Portland General Electric Company

January 13, 1981

Trojan Nuclear Plant
Docket 50-344
License NPF-1
License Change Application 63

Director of Nuclear Reactor Regulation
ATTN: Mr. Robert A. Clark, Chief
Operating Reactors Branch No. 3
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir:

In support of License Change Application 63, submitted on July 22, 1980, regarding changes to the Trojan Nuclear Plant Environmental Technical Specifications, attached is additional clarifying information. Although the primary basis for LCA 63 was a recent Atomic Safety and Licensing Board decision in the Yellow Creek Nuclear Plant Hearings (ALAB-515), it was felt prudent to request deletion of various other portions of the Environmental Technical Specifications due to having satisfied the commitments and requirements of the Final Environmental Statement (FES) related to operation of the Trojan Nuclear Power Plant dated August 1973.

The environmental monitoring programs for Trojan have been in effect since 1974 (6 years). During this time an adequate data base has been established to show that there has been no detectable impact on the environment due to the operation of the Trojan Nuclear Plant. As a matter of fact, in some cases, the monitoring program has had a greater impact than the operation of the Plant.

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121 S.W. Salmon Street, Portland, Oregon 97204

This information should provide you with the additional bases needed to process LCA 63. If you have further questions, please do not hesitate to contact us.

Sincerely,

B D Withers

Bart D. Withers
Vice President
Nuclear

Attachment

c: Mr. Lynn Frank, Director
State of Oregon
Department of Energy

ADDITIONAL BASES FOR MODIFICATION OF
TROJAN ENVIRONMENTAL TECHNICAL SPECIFICATIONS (ETS)

(Appendix B - Facility Operating License NPF-1)

A. 3.0 Design Features and Operating Practices

This chapter consists of the following sections:

3.1 Intake System
3.2 Discharge System
3.3 Cooling Tower
3.4 Chemical Usage
3.5 Intake Velocity
3.6 Land Management

Sections 3.1, 3.2, 3.4 and 3.5 are all related to water quality and the Yellow Creek decision (ALAB-515). Therefore, the basis for deleting these sections is the same established in LCA 63 for deleting the other specifications concerning water quality.

Although Sections 3.3 and 3.6 are not water quality-related, their inclusion in the ETS is improper for the following reasons:

1) These design features and operating practices are more accurately described in the Trojan FSAR and Environmental Report as well as the NRC Final Environmental Statement. Their inclusion in the ETS is meaningless and inappropriate.

2) They are not Limiting Conditions for Operation or Surveillance Requirements. As a result, their purpose in the ETS is ambiguous, that is, it is not clear how these Technical Specifications are violated and what should happen if they are violated.

3) These sections have no bearing upon or relation to Plant operation. Furthermore, they cannot be controlled or even affected by Plant operation.

Retaining these sections in the ETS will continue to create confusion and hinder efficient interpretation of the Technical Specifications and effective operation of the Plant. It is recommended they be deleted.

B. 4.1.2 Terrestrial Program

This section consists of the following subsections:

4.1.2.3.1 Vegetation
4.1.2.3.2 Birds
4.1.2.3.3 Small Mammals
4.1.2.3.4 Large Mammals
4.1.2.3.5 Reptiles, Amphibians, and Small Mammals

The primary objective of the Trojan Terrestrial Monitoring Program is to assess the effects of operation of the Plant including the cooling tower vapor plume on the surrounding environment. Inasmuch as environmental monitoring activities have been conducted since 1974, and are documented in Topical Reports PGE-1009-74 through PGE-1009-79 (Annual Environmental Report, NonRadiological) and PGE-1015-76 through PGE 1015-79 (Annual Report), these Technical Specifications are requested to be deleted for the following reasons:

4.1.2.3.1 Vegetation

Vegetation study plots have been established near the Trojan Nuclear Plant and in control areas to monitor species composition, tree dominance, and forest productivity. No significant changes have occurred in tree size and density or vegetation species composition in any of the study plots. Signs of human disturbance were evident from decreased density of herb groundcover, but no impacts from cooling tower discharge were observed. Forest productivity as measured by litterfall deposition during years of power plant operation has been similar to preoperational results; the impact of Plant operation is negligible.

To directly measure salt deposition from cooling tower vapor in the Trojan Nuclear Power Plant area, local precipitation samples from various stations and live leaves were chemically analyzed. Total deposition of the chemical parameters measured in 1976 to 1979 are similar in magnitude to preoperational results measured in 1974 to 1975. Deposition at Station 6, located near the base of the cooling tower, was higher than the average deposition at the other stations when Trojan was operational. No impacts which could be attributed to Trojan Nuclear Plant operation, however, were measured at the other locations. Leaf chemical composition also compared similarly during the period 1974 to 1979, but with a high degree of natural variation in both Trojan and control areas.

4.1.2.3.2 Birds

Bird densities, diversities, and community composition in the Trojan region compare similarly from year to year since studies were initiated in 1974. These data indicate no impact from the operation of the Trojan Nuclear Power Plant. Bird mortalities due to collision with various Trojan structures has been extremely low and poses no threat to local bird populations.

4.1.2.3.3 Small Mammals

Small mammal live trap results for 1974 to 1979 indicate similar species composition in patterns of seasonal abundance. No evidence of cooling tower plume influence is apparent from these data. Stomach analyses of mice indicate an opportunistic feeding behavior and show no relationship to Trojan Nuclear Power Plant operation.

4.1.2.3.4 Large Mammals

Large mammal surveys have been conducted in the Trojan region since 1974. General species composition and relative abundance of large mammals has not significantly changed, indicating no adverse effects from Trojan Nuclear Plant operation.

4.1.2.3.5 Reptiles, Amphibians, and Small Mammals

In 1975 drift fence pit traps were established in various Trojan and control areas to monitor the species composition and relative abundance of reptiles and small mammals (particularly insectivores). Annual comparisons indicate no change in reptile composition or relative abundance. Small mammal species composition has not significantly changed, but the abundance of insectivores has substantially decreased. This can be directly attributed to the monitoring method involved. Small mammal captures and pit traps almost always result in death; therefore, this monitoring activity may have a greater impact on small mammals (especially insectivores) than the Trojan Nuclear Power Plant operation. It has not been shown that the operation of the cooling tower has detectable effects on reptiles, amphibians, or small mammals.

Upon comparison of the requirements of the final Environmental Statement related to operation of the Trojan Nuclear Plant, it is felt that all monitoring programs have been satisfactorily carried out in regard to the Terrestrial Program and there has been no environmental impact attributable to operation of the Trojan Nuclear Plant. Continuation of this program is felt to only have a greater impact upon the terrestrial aspect of the environment than the actual operation of the Trojan Nuclear Plant. Therefore, Section 4.1.2, Terrestrial Program, should be deleted.