval by an Independent Safety Reviewer is required prior to implementation of any change to the program.

Requirements for limitations on annual and quarterly doses and operability and use of effluent treatment systems for conformance with Appendix I to 10 CFR Part 50 were inserted in the proposed PDTS for the Radioactive Effluent Controls Program. These particular requirements are presently in the TTS, and have been modified only slightly for inclusion in the proposed PDTS. Specifically, the requirements on doses due to noble gases and iodine were not included due to the limited amounts of noble gases and iodines available for release.

In proposed PDTS 5.7.2.5, the requirement for participation in an Interlaboratory Comparison Program was renumbered.

Control Building Bolts

As discussed in the previous submittal, the existing TTS LCO for the Control Building Modification Connection Bolts was determined to not meet the criteria for inclusion in the proposed PDTS. However, the requirement to establish and maintain a program to monitor the structural adequacy of the bolts has been inserted into proposed PDTS 5.7.2.9.

Reporting Requirements

A requirement was added to the proposed PDTS for the submittal of an annual radioactive effluent release report in accordance with 10 CFR 50.36a.

Subsequent to submittal of the proposed PDTS, a revision to 10 CFR Part 20 became effective. Throughout Section 5, references to 10 CFR Part 20 were updated to reflect the current Part 20. The affected PDTS sections are 5.7.2.3.2, 5.7.2.4, 5.8.1.1 and 5.10.1.

Document Control Desk
Attachment II to VPN-009-94
March 8, 1994
78 Pages

Proposed

PDTS

Pages