



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555
May 17, 1979

NRC PDR

Docket No. 50-54

Mr. K. D. George
Senior Development Scientist
Union Carbide Nuclear Center
Union Carbide Corporation
P. O. Box 324
Tuxedo, New York 10987

Dear Mr. George:

The Commission has issued the enclosed Amendment No. 14 to Facility Operating License No. R-81 for your pool-type research reactor. This amendment is in response to your request dated December 10, 1973, as supplemented.

This amendment incorporates in the license Technical Specifications (TS) consistent with the requirements of Section 50.36 of 10 CFR Part 50. These TS provide a more concise and definitive statement of the limits of reactor operating parameters and surveillance measures required to assure that these limits are not exceeded. The amendment restates the license in its entirety, utilizing the current license format, to delete those items transferred to the TS and to consolidate all pertinent provisions of all previously issued changes and amendments through Amendment No. 13. This license amendment becomes effective within four months after the date of issuance.

By letter dated February 14, 1978, the Commission approved the Physical Security Plan for your research reactor. In keeping with current Commission practice, this amendment identifies this currently approved security plan and incorporates security plan requirements as a condition of the license. Future changes which do not decrease the effectiveness of your plan do not require prior NRC approval but should continue to be reported as provided in 10 CFR §50.54(p). Changes which do require prior NRC approval should be identified as license amendment requests.

dterg 269, 270, 271
7907030263

275 118

Mr. K. D. George

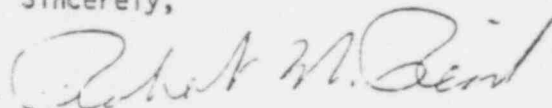
-2-

As discussed in the enclosed Safety Evaluation, the total effluent release from your facility originates from the hot cells, from process activities within the reactor building and from the reactor. These sources cannot be readily separated for the purpose of regulating effluents. However, the major source of radioactive effluents originates in the hot cells, which are licensed by New York State. In early 1978, the New York State Department of Environmental Conservation (NYSDEC) issued a consent order that limits the radioactive effluents and establishes "as low as reasonably achievable" (ALARA) objectives for radioiodine-131. This consent order further requested additional information on improved site meteorological data, effluent controls, individual and population doses, environmental monitoring programs and information pertinent to all radionuclide releases. As part of the evaluation of this information, the NYSDEC will consider the cost benefit aspect of ALARA. We have not separately evaluated your facility's radioactive effluent from a cost benefit aspect because as indicated above, the major source of effluents (>99%) originates from the hot cells which are licensed by NYS.

Because the major source of radioactive effluents originates in the hot cells which are licensed through NYS, it is our intent to have NYSDEC take the lead in establishing the final radioactive effluent limits, including the ALARA objectives for your facility. We will support the efforts of NYSDEC and will assist them as required. The NRC will determine the nature of limitations imposed with respect to reactor operation. The interim effluent specifications applicable to the reactor operations do not relieve you in any way from compliance with any of NYSDEC's regulatory actions concerning your facility. Upon the completion of actions by NYSDEC relating to radioactive effluent requirements, we will evaluate the need to revise the radiological release portions of the NRC's TS as appropriate.

Your proposed TS were changes to comply with regulatory requirements. These changes were reviewed and accepted by representatives of the Union Carbide Corporation.

Sincerely,



Robert W. Reid, Chief
Operating Reactors Branch #4
Division of Operating Reactors

Enclosures and cc: See next page

275 119

Mr. K. D. George

-3-

Enclosures:

1. Amendment No. 14
2. Safety Evaluation

cc w/enclosures:

See next page

275 120

Union Carbide Corporation

cc w/enclosures:

Mr. John W. Paradiso
Reactor Supervisor
Union Carbide Nuclear Center
Union Carbide Corporation
P. O. Box 324
Tuxedo, New York 10987

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

New York State Department of
Environmental Conservation
ATTN: Director, Office of
Environmental Analysis
Albany, New York 12201

275 121