

AMENDMENT NO. 3 TO
THERMAL POWER PLANT
SITE CERTIFICATION AGREEMENT

for the

BOARDMAN SITE

between

The State of Oregon

and

PORTLAND GENERAL ELECTRIC COMPANY

1. The Boardman Site Certification Agreement ("Agreement") was executed by Portland General Electric Company ("PGE") and the State of Oregon ("State") on March 24, 1975. The Agreement authorizes PGE to construct a 550 megawatt coal-fired thermal power plant and certain associated facilities at its Boardman site in Morrow County, Oregon.

2. Amendments No. 1 and 2 to the Agreement were executed on August 30, 1977, and February 13, 1978, respectively. PGE and the State wish to further amend the Agreement to establish a program for evaluating the radiological impacts upon the environment of coal ash generated by operation of the plant.

3. An evaluative program agreed to by PGE and the Oregon Department of Energy has been reviewed by the Energy Facility Siting Council, and it agrees that an amendment to the Agreement should be executed.

In consideration of the foregoing, it is agreed by PGE and the State that:

Section IV.E.4 of the Agreement is amended to provide a subsection (b) thereof, which shall read as follows:

"(b) PGE will implement a program to evaluate the radiological impacts of coal ash on the environment. This program shall consist of the following:

"(1) Annual measurement of external gamma dose and radon daughter concentrations in air shall be conducted while the ash disposal site is being operated, along with quarterly gamma spectrometric analysis of a composite sample of the ash deposited during that calendar quarter. The results of these measurements shall be reported annually to the Department within 90 days after the end of the calendar year.

"(2) Prior to unrestricted use of the site, the ash pile shall be stabilized in accordance with the applicable rules and regulations of the Oregon Department of Environmental Quality and the external gamma dose and radon emanation rate from the stabilized pile shall be measured and reported to the Department.

"(3) Offsite radiation doses from stack emissions shall be evaluated and reported annually by PGE to the Department within 90 days after the end of the calendar year, based on the following relationship:

$$"D = R (C_t K_t + C_u K_u)$$

"where

"D = Annual whole body dose, mrem/yr

"R = Annual ash release from stack, g/yr

"C_u = Annual average concentration of U-238
in ash, pCi/g

"C_t = Annual average concentration of Th-232
in ash, pCi/g

"K_u = Dose conversion factor for U-238,
1.3 x 10⁻¹⁰ mrem/pCi

"K_t = Dose conversion factor for Th-232,
5.3 x 10⁻¹¹ mrem/pCi"

IN WITNESS WHEREOF, this Amendment No. 3 to the Boardman Site Certification Agreement has been executed by the Chairman of the Energy Facility Siting Council of the State of Oregon and Portland General Electric Company, as below subscribed this 1 day of August, 1979.

STATE OF OREGON
ENERGY FACILITY SITING COUNCIL

By William R. Tisted
Chairman

PORTLAND GENERAL ELECTRIC COMPANY

By Rosert H. Shurt
President

Attest: Wanda Beckings
Secretary