

Formal
03/25/63

Docket No. 50-22
DL&R:ERF

MAR 25 1963

Westinghouse Electric Corporation
Box 1075
Pittsburgh, Pennsylvania

Attention: Mr. Charles H. Weaver
Vice President

Gentlemen:

There is transmitted herewith Amendment No. 2 to Facility License No. TR-2, as amended. Amendment No. 2 authorizes Westinghouse to possess but not to operate the Westinghouse Testing Reactor in the condition described in the "Final Shutdown Report ... (WTR-172)"

Also attached for your information are copies of the Notice of Issuance of the Facility License Amendment which has been filed with the Office of the Federal Register and the Hazards Analysis by the Staff of the Division of Licensing and Regulation referred to therein.

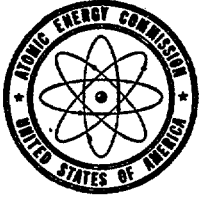
Enclosed are two signed copies of Amendment No. 2 to Formal Indemnity Agreement No. B-18 for your review and acceptance. Please sign both copies and return one copy to this office.

Sincerely yours,

Director
Division of Licensing and Regulation

Enclosures:
As stated above

Al67



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

DOCKET NO. 50-22

WESTINGHOUSE ELECTRIC CORPORATION

L I C E N S E

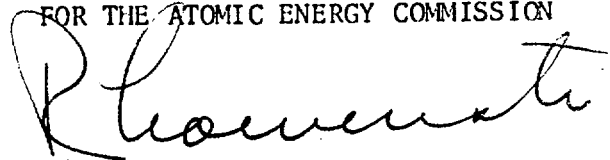
License No. TR-2
Amendment No. 2

License No. TR-2 is amended in its entirety to read as follows:

1. This license applies to the utilization facility known as the Westinghouse Testing Reactor which is owned by the Westinghouse Electric Corporation and located near Waltz Mill, in Westmoreland County, Pennsylvania, described in Westinghouse's application attested February 29, 1952 and amendments thereto, and for which Construction Permit No. CPTR-1 was issued by the Commission on July 3, 1957.
2. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Westinghouse Electric Corporation:
 - a. Pursuant to Section 104(c) of the Atomic Energy Act of 1954, as amended, (hereinafter referred to as "the Act") and Title 10, CFR, Chapter 1, Part 50, "Licensing of Production and Utilization Facilities," to possess, but not to operate, the facility as a utilization facility in the condition described in the "Final Shutdown Report for Westinghouse Testing Reactor, WTR-172" dated January 25, 1963.
 - 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.
3. Pursuant to the Act and Section 20.501 of Title 10, CFR, Chapter 1, Part 20, "Standards for Protection Against Radiation," Westinghouse is exempt from the requirements of Section 20.203(c)(2) for a visible or audible control device in high radiation areas of the Westinghouse Testing Reactor.
4. 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 any additional conditions specified or incorporated below:

- a. Westinghouse shall not reactivate the facility without prior approval of the Commission.
 - b. Westinghouse shall not dispose of the facility or the property occupied by the facility without prior approval of the Commission.
 - c. Westinghouse shall keep the following records:
 - (1) Records of annual inspections of the retired facility, including results of surveys of radioactivity levels.
 - (2) Records showing radioactivity released or discharged into the air or water beyond the effective control of Westinghouse as measured at the point of such release or discharge.
 - d. Westinghouse shall submit the following reports in writing to the Commission:
 - (1) An immediate report of any indication or occurrence of a possible unsafe condition relating to the facility or the public.
 - (2) An annual report of the status of the retired facility including results of surveys of radioactivity levels.
5. This license is effective as of the date of issuance and shall expire at midnight July 3, 1967.

FOR THE ATOMIC ENERGY COMMISSION



Director

Division of Licensing and Regulation

Date of Issuance: **MAR 25 1963**

UNITED STATES ATOMIC ENERGY COMMISSION
NOTICE OF ISSUANCE OF FACILITY LICENSE AMENDMENT
WESTINGHOUSE ELECTRIC CORPORATION, DOCKET NO. 50-22
SHUTDOWN OF THE WESTINGHOUSE TESTING REACTOR

Please take notice that the Atomic Energy Commission has issued, effective as of the date of issuance, Amendment No. 2, set forth below, to Facility License No. TR-2. The amendment authorizes Westinghouse Electric Corporation to possess but not operate the retired Westinghouse Testing Reactor, located at Waltz Mill in Westmoreland, Pennsylvania, in the condition described in the "Final Shutdown Report for the Westinghouse Testing Reactor WTR-172" dated January 25, 1963.

The Commission has found that:

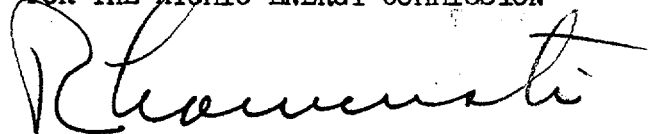
- (1) Possession of the reactor in accordance with the license as amended will not present undue hazard to the health and safety of the public and will not be inimical to the common defense and security.
- (2) The application for amendment complies with the requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations set forth in Title 10, Chapter 1, CFR;
- (3) Prior public notice of proposed issuance of this amendment is not necessary in the public interest since possession of the reactor in accordance with the license, as amended, does not involve consideration of safety factors significantly different from those previously evaluated.

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 Regulation (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) a related hazards analysis prepared by the Test & Power Reactor Safety Branch of the Division of Licensing and Regulation and (2) the licensee's applications for license amendment dated January 25, 1963, 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., Attention: Director, Division of Licensing and Regulation.

FOR THE ATOMIC ENERGY COMMISSION



Director
Division of Licensing and Regulation

Dated at Germantown, Maryland
this 25th day of March, 1963

HAZARDS ANALYSIS BY THE TEST & POWER REACTOR SAFETY BRANCH

DIVISION OF LICENSING AND REGULATION

WESTINGHOUSE ELECTRIC CORPORATION
RETIREMENT OF WESTINGHOUSE TESTING REACTOR

DOCKET NO. 50-22

Introduction and Background

On May 8, 1962, the Westinghouse Electric Corporation advised the Commission that the Westinghouse Testing Reactor, then operating under AEC Facility License TR-2, had been shut down and was to be permanently retired. Westinghouse filed an amendment to its application including a Shutdown Report (WTR-170) describing a two-phase program for the shutdown and retirement of the facility. The first phase involved the removal of fuel, decontamination of certain areas, and measures for restricting access to the facility. The second phase involving the safeguarding of the shutdown facility was to begin upon completion of Phase 1. The Commission advised Westinghouse that Phase 1 of the shutdown program could be conducted under the terms of License No. TR-2 and that upon notification that Phase 1 had been completed along with any necessary amendment to the Shutdown Report, AEC would consider issuance of an amendment to the license which would authorize possession only of the facility, since the structure itself was not to be totally dismantled.

On January 25, 1963, Westinghouse informed the Commission that the shutdown and permanent retirement of the WTR facility had been completed and submitted "Final Shutdown Report for Westinghouse Testing Reactor" (WTR-172). This report describes the action taken and conditions now prevailing at the facility.

Description of Deactivation and Retirement

The retired WTR is located on a large site owned by the Westinghouse Electric Corporation near Waltz Mill, Pennsylvania. The site will continue to be used in connection with other operations, some of which are licensed by AEC.

The following summarizes the steps taken by Westinghouse to retire the WTR:

- ✓ 1. The irradiated fuel elements in the reactor have been removed and returned to the AEC in accordance with licensed procedures. All nonirradiated fuel elements have been returned to the supplier or other licensees for reprocessing and recovery of special nuclear material.
- ✓ 2. All experimental material was returned to the original supplier or disposed of as waste material.
3. The reactor vessel has been drained and the head assembly replaced and bolted down. All other openings have been secured.
4. The primary coolant system, pipes and tanks have been drained and openings secured to prevent escape of any airborne activity.

5. The subpile room has been cleaned and the doors locked.
6. All irradiated materials have been removed from the canal. The canal itself has been carefully cleaned and covered with polyethylene sheeting and a heavy wire mesh screen. Access to the canal area in the reactor building is restricted by a heavy screen placed in the canal at the building wall.
7. The contaminated pipe tunnels have been cleaned of gross contamination and access is restricted by locked gates, doors, and concrete slabs as appropriate.
8. Loop No. 4 has been removed and concrete shielding slabs replaced on the shielding cubicle to prevent access. Loop Nos. 1 to 3 have been posted with appropriate signs.
9. The Reactor Building itself has been cleaned and all doors have been locked.
10. In the Process Building, entrances to retired areas have been locked and, in addition, gates or doors to the pump rooms and other internal areas have been locked. Since some of these retired areas are radioactive, they have been posted as restricted areas.

Analysis of Hazard to Public from Retired Condition

As a nonoperating reactor, the only radiation danger to the public would be from direct radiation from contaminated surfaces or by the dispersal of residual contamination. During the deactivation of the facility, irradiated materials and/or equipment have been removed and areas decontaminated, where practical. A radiation survey was made of all retired areas on December 31, 1962, to establish the radiation levels after these measures. The results of this survey (Appendix A to the Final Shutdown Report) indicate that some contamination still exists in certain areas. The highest levels were found in the Process Building, where contact readings on certain primary system components are in the range specified for a "High Radiation Area" as defined in 10 CFR 20. All of these areas have been posted, and access to any radiation or contamination area is restricted by locked doors and gates, and, in addition, the entire facility is surrounded by a chain link fence. A twenty-four hour guard is to be maintained at the site to discourage trespassing and unlawful entry.

In view of physical security features and administrative procedures limiting entry to the retired area, it is believed that the requirement in 20.203(c)(2) for a visible or audible control device in high radiation areas of the WTR may be waived. In addition, we believe that the procedures proposed for controlling and restricting access to the WTR provide adequate protection against any direct radiation hazard to the public.

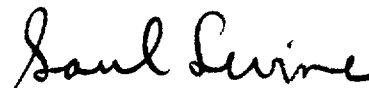
All combustible material, such as the cooling tower, is being removed from the site. Further, there are no sources of explosive gases or dust in the retired areas. Therefore, it does not appear that dispersal of residual contamination to the atmosphere from the WTR constitutes a significant public hazard.

Personnel trained in handling contaminated materials, radiation instruments, and fighting fires are available in the event of an emergency at the WTR. Further, Westinghouse proposes to conduct annual inspections of the retired facilities to determine if either nuclear or non-nuclear hazards have developed.

Conclusion

It is the opinion of the Staff that Westinghouse has taken all practical steps to decontaminate, deactivate, and secure the Westinghouse Testing Reactor, 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.

FOR THE ATOMIC ENERGY COMMISSION



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

Date: MAR 25 1963

Director
DLR
DLR
DLR

Accepted April 8, 1963
By *E. Charles Brown*

Director
Division of Licensing and Regulation

1963 April 8

FOR THE UNITED STATES ATOMIC ENERGY COMMISSION

\$250,000 from 12:01 A.M., November 23, 1957 to
12:01 A.M., June 19, 1959, inclusive; \$3,000,000
from 12:01 A.M., June 19, 1959 to 12:01 A.M.,
January 8, 1960, inclusive; \$9,000,000 from 12:01
A.M., January 8, 1960 to 12:01 A.M., May 7, 1960,
inclusive; \$10,800,000 from 12:01 A.M., May 7,
1960 to 12:01 A.M., April 15, 1961, inclusive;
\$12,600,000 from 12:01 A.M., April 15, 1961 to
12:00 midnight MAR 2 4 1963, inclusive; and
\$1,000,000 subsequent to that date.

Item 2a - Amount of financial protection -

Effective at 12:01 A.M.,
MAR 2 5 1963
Indemnity
Agreement No. B-18 between Westinghouse Electric Corporation
and the Atomic Energy Commission dated June 18, 1962, as
amended is hereby amended by deleting Item 2a of the
attachment to the indemnity agreement in its entirety and
substituting the following therefor:

AMENDMENT NO. 2

AMENDMENT TO INDemnITY AGREEMENT NO. B-18

L. R. Hurd, Chief
Administrative Branch

[Handwritten signature]