



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

OCT 12 1990

Docket No. 50-344

James E. Cross  
Vice President, Nuclear  
Portland General Electric Company  
121 S.W. Salmon Street, TB-17  
Portland, Oregon 97204

Dear Mr. Cross:

SUBJECT: ELECTRICAL DISTRIBUTION SYSTEM FUNCTIONAL INSPECTION  
OF THE TROJAN NUCLEAR PLANT (REPORT NUMBER 50-344/90-200)

We are forwarding the report of a special electrical distribution system functional inspection (EDSFI) performed on July 23 through August 31, 1990, involving activities authorized by Operating License No. NPF-1 for the Trojan Nuclear Plant. The U.S. Nuclear Regulatory Commission (NRC) staff from the Special Inspection Branch of the Office of Nuclear Reactor Regulation conducted the inspection. An exit meeting was held on August 31, 1990, during which we discussed the team's findings with you and other members of your staff.

The enclosed copy of our inspection report identifies the areas examined during the inspection. The inspection team assessed the design, implementation, and engineering and technical support of the electrical distribution system. The inspection consisted of a selective review of design calculations, relevant procedures, representative records, installed equipment, and interviews with engineering and technical support staff.

In general, the team considered the design and implementation of the electrical distribution system at Trojan to be acceptable and the electrical distribution system to be functional under all design conditions. The engineering and technical support provided by your Nuclear Plant Engineering group to site organizations was also generally adequate. However, the team did identify several deficiencies, which are discussed in detail in the enclosed inspection report, within the systems and programs it reviewed.

The team concluded from its findings that certain areas require additional PGE attention. These areas are:

1. a lack of attention to detail in engineering work as exemplified by omissions, errors, and incorrect values in short-circuit and cable sizing calculations, and the collection of motor polarization index and fuel oil specific gravity data by plant personnel without acceptance criteria or subsequent engineering evaluation,

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James E. Cross

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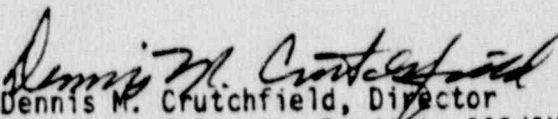
2. a lack of rigor by engineering and other plant personnel in determining the scope of problems and in fully resolving problems as exemplified by the failure to identify overfilled conduit and the significance of overfilled control cable tray, and the failure to evaluate past test data with respect to newly developed test criteria for circuit breakers, and
3. weaknesses in the temporary modification program, including temporary modifications installed for more than two years and no time limit on obtaining plant safety board review.

The inspection findings indicate that certain activities apparently were not conducted in full compliance with NRC requirements. The unresolved items described in the enclosed inspection report will be reviewed by the NRC's Region V office and any subsequent enforcement actions will be taken by Region V.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Please inform Region V, in writing within 60 days, of your corrective actions for the deficiencies identified in the report and your schedule for implementing the corrective actions. Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

  
Dennis M. Crutchfield, Director  
Division of Reactor Projects III/IV/V  
and Special Projects  
Office of Nuclear Reactor Regulation

Enclosure:  
Inspection Report 50-344/90-200

cc: See page 3



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James E. Cross

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Original signed by

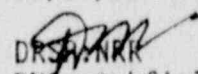
Dennis M. Crutchfield, Director  
 Division of Reactor Projects III/IV/V  
 and Special Projects  
 Office of Nuclear Reactor Regulation

Enclosure:  
 Inspection Report 50-344/90-200

cc: See page 3

Distribution: See page 4

\*See previous concurrence

RSIB:DRIS	RSIB:DRIS	RV	RV	RV
SRStein*:bt	GEGarten*	DGAcker*	FGee*	RACaldwell*
10/11/90	10/11/90	10/11/90	10/11/90	10/11/90
RIII	SC:RSIB:DRIS	C:RSIB:DRIS	D:DRIS	DR: 
JHNeisler*	RAGramm*	WDLanning*	BKGrimes*	DMCrutchfield*
10/11/90	10/11/90	10/11/90	10/11/90	10/12/90

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Mr. James E. Cross  
Portland General Electric Company

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Trojan Nuclear Plant

cc:

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U.S. Nuclear Regulatory Commission  
Trojan Nuclear Plant  
Post Office Box 0  
Rainier, Oregon 97048

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Board of County Commissioners  
Columbia County  
St. Helens, Oregon 97501

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Salem, Oregon 97310

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Distribution:

Docket Files 50-344

RS1B R/F

DRIS R/F

TEMurley, NRR

FJMiraglia, NRR

WTRussell, NRR

JGPartlow, NRR

BKGrimes, NRR

BDLiaw, NRR

WDLanning, NRR

SRStein, NRR

RAGramm, NRR

RLSpessard, AEOD

DMCrutchfield, NRR

JEDyer, NRR

RBBevan, NRR

DJFoster, NRR

SARichards, RV

RCBarr, SRI Trojan

Regional Administrators

Regional Division Directors

Inspection Team

LPDR

PDR

ACRS (3)

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IS Distribution