

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-358/84-05(DRP)

Docket No. 50-358

License No. CPPR-88

Licensee: Cincinnati Gas and Electric Company  
139 East 4th Street  
Cincinnati, OH 45201

Facility Name: Wm. H. Zimmer Power Station, Moscow, Ohio

Inspection Conducted: April 27 through July 16, 1984

Inspectors: T. P. Gwynn

*W B Grant*

W. B. Grant

Approved by: *W. L. Forney*  
W. L. Forney, Chief  
Projects Section 1A

8/02/84  
Date

Inspection Summary

Inspection on April 27 through July 16, 1984 (Report No. 50-358/84-05(DRP))

Areas Inspected: Verification of licensee actions under an applicant proposed Motion for Withdrawal of Application; current plant conditions; transfer, packaging, and shipment of unirradiated fuel (license number SNM-1823); and miscellaneous inspector activities. The inspection involved a total of 19 inspector-hours onsite by two NRC inspectors, including no inspector-hours onsite during off-shifts.

Results: Of the three areas inspected, no items of noncompliance or deviations were identified.

## DETAILS

### 1. Persons Contacted

\*J. R. Schott, Site Manager  
T. J. Cummins, Assistant Site Manager  
D. J. Schulte, CG&E Engineer  
R. P. Ehas, CG&E Engineer  
A. L. Mosbaugh, CG&E Engineer (Fuel Custodian)  
G. Ficke, Licensing Coordinator  
J. Shaffer, Quality Assurance Manager

\*Designates those attending the exit meeting on July 16, 1984.

The inspector also interviewed other members of the site staff.

### 2. Licensee Actions Under Motion for Withdrawal of Application

On March 20, 1984, the Cincinnati Gas and Electric Company filed a Motion for Withdrawal of Application with the presiding Atomic Safety and Licensing Board (ASLB). That motion included an applicant proposed ASLB Order which would rescind the Zimmer operating license application and which would preclude the future use of the Wm. H. Zimmer Site for any nuclear activity.

The applicant proposed ASLB Order carried with it four conditions which the applicant committed to. Those conditions were stated in the applicant's motion as follows:

- a. Because the applicants will not use the Zimmer site for a nuclear plant at any time in the future, applicants have no objection to the Licensing Board's dismissal of the application with prejudice against the future use of the site for a nuclear plant.
- b. All fuel will be removed from the site not later than August 31, 1984.
- c. The existing nuclear steam supply system will be modified so that it cannot operate as a "utilization facility" by isolating the system inside the reactor building by severing and welding caps on two main feedwater lines and the four main steam leads. In addition, control rod drive mechanisms will be removed from the reactor vessel.
- d. The balance of plant will be used to the extent possible as part of the new fossil fuel-fired electric generating plant. As such, there will be no change in the fundamental character of the Zimmer site as one for the generation of electric power.

This inspection was conducted to confirm the applicant's actions with respect to the above commitments.

a. New Fuel Shipment

The inspector observed the applicant's preparations for off-shipment of new fuel. Those preparations included the checkout of fuel handling equipment, the preparation of approved procedures, and QA surveillance overview of fuel shipment activities.

The inspector maintained an awareness of the status of fuel shipment activities via telephone communications with the applicant's staff. On July 3, 1984, the inspector was informed that fuel shipment activities had been completed. This was confirmed during the exit meeting with the Zimmer Site Manager on July 16, 1984. (See Item 4)

b. Disabling of the Reactor/Nuclear Steam Supply System

The inspector observed the main steam and feedwater piping just outside of the primary containment outboard containment isolation valves. The inspector observed that approximately eight inches of piping had been removed from each of the four main steam lines and from each of the two feedwater lines. The piping was then blank flanged at each open face, seal welded, and the welding painted with a preservative metal primer. This action isolates the reactor vessel from the remainder of the power generating steam cycle equipment.

The inspector also observed the applicant's preparations for removal of all control rod drive mechanisms from the reactor vessel. Those preparations included the removal of all control rod drive housing support steel, removal of all but two bolts from each control rod drive housing flange, removal of obstructions (such as CRD position indicator cables), and the provision of lighting and air handling equipment in the under-vessel area. The applicant stated that the actual removal of control rod drives from the reactor vessel was scheduled to begin on July 17, 1984, and would require five to six weeks to complete. No QA/QC activities were planned. The control rod drive removal was being treated as a non-safety related activity. Current applicant plans are to store the control rod drives in the reactor building, 525' elevation, in the vicinity of the drywell equipment hatch.

The inspector noted that the above actions taken or being taken by the applicant to disable the reactor and nuclear steam supply system were such that the systems and components could be returned to an operable condition with relative ease.

3. Current Plant Conditions

The inspector toured the Zimmer facility on July 13, 1984, to observe the current condition of the plant. Areas toured included the drywell (primary containment), the reactor building (secondary containment), the auxiliary

building (control room), the turbine building, and the QA records storage vault.

The inspector observed that significant actions had been taken by the applicant to seal the turbine building and to provide a controlled, dehumidified environment for the turbine building, turbine building systems, and the auxiliary building. The applicant stated that no action had been taken or was planned to be taken to preserve or protect other portions of the plant (i.e., reactor plant and reactor plant auxiliary systems).

The inspector observed that excess construction materials had been removed from all areas toured and that general cleanliness was good. The construction opening into the reactor building had been sealed. There were no safety-related plant systems in operation. Minimal security forces were being retained commensurate with the protection of CG&E Company property.

A tour of the QA records facility indicated that the building was secure, fire protection systems and atmosphere control systems were operable, and the record storage conditions were generally adequate. The inspector noted that the humidity level in the records storage area was higher than normal due to lack of routine maintenance of a dehumidification unit. This condition was promptly corrected by the applicant.

Discussion with cognizant applicant personnel indicated that there were presently no QA/QC activities planned or in progress for the Zimmer site. Plans are in progress to provide for preventative and corrective maintenance of non-nuclear plant systems and components. A refurbishment program is also planned for selected non-nuclear pumps and valves. Most reactor plant systems have been drained of water but no action has been taken to assure all water was removed or to preserve reactor plant systems and components.

4. Transfer, Packaging, and Shipment of Unirradiated Fuel (Special Nuclear Materials License No. SNM-1823)

The inspector reviewed the licensee's program for the transfer, packaging, and shipment of unirradiated fuel, including: determination whether written implementing procedures are adequate, current, properly approved, and acceptably implemented; determination whether shipments are in compliance with NRC and DOT regulations and the licensee's quality assurance program; and adequacy of required records, reports, shipment documentation, and notifications.

The following procedures were reviewed. No problems were identified.

AD. NP. 17	Revision 00	Removal of Initial Core of Unirradiated Fuel from the Zimmer Site
NE. SAD. 03	Revision 06	Accountability of Special Nuclear Materials

NE. FHP. 32	Revision 00	Movement of Unirradiated Fuel in the Spent Fuel Pool
NE. FHP. 33	Revision 00	Dechanneling Unirradiated Fuel in the Spent Fuel Pool
NE. FHP. 34	Revision 02	Off-loading Empty Fuel Shipping Containers
NE. FHP. 35	Revision 02	Packaging of Unirradiated Fuel for Shipment
NE. FHP. 36	Revision 02	Preparation of Fuel Shipment for Departure.

The licensee is shipping the fuel assemblies in shipping containers which have been issued NRC Certificate of Compliance No. 4986. The certificate authorizes use of the package under the general license provisions of 10 CFR 71.12. The inspector verified that the licensee had met the requirements of 10 CFR 71.12, including an approved quality assurance program (71.12(b)), possession of copy of license and other pertinent documents (71.12(c)(1)), compliance with the certificate conditions (71.12(c)(2)), and NRC notification (71.12(c)(3)).

The shipping containers are right rectangular boxes consisting of an outer container of wooden construction and a metal inner container. The metal inner container is approximately 12 inches by 18 inches by 179 inches. The wooden outer container is approximately 30 inches by 31 inches by 207 inches. Cushioning is provided between the inner and outer containers.

The inspector observed the transfer and loading of ten shipping containers containing two fuel assemblies each. Procedures were followed; no problems were identified. The loaded shipping containers were surveyed for contamination and direct radiation prior to loading onto a flat bed trailer. Radiation levels at the surface of the shipping container averaged about 0.6 mR/hr. No contamination, beta-gamma or alpha, was detected. The inspector independently verified the survey results, using licensee instrumentation. The containers were properly labeled with DOT "Radioactive II" labels. No problems were noted.

Shipping records and survey results were selectively reviewed to verify that procedures were followed. No problems were noted.

#### 5. Miscellaneous Inspector Activities

The NRC Senior Resident Inspector spent a minimal number of inspector-hours working on the Zimmer docket during this report period. Major activities undertaken during this period included the following:

- Assisted the Senior Resident Inspector at the Davis-Besse Nuclear Power Station. Those activities were documented in NRC Inspection Reports 50-346/84-07 and 50-346/84-12.

- . Attended a resident inspector counterpart meeting in Glen Ellyn, Illinois.
- . Provided assistance to the NRC Region III office as an independent observer of the conduct of a Construction Assessment Team inspection of Detroit Edison's Enrico Fermi II Nuclear Power Station. Those activities will be documented in NRC Inspection Report 50-341/84-21.

The Zimmer NRC resident office was vacated by the resident inspection staff on July 16, 1984. U. S. Government property remaining in that office was scheduled for transfer offsite during the week of July 23, 1984.

In addition, the NRC Senior Resident Inspector returned custody of H. J. Kaiser nonconformance reports which were voided by Kaiser in 1979-80 to Cincinnati Gas and Electric Company. The U. S. Attorney in Cincinnati was advised of this action.

6. Exit Interview

The inspector met with applicant representatives (denoted in Paragraph 1) at the conclusion of the inspection on July 16, 1984. The inspector summarized the scope and findings of the inspection. The applicant acknowledged the inspector's findings.