



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 23, 1996

50-344
72-17

Mr. Stephen M. Quennoz, Trojan Site Executive
Portland General Electric Company
71760 Columbia River Highway
Rainier, Oregon 97048

SUBJECT: FINAL SURVEY PLAN FOR THE TROJAN INDEPENDENT SPENT FUEL STORAGE
INSTALLATION (TAC NO. L22102)

Dear Mr. Quennoz:

By letter dated April 9, 1996, Portland General Electric Company (PGE) submitted its Final Survey Plan for the proposed Trojan Independent Spent Fuel Storage Installation (ISFSI). On August 13, 1996, PGE responded to the staff's request for additional information dated July 16, 1996. Additionally, in August 1996, the staff completed an inspection regarding your final survey activities (Inspection Report Nos. 50-344/96-07; 72-17/96-01), to verify compliance with the requirements of 10 CFR 50.82.

The staff has completed its review of the PGE Final Survey Plan for the Trojan ISFSI. In general, the staff agrees with the approach taken by PGE. However, as you are aware, the Nuclear Regulatory Commission does not require that a final survey plan be approved prior to implementing final survey activities, as, in fact, was the case for the proposed Trojan ISFSI. The purpose of reviewing and resolving comments on a final survey plan is to provide a licensee with a certain level of assurance that its survey approach is acceptable and to reduce potential schedule delays since it is always possible that additional survey work could be required.

The release of a site or site area is contingent upon review and approval of the final survey report, which essentially is the report of the implementation of the Plan. Even if the Plan had been reviewed and approved (all comments resolved), this does not necessarily ensure that the final survey report will be approved. Indeed, the implementation of the Plan and the subsequent data analysis may indicate additional survey work is necessary.

Enclosed are additional comments, which should be considered as NRC guidance, on the PGE Final Survey Plan. PGE is not required to respond to these comments by modifying the Plan. Rather, PGE should ensure that these comments are incorporated into the Final Survey Report prior to submittal to the NRC.

The staff reserves the right to comment on the final survey activities conducted at the Trojan ISFSI site as delineated in the Final Survey Report. The NRC recommends that PGE submit the Final Survey Report for the Trojan ISFSI site as soon as practicable since approval of the Report

9610250226 961023
PDR ADOCK 05000344
Y PDR

NRC FILE CENTER COPY

11
NFC 7

determines the acceptability of the release of the Trojan ISFSI site. Insofar as the NRC has not released this portion of PGE's site, you are advised that Trojan ISFSI construction activities could proceed at your risk, at least in relation to final survey activities. However, the staff would like to remind PGE of the requirements cited at 10 CFR Sections 72.34 and 72.40(b and c) regarding the environmental review for the ISFSI site.

Moreover, PGE should not construe in any way that the acceptance of the ISFSI Final Survey Plan and Report constitutes approval of the Final Survey Plan or Report for the Trojan Nuclear Plant facility and site. The Trojan ISFSI comprises a small portion of the Trojan site, and the contamination potential for this area is anticipated to be low and primarily unaffected, although the Radwaste Building site area may be a notable exception. PGE must submit a new Final Survey Plan and subsequent Final Survey Report for the Trojan Nuclear Plant facility and site.

TAC No. L22102 will remain open for future activities related to the review of the Final Survey Report regarding the Trojan ISFSI site. As such, PGE should continue to reference this TAC No. on any future correspondence related to the Trojan ISFSI Final Survey Plan and Report.

If PGE would like to discuss this further, please contact me at (301) 415-1309.

Sincerely,

Original signed by /s/

Lawrence E. Kokajko, Senior Project Manager
Spent Fuel Licensing Section
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Dockets 72-17 (50-344)

Enclosure: NRC Comments

cc: Mr. John Stokley, SAIC
Service List

Distribution: (Control No. 010S)

Dockets 72-17, 50-344

PUBLIC

NRC File Center

NMSS r/f

SFPO r/f

VTharpe

FSturz

CHaughney

WDTravers

MMasnik, NRR

VEverett, RIV

OFC	SFPO	DWM	DWM	SFPO
NAME	LKokajko:dd	CPittiglio	DMoser	EJLeeds
DATE	10/ /96	10/15/96	10/ /96	10/22/96

C = COVER

E = COVER & ENCLOSURE

N = NO COPY

OFFICIAL RECORD COPY

G:\LEK\FSP.TNP

cc:

Mr. Michael J. Sykes, Chairman
Board of County Commissioners
Columbia County
St. Helens, OR 97501

Mr. David Stewart-Smith
Oregon Department of Energy
Salem, OR 97310

Regional Administrator, Region IV
U. S. Nuclear Regulatory Commission
Harris Tower and Pavillion
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Mr. Harold Chernoff
Manager, Licensing
Trojan Nuclear Plant
71760 Columbia River Highway
Ranier, OR 97048

Mr. Lloyd K. Marbet
19142 S.E. Bakers Ferry Road
Boring, OR 97009

Mr. Jerry Wilson
Do It Yourself Committee
570 N.E. 53rd
Hillsboro, OR 97124

Mr. Eugene Rosolie
Northwest Environmental Advocates
302 Haseltine Building
133 S.W. 2nd Avenue
Portland, OR 97204

U.S. NUCLEAR REGULATORY COMMISSION COMMENTS
ON PORTLAND GENERAL ELECTRIC COMPANY'S
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING THE
TROJAN ISFSI FINAL SURVEY PLAN (PLAN)

NRC Comment No. 1:

It is not necessary to remove the commitment from the Plan to take confirmatory soil samples in the open land areas north and east of the Industrial Area fence line. The explanation provided as to their purpose satisfies the NRC staff inquiry.

Revision of the Plan to remove the Maintenance Building, Materials Warehouse, and the Materials Covered Storage from the survey design is acceptable provided that the final survey of these buildings will be conducted in compliance with survey commitments when decommissioning the remaining site.

NRC Comment No. 2:

The requirement that open area survey measurements are "averaged over areas not to exceed 100 m²" also applies to soil concentration. This requirement should be reflected in the final survey. The licensee is reminded that this averaging requirement refers to the 100 m² contiguous area surrounding an elevated sample, and this area may not correspond to the established 10m x 10m grid pattern imposed on the survey area.

NRC Comment No. 3:

NRC staff continues to caution the licensee from using the release values listed in NUREG-1500, particularly regarding uranium and thorium soil guideline limits. These values are still being revised and the schedule for final publication is uncertain.

NRC Comment No. 4:

This comment required that the radionuclide contaminants be clearly identified. In response to our comments, the Plan has been revised identifying Co-60 and Cs-137 as the primary contaminants. Is Sr-90 a potential contaminant? Will the survey address hard to detect radionuclides? Are there other potential radiological contaminants?

ENCLOSURE

PGEs' response to comment no. 4 states, "Alpha activity should not be a consideration in any unaffected areas since the radiological history of Trojan show alpha activity, when present, is associated with detectable beta and/or gamma radionuclides." This statement is not sufficient in justifying why the final survey will not include survey measurements for alpha activity in unaffected areas. The Plan also states, "Since TNP experienced events of fuel failure, the alpha contamination limits in Table 3.1 are applicable." The limits in Table 3.1 apply to both affected and unaffected areas. Affected and unaffected areas differ by the frequency of measurements taken per survey area. The radiation type (i.e., alpha, beta, or gamma) and the measurement technique (i.e., scan, direct, soil, etc.) performed should be the same for affected and unaffected areas.

As stated in the original comment, PGE should identify and document potential radiological contaminants that are to be addressed in the survey, including alpha emitting radionuclides. Identification of potential radiocontaminants is necessary to determine applicable release limits and to evaluate the survey data.

Justification supported by data (i.e., operational history, characterization data) should be provided explaining why potential radiological contaminants other than Co-60 and Cs-137 are not included in the final survey.

NRC Comment No. 5:

The licensee response to this comment states, "The expected MDAs for our alpha counting systems are greater than 25% of the applicable release limits." Which release limits are applicable to this site? Table 3.1 lists three different release limits for alpha emitting radionuclides (i.e., 5000 dpm/100 cm² for natural uranium, 100 dpm/100 cm² for transuranics, and 1000 dpm/100 cm² for natural thorium). As stated in comment no. 4, identification of potential radiocontaminants is necessary to determine applicable release limits and to evaluate appropriate instrumentation MDA.

If recommended survey instrumentation MDAs are not obtainable for radiological emissions of concern, the licensee should address how elevated areas of activity will be detected with an acceptable level of confidence.

Estimations of the MDA and the corresponding critical level for all survey measurements are necessary to evaluate the survey data in relation to background and appropriate release limits. Illustrate the MDA calculation for each survey measurement type and indicate which survey measurements exceed the critical level.

NRC Comment No. 8:

Does Section 3.6.4 imply that approximately 10% of the survey measurements will be re-analysed as part of Independent Quality Checking?

NRC Comment No. 13:

As stated above, affected and unaffected areas differ by survey frequency; the same surveys conducted in affected areas should be conducted in unaffected areas at a lower frequency.