



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

December 13, 1990

Docket No. 50-57

Mr. Louis G. Henry, Director
Buffalo Materials Research Center
State University of New York
Rotary Road
Buffalo, New York 14214

Dear Mr. Henry:

SUBJECT: TEMPORARY WAIVER OF COMPLIANCE - 2 MEGAWATT NON-POWER REACTOR
AT STATE UNIVERSITY OF NEW YORK, BUFFALO

By letter dated September 13, 1990, you requested a temporary exemption to your Technical Specification (TS) Section 4.3(4), which requires you to determine on an annual basis (not to exceed 15 months) the sensitivity of your gaseous radioactivity effluent monitors (stack gas and building gas). The sensitivity of these gaseous effluent monitors is determined by injecting measured quantities of Ar-41 gas into the sensitive volume of the monitor and observing the resulting increases in monitor count rates. The last measurement was made on September 29, 1989.

Your request stems from the fact that the reactor has been shut down since November 5, 1989 initially to find a leak in the pool liner and, subsequently, to install a new pool liner. This shutdown condition does not permit the generation of Ar-41 gas, which is used to calibrate the sensitivity of your gaseous effluent monitors. The import of Ar-41 from another reactor would be expensive, logistically difficult, and would lead to unwarranted radiation exposures since, due to its 1.8 hour half-life, very large quantities would need to be shipped to provide sufficient radioactivity to perform the sensitivity test upon arrival at your facility.

We have reviewed your request and the supporting reasons for suspending the sensitivity analysis of your gaseous effluent monitors until 30 days beyond the resumption of reactor operations and find them acceptable. Also, we have reviewed your previous gaseous releases and find that they are well below your TS requirements in Section 3.6.

Accordingly, we grant a temporary waiver of compliance to TS 4.3(4) until 30 days beyond the resumption of reactor operations. As agreed upon on December 12, 1990 in a telecon between you and T. Michaels, when the pool liner is replaced and the reactor is restarted, reactor power shall be limited to 1 megawatt until such time as the sensitivity analysis of the gaseous radioactivity effluent monitors is completed. The electronic calibrations and operability checks, which include the determination of the detector response to a reference Co-60 source, will continue as required by TS Section 4.3(1).

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Mr. Louis G. Henry

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Postponement of the sensitivity tests for the stack and building monitors does not involve any irreversible environmental consequences since, while the reactor is not operating, no Ar-41 or Cesium-138 is being generated and, in any case, the monitors are functional and their operability is verified by the detector response and operability tests. When the reactor is restarted, it will be limited to operating at 50 percent power until the sensitivity tests are performed. Also, the monitors will continue to be in service and, historically, the Ar-41 and Cesium-138 levels at typical full-power operation for a year are well below the TS requirements. Therefore, the staff has determined that this waiver of compliance involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and there is no significant increase in individual or cumulative occupational radiation exposure.

Sincerely,



William D. Travers, Deputy Director
Division of Advanced Reactors
and Special Projects
Office of Nuclear Reactor Regulation

cc: See next page

State University of New York
at Buffalo

Docket No. 50-57

cc: New York State Department of
Environmental Conservation
Attn: Director, Office of
Environmental Analysis
Albany, New York 12223

Director, Technical Development
Programs
State of New York Energy Office
Agency Building 2
Empire State Plaza
Albany, New York 12223

December 13, 1990

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Mr. Louis G. Henry

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Postponement of the sensitivity tests for the stack and building monitors does not involve any irreversible environmental consequences since, while the reactor is not operating, no Ar-41 or Cesium-138 is being generated and, in any case, the monitors are functional and their operability is verified by the detector response and operability tests. When the reactor is restarted, it will be limited to operating at 50 percent power until the sensitivity tests are performed. Also, the monitors will continue to be in service and, historically, the Ar-41 and Cesium-138 levels at typical full-power operation for a year are well below the TS requirements. Therefore, the staff has determined that this waiver of compliance involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and there is no significant increase in individual or cumulative occupational radiation exposure.

Sincerely,

Original signed by:

William D. Travers, Deputy Director
Division of Advanced Reactors
and Special Projects
Office of Nuclear Reactor Regulation

cc: See next page

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[TM LTR2 LHenry]

*PREVIOUSLY CONCURRED
**via telecon

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