



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

AUG 15 1980

DOCKET NO.: 70-33
APPLICANT: Texas Instruments, Inc.
FACILITY: Attleboro, Massachusetts
SUBJECT: REVIEW OF LICENSE AMENDMENT APPLICATION DATED JULY 16, 1980
REVIEWER: N. Ketzlach

I. Background

By letter dated February 15, 1979, Texas Instruments, Inc. (TI) filed a renewal application of its Material License No. SNM-23. Since that time, the license has remained in effect in accordance with the timely renewal provisions pursuant to Subsection 70.33(b) of 10 CFR Part 70. By letter dated August 29, 1979, TI submitted a revised application requesting authorization for greater flexibility to allow changes in the operations without requiring an amendment to the license. The NRC completed the initial review of the TI application and its revision and by letter dated May 12, 1980, requested additional information to justify increased flexibility. In subsequent personal communications, TI notified the staff it had decided to close the nuclear portion of its facility and no longer requires the flexibility requested in the revised application. By letter dated July 16, 1980, TI confirmed its plans to terminate its nuclear fuel production operations about the end of calendar year 1981 and at the same time requested an extension of the existing license rather than a renewed license as requested in their application of February 15, 1979.

II. Discussion

A. Nuclear Criticality Safety

TI neither plans to fabricate any fuels nor use procedures that are not authorized by the existing license. However, there have been several changes in the organization relative to personnel responsible for safety-related functions. The existing license requires the Health/Physics Officer to make criticality evaluations which are reviewed by outside consultants or qualified TI personnel. The Health/Physics Officer or an alternate specified in writing by the "HFIR Project Manager" also conducts monthly criticality

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inspections. The minimum experience requirements for the one performing the nuclear criticality safety functions are not clearly identified in the existing license. Therefore, the following license conditions are recommended to clarify the minimum qualifications for the person responsible for the nuclear criticality safety related functions and for the "HFIR Project Manager," who may select an alternate to perform the monthly criticality inspections:

1. The person responsible for all nuclear criticality safety related functions shall have a Bachelor of Science degree in a technical field and a minimum of 1 year's experience in performing nuclear criticality safety analyses for operations related to fissile materials outside reactors.
2. The second party reviewer of the nuclear criticality safety evaluations shall have the same minimum qualifications as the individual described in Item 1.
3. The "Manager of the HFIR Project" shall have a Bachelor of Science degree and a minimum of 3 years' experience related to the supervision of processing, handling and storage of fissile materials.

One year experience for the persons described in Items 1 and 2 above is adequate because of the specificity of the license conditions related to nuclear criticality safety.

The minimum experience requirement of 3 years for the "Manager of the HFIR Project" is adequate for the size and type of fuel fabrication operations at TI.

B. Radiation Safety

Although the education requirements for the Health/Physics Officer are specified in the existing license, the experience requirements are not clearly identified. Moreover, a person having another title may assume the responsibility for the radiation safety related functions. Also, the operational air monitoring requirements in the current license need to be clarified. Accordingly, the following license conditions are recommended:

1. The person responsible for all radiation safety related functions shall have a Bachelor of Science degree in a technical field and a minimum of 1 year's experience in performing radiation safety evaluations for operations related to fissile materials outside reactors.
2. The sampling and analysis of airborne concentrations of radioactivity in the Fuel Manufacturing Area (FMA) shall be made daily.

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The above conditions are adequate for the size and type of TI fuel fabrication operations.

C. Effluent Control

No significant environmental effects should result from continued operations under an extension of the existing license.

D. General

The amendment application dated July 16, 1980, was discussed on August 7, 1980, with W. W. Kinney, Region I (IE) Project Inspector of the Texas Instruments, Inc., facility. He saw no safety or environmental problems associated with an extension of the existing license.

III. Conclusion

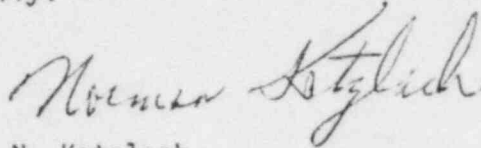
The activities authorized by the extension of the existing license to TI, subject to the additional conditions developed by the Uranium Fuel Licensing Branch, will not constitute an undue risk to the health and safety of the public and the environment.

Issuance of the license amendment is recommended subject to the following conditions:

- Condition 26. The person responsible for all nuclear criticality safety related functions shall have a Bachelor of Science degree in a technical field and a minimum of 1 year's experience in performing nuclear criticality safety analyses for operations related to fissile materials outside reactors.
- Condition 27. The second party reviewer of the nuclear criticality safety evaluations shall have the same minimum qualifications as the individual described in Condition 26.
- Condition 28. The "Manager of the HFIR Project" shall have a Bachelor of Science degree and a minimum of 3 years' experience related to the supervision of processing, handling and storage of fissile materials.
- Condition 29. The person responsible for all radiation safety related functions shall have a Bachelor of Science degree in a technical field and a minimum of 1 year's experience in performing radiation safety evaluations for operations related to fissile materials outside reactors.


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Condition 30. The sampling and analysis of airborne concentrations of radioactivity in the Fuel Manufacturing Area (FMA) shall be made daily.



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Approved by:


W. T. Crow, Section Leader