

Docket No. 50-18
DEL:ERF

SEP 9 1965

General Electric Company
Atomic Products Division
P. O. Box 254
San Jose, California

Attention: Mr. E. W. O'Rourke

Gentlemen:

Transmitted herewith is Amendment No. 18 to Facility License No. DPR-1 authorizing General Electric to possess but not to operate the retired Vallecitos Boiling Water Reactor in the condition described in the "Final Report on Deactivation of Vallecitos Boiling Water Reactor" dated February 5, 1965. A copy of the notice of issuance which has been filed with the Office of the Federal Register and the related Safety Evaluation are also attached.

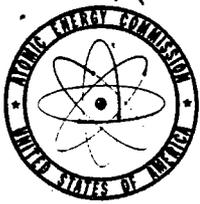
bcc: E. G. Case, DRL
C. L. Henderson, REG
N. Stoner, DRL
H. K. Shapar, OGC
L. Kornblith, Jr., CO (2)
Doc. Room - ~~Formal~~
Suppl. 
DRL Reading
T&PRSB Reading
F. W. Karas, DRL

Sincerely yours,

Director
Division of Reactor Licensing

Enclosures:
As stated above

OFFICE ▶	DRL <i>ERF</i>	DRL <i>RC</i>	OGC <i>OGC</i>	DRL <i>SL</i>	DRL	DRL
SURNAME ▶	ERFleury:rab	RCDeYoung	<i>OGC</i>	SLvine	ECCase	RLDoan
DATE ▶	9/1/65	9/3/65	9/7/65	9/1/65	9/1/65	9/9/65



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

GENERAL ELECTRIC COMPANY

DOCKET NO. 50-18

License No. DPR-1
Amendment No. 18

License No. DPR-1 is amended in its entirety to read as follows:

1. This license applies to the nuclear reactor designated by the General Electric Company as the "Vallecitos Boiling Water Reactor" (hereinafter referred to as "the facility") which is owned by the Company and located in its Vallecitos Atomic Laboratory at Alameda County, California, and for which Construction Permit No. CPPR-3 was issued by the Commission on May 14, 1956.
2. The Commission has found that:
 - a. The application for amendment complies with the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations set forth in Title 10, Chapter 1, CFR;
 - b. The issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - c. Prior public notice of proposed issuance of this amendment is not required since the amendment does not involve significant hazards considerations different from those previously evaluated; and
 - d. There is reasonable assurance that the reactor can be possessed at the designated location without endangering the health and safety of the public.
3. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses General Electric:
 - a. Pursuant to Section 104 b of the Act and Title 10, CFR, Chapter 1, Part 50, "Licensing of Production and Utilization Facilities", to possess, but not to operate, the facility in the condition described in the Final Report on Deactivation of Vallecitos Boiling Water Reactor dated February 5, 1965.

- b. Pursuant to the Act and Title 10, CFR, Chapter 1, Part 30, "Licensing of Byproduct Material", to possess, but not to separate, such byproduct material as may be contained in the structural parts of the facility.
4. Pursuant to the Act and Title 10, CFR, Chapter 1, Part 20, "Standards for Protection Against Radiation", General Electric is exempted from the requirements of Section 20.203 (c) (2) for a visible or audible control device in high radiation areas of the VBWR provided that an audible control device is maintained on the doors to the containment building.
5. This license shall be deemed to contain and be subject to all applicable provisions of the Act and rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

- a. General Electric shall not reactivate the facility without prior approval of the Commission.
- b. General Electric shall not dispose of the facility or the property occupied by the facility without prior approval of the Commission, except that General Electric may dispose of any component parts or devices from the VBWR facility in accordance with the provisions of 10 CFR Part 20.

c. Records

In addition to those required by applicable AEC regulations, including Section 20.401 of 10 CFR 20, General Electric shall keep the following records:

- (1) Records of annual inspections of the deactivated facility, including the results of surveys of radioactivity levels.
- (2) Records showing radioactivity released or discharged into the air or water beyond the effective control of General Electric as measured at the point of such release or discharge.

d. Reports

In addition to those required by applicable AEC regulations, General Electric shall submit the following reports:

- (1) A report of any indication or occurrence of a possible unsafe condition relating to the facility or to the public. For each occurrence, General Electric shall promptly notify by telephone or telegraph the Director of the appropriate AEC Regional Compliance Office listed in Appendix D of 10 CFR 20 and shall submit within 10 days a report in writing to the Director, Division of Reactor Licensing, with a copy to the Regional Compliance Office.

- (2) An annual report of the status of the deactivated facility, including the results of the surveys of radioactivity levels. The first such report shall be submitted to the Director, Division of Reactor Licensing on February 15, 1966, and succeeding reports within 60 days after each annual inspection is completed.
6. This license is effective as of the date of issuance and shall expire at midnight, May 14, 1973, unless extended for good cause shown.

FOR THE ATOMIC ENERGY COMMISSION

Director
Division of Reactor Licensing

Original Signed By
R.L. Doan

Date of Issuance: SEP 9 1965

SAFETY EVALUATION BY THE TEST & POWER REACTOR SAFETY BRANCH

DIVISION OF REACTOR LICENSING

DEACTIVATION OF THE VALLECITOS BOILING WATER REACTOR

DOCKET NO. 50-18

INTRODUCTION

By letter dated February 9, 1965, the General Electric Company submitted Amendment No. 52 to the license application for the VBWR which includes (1) the final report on deactivation of the VBWR, and (2) a request that the existing license DPR-1 be amended to authorize General Electric to possess, but not to operate, the VBWR. The reactor was shutdown on December 9, 1963, for an extended period of time and was subsequently deactivated.

DEACTIVATION

All fuel has been removed from the reactor and transferred from the facility. In addition, much of the equipment used in operation of the reactor (for example: nuclear instrumentation, control rod drives, pumps, etc.) has been removed to storage or has been transferred to other facilities. Contamination in the containment building has been reduced by cleanup and painting, and keylocks have been installed on the outer airlock doors to prevent uncontrolled entry. Microswitches on these doors actuate alarms locally and in the EVESR control room when the doors are opened. A 1½ inch vent line with a high efficiency filter has been installed in a containment penetration to permit the containment to "breathe". All lines capable of supplying water or air to the containment building have been cut and capped except for the reactor cleanup to hotwell line. However, this line has two block valves locked closed, a closed isolation valve and check valve to prevent any water flow to the containment from the hotwell. VBWR facilities external to the containment building have been deactivated or turned over to EVESR for operation in conjunction with that reactor. The VBWR stack has been isolated and capped to prevent the release of radioactive materials plated out on the interior surfaces. Supervision and surveillance of the remaining VBWR facility is carried out by EVESR personnel. The area external to the containment is patrolled several times each day and the containment is entered and checked weekly. A complete radiation survey of the VBWR containment vessel will be made at least annually.

Representatives of the AEC's Division of Compliance have inspected the facility and determined that its condition and the radiation levels are as reported by the licensee.

ANALYSIS OF HAZARDS

As a nonoperating reactor, the only radiation danger to the public would be from direct radiation from contaminated surfaces or by dispersal of residual contamination. During the deactivation of the facility, irradiated materials and equipment have been removed and areas decontaminated, where practical. A

radiation survey was made of all retired areas on December 15, 1964, to establish radiation measures. The results of this survey (Appendix I to the Final Report on Deactivation) indicate that some contamination still exists in certain areas. The highest levels were found in the basement area of the reactor enclosure where radiation readings are in the range specified for a "High Radiation Area" as defined in 10 CFR 20. The reactor enclosure has been posted and access has been restricted by keylock. In addition, alarms have been installed on the doors as required by 10 CFR 20.203(c) (2).

The VBWR is within a fenced enclosure on the Vallecitos Atomic Laboratory site, which in turn is fenced and guarded to prevent unauthorized entry. In addition, routine patrols will verify that no unauthorized personnel are in the VBWR area. We believe that the procedures proposed for controlling and restricting access to the VBWR provide adequate protection against any direct radiation hazard to the public.

Combustible and flammable materials have been removed from the retired areas where practical. Further, there are no sources of explosive gases or dust in the retired areas. Electrical circuits have been de-energized. Personnel trained in handling contaminated materials, radiation instruments, and fighting fires are available in the event of an emergency at the VBWR. It does not appear that dispersal of residual contamination to the atmosphere from the VBWR due to a fire will constitute a significant public hazard.

CONCLUSION

We have concluded that the VBWR has been deactivated and that there is reasonable assurance that the retired facility will be maintained in such a manner that the health and safety of the public will not be endangered.

Original Signed by

S. Levine

Saul Levine, Chief
Test & Power Reactor Safety Branch
Division of Reactor Licensing

Date: SEP 9 1965

UNITED STATES ATOMIC ENERGY COMMISSION
NOTICE OF ISSUANCE OF FACILITY LICENSE AMENDMENT
GENERAL ELECTRIC COMPANY, DOCKET NO. 50-18

Please take notice that the Atomic Energy Commission has issued, effective as of the date of issuance, Amendment No. 18, set forth below, to Facility License No. DPR-I. The amendment authorizes General Electric Company to possess but not operate the retired Vallecitos Boiling Water Reactor, located at Vallecitos Atomic Laboratory, Alameda County, California, in the condition described in the "Final Report on Deactivation of Vallecitos Boiling Water Reactor" dated February 5, 1965.

Within fifteen (15) days from the date of publication of this notice in the Federal Register, the applicant may file a request for a hearing, and any person whose interest may be affected by this proceeding may file a petition for leave to intervene. Requests for a hearing and petitions to intervene shall be filed in accordance with the provisions of the Commission's "Rules of Practice" (10 CFR 2). If a request for a hearing or a petition for leave to intervene is filed within the time prescribed in this notice, the Commission will issue a notice of hearing or an appropriate order.

For further details with respect to this amendment, see (1) the related safety evaluation prepared by the Test & Power Reactor Safety Branch of the Division of Reactor Licensing and (2) the licensee's application for license amendment dated February 9, 1965, both of which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. A copy of item (1) above may be obtained at the Commission's Public Document Room, or upon request, addressed to the Atomic Energy Commission, Washington, D. C., 20545, Attention: Director, Division of Reactor Licensing.

FOR THE ATOMIC ENERGY COMMISSION

Original Signed By
R.L. Doan

Director
Division of Reactor Licensing

Dated at Bethesda, Maryland
this _____ day of _____, 1965

SEP 9 1965

GENERAL ELECTRIC COMPANY

DOCKET NO. 50-18

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Amendment No. 18

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2. The Commission has found that:
 - a. The application for amendment complies with the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations set forth in Title 10, Chapter 1, CFR;
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FOR THE ATOMIC ENERGY COMMISSION

Date of Issuance:

Director
Division of Reactor Licensing