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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 7 TO

FACILITY OPERATING LICENSE NO. TR-5

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

DOCKET NO. 50-184

1.0 INTRODUCTION

By letter dated July 27, 1990, as supplemented on August 990, the National Institute of Standards and Technology (the lice formerly known as the National Bureau of Standards, proposed to am the Technical Specifications (TS) for their 20 Megawatt (Mw) thermal Test Reactor (NBSR) located in Gaithersburg, Maryland. The TS change would delete the quantity and type, two shell and tube heat exchangers, from TS Section 6.2. The licensee states that the type and quantity limitations in the TS preclude the selection of more reliable heat exchangers using the latest technology.

Also, by letter dated November 29, 1988, the licensee informed the NRC that the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100-418) changed the name of the National Bureau of Standards (NBS) to the National Institute of Standards and Technology (NIST). Under the Act, all activities, responsibilities and obligations of NBS were transferred to NIST. However, the designation of the reactor will continue to be "NBSR".

2.0 EVALUATION

The licensee has two tube-type heat exchangers. Each heat exchanger is rated at 10 Mw and both are used to handle the rated capacity of the reactor which is 20 Mw. The licensee is planning to replace these heat exchangers and does not want to be inhibited in the selection process by the type and quantity of heat exchangers specified in the TS. The licensee will select a heat exchanger(s) that will still operate under the same performance requirements contained in the Limiting Conditions for Operation in the TS and therefore will have to choose a heat exchanger with specifications that meet these conditions for normal operation. The basic design specifications for any type heat exchanger will remain the same. These include material, design pressure and temperature and fabrication requirements. With regard to design basis accidents analyzed in the 1984 renewal of the license (NUREG-1007), the type or quantity of heat exchangers were not a factor in any of the analyses.

Therefore, the staff concludes that tube type heat exchangers, and the need to have two, does not have to be included in the TS.

As noted in the Omnibus Trade Act of 1988 (P.L. 100-418) Section 5115(c) "References in any other Federal law to the National Bureau of Standards shall be deemed to refer to the National Institute of Standards and Technology." As such, reference to the National Bureau of Standards in any of the license documents can be considered to be synonymous with the National Institute of Standards and Technology, which will be used as the official licensee name in all documents issued hereafter in this license. In accordance with the licensee's request the designation of the reactor will continue to be "NBSR."

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in a requirement with respect to the installation or use of facility components located within the restricted areas defined in 10 CFR Part 20 and changes in inspection and surveillance requirements. The staff has determined that this amendment 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. The commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the FEDERAL REGISTER (55 FR 36357) on September 5, 1990. No public comments were received.

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or the health and safety of the public.

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Dated: October 9, 1990