March 21, 1985

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PKreutzer HThompson

Docket No. 50-344

Mr. Bart D. Withers Vice President, Nuclear Portland General Electric Company 121 S.W. Salmon Street Portland, Oregon 97204

Dear Mr. Withers:

SUBJECT: CERTIFICATION OF POLLUTION CONTROL FACILITIES FOR THE TROJAN NUCLEAR PLANT

By letter dated January 17, 1985, Portland General Electric Company (PGE) requested that our office issue a Certification of Pollution Control Facilities for certain facilities at the Trojan Nuclear Plant described in the enclosed exhibit (Exhibit A).

The NRC staff has reviewed the request of January 17, 1985. Based on that review, we are satisfied that the portions of the Trojan Nuclear Plant for which PGE has requested certification are in furtherance of the purpose of abating or controlling atmospheric pollutants or contaminants or water pollutants resulting from the generation of electricity at the Trojan Nuclear Plant. Accordingly, the enclosed certificate has been executed.

A copy of PGE's request and this response will be available for inspection at the local public document room located at the Multnomah County Library, 801 S.W. 10th Avenue, Portland, Oregon 97205, and at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D.C. 20555.

Sincerely,

Original signed by Darrell G. Eisenhut

W Harold R. Denton, Director Office of Nuclear Reactor Regulation

Enclosure: Certificate

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cc w/enclosures See next page

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Portland General Electric Company

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Senior Resident Inspector U.S. Nuclear Regulatory Commission Trojan Nuclear Plant Post Office Box O Rainier, Oregon 97048

Robert M. Hunt, Chairman Board of County Commissioners Columbia County St. Helens, Oregon 97501

William T. Dixon Oregon Department of Energy Labor and Industries Building Room 111 Salem, Oregon 97310

Mr. T. R. Strong, Head Radiation Control Section Mail Stop LF-13 Department of Social and Health Services State of Washington Olympia, Washington 98504

Regional Administrator Nuclear Regulatory Commission Region V Office of Executive Director for Operations 1450 Maria Lane, Suite 210 Walnut Creek, California 94596

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CERTIFICATE

TROJAN NUCLEAR PLANT

POLLUTION CONTROL FACILITIES

The Nuclear Regulatory Commission (NRC) hereby certifies as follows:

- (a) that it has examined Exhibit A attached hereto which is entitled "General Description of the Facilities" and which describes certain facilities which have been constructed, and are under construction or are to be constructed at the Trojan Nuclear Plant, a nuclear electric power generating plant located in Columbia County, Oregon, undivided interests in which plant are owned by Portland General Electric Company (67.5%), Eugene Water and Electric (30%) and Pacificorp (formerly Pacific Power & Light Company) (2.5%).
- (b) that such facilities, as designed, are in furtherance of the purpose of abating or controlling atmospheric pollutants or contaminants or water pollutants resulting from the generation of electricity at the Trojan Nuclear Plant.

For the Nuclear Regulatory Commission

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Harold R. Denton, Director Office of Nuclear Reactor Regulation

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Dated at Washington, D. C. this 21st day of March, 1985.

EXHIBIT A

GENERAL DESCRIPTION OF THE FACILITIES

The facilities consist of the following systems at the Plant and, in each case, include related machinery, equipment and related facilities:

Sanitary Drainage and Treatment Systems. The sanitary drainage and treatment system collects, transports, treats, clarifies, and disposes of wastewater. The system includes sewage lift stations, a package sewage treatment plant, chlorine contact chamber, sumps, pumps, piping, valves, controls, and instrumentation.

<u>Oily Waste and Nonradioactive Waste Systems</u>. The oily and nonradioactive waste system at the Plant collects for processing and disposal, nonradioactive waste from normally nonradioactive areas where oil may be present. The system may include drains, sumps, oil/water separators, and a settling pond.

<u>Chemical Waste Systems</u>. The chemical waste system for the Plant consists of subsystems that collect chemical wastes from various areas of the Plant, neutralize the chemicals in such wastes and/or transfer such wastes to the neutralizing tank for discharge. Each system may include drains, sumps, a neutralizing tank, and related piping.

<u>Settling Ponds</u>. The settling ponds collect and dispose of yard drainage to prevent discharge of sedimentation to the Columbia River.

<u>Gaseous Radwaste Systems</u>. The gaseous radwaste systems for the Plant collect and process potentially radioactive gases generated within the unit so that offsite exposure is kept as low as reasonably achievable (ALARA). These systems include a system to process high activity gas containing primarily hydrogen and nitrogen which is collected and stored in an oxygen-free environment to guard against a rapid hydrogen/oxygen reaction and to permit decay of short-lived isotopes prior to release to the environment. The system includes a surge tank, waste gas compressors and decay tanks, filters and flow control valve and related radiation monitoring equipment. The low activity processing portion of the gaseous radwaste system includes the vent collection header and related equipment.

Solid Radwaste Systems. The solid radwaste system for the Plant collects and processes radioactive waste consisting of trash, spent ion exchange resins, waste evaporator concentrates, used filter cartridges, contaminated steam generator blowdown demineralizer resins and contaminated condensate polishing demineralizer resins. Wastes are processed by collection, compaction, or solidification, if necessary, and are stored onsite prior to shipment offsite. The system includes filter handling machines, various waste feed tanks, and various solidification equipment. The system provides for decontamination, swiping, and placement of solidified waste containers in a controlled storage location onsite. The system also includes related radiation monitoring equipment.

EXHIBIT A

Liquid Radwaste Systems. The liquid radwaste systems for the Plant collect, store, and process radioactive or potentially radioactive waste fluids from various areas of the Plant. Such waste fluids are processed by holdup, filtration, ion exchange and evaporation. The waste is sampled and analyzed prior to discharge to assure releases are ALARA. The system also includes related radiation monitoring equipment.

Steam Generator Blowdown Processing System. The steam generator blowdown processing system functions to eliminate chemical and radioactive materials before dilution with the service water and discharge. If a leak should develop in a steam generator, system effluent can be processed through a series of demineralizers prior to discharge or recycled to the main condenser or released directly to the environment. The demineralizers are also used to process radioactive waste from the Liquid Radwaste Systems prior to discharge.

The processing portion of the system which is being claimed for bonding consists of demineralizers, a filter, related mechanical equipment, and instrumentation that provides process-related information used to assess system performance.

Boron Recycle System. The boron recycle system receives and recycles reactor coolant effluent for reuse of the boric acid and makeup water. The system decontaminates the effluent by means of filtration, demineralization and gas stripping and uses evaporation to separate and recover the boric acid and makeup water, thus, reducing the required discharge of boric acid and radioactive effluents.

Auxiliary and Fuel Buildings. The Auxiliary and Fuel Buildings, including the Fuel Building Annex, house the systems used for the processing of liquid, solid and gaseous radioactive wastes generated and is functionally related and subordinate to such systems. The portions of the buildings being claimed are those which are provided for the gaseous, liquid, and solid radwaste facilities.

Filtration Equipment. The air filtration equipment for the Plant collects and removes contaminants from gases prior to discharge to the environment in order to maintain offsite exposure ALARA. Each system includes high efficiency particulate air filter banks and related mechanical equipment and ducting and in some cases, charcoal absorbers.

<u>Closed Loop Cooling Systems</u>. The closed loop cooling system includes the circulating water system, related chemical treatment system, and the cooling tower. This system removes heat from equipment used in the Plant and ensures that thermal discharges from the site are minimized. Heated water in the circulating water system is recirculated through a natural draft cooling tower where it is cooled and returned for use as equipment cooling water. The systems being claimed are those beyond which would otherwise be required for once-through cooling.

EXHIBIT A

Effluent Collection, Treatment and Disposal Facilities. The National Pollutant Discharge Elimination System ("NPDES") Guidelines issued pursuant to the Federal Water Pollution Control Act limit the discharge of pollutants. Facilities installed to collect and treat liquids from various sources include settling basin dechlorination facility systems and sediment retention pond systems.

Spent Fuel Pool Reracking. When the Plant was designed, it was assumed that spent fuel assemblies would be stored for short periods of time onsite prior to shipment for reprocessing: As there are currently no reprocessing facilities in operation or permanent disposal sites available, and none planned in the near future, all spent fuel assemblies must be stored onsite. The existing pool is being reracked to increase its capacity to store spent fuel until a USDOE repository becomes available using high density racks with neutron absorbing material.

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