

MAY 30 1985

FCUP:NK

DOCKET NO: 70-734

APPLICANT: GA Technologies, Inc.

FACILITY: San Diego, California

SUBJECT: REVIEW OF LICENSE AMENDMENT APPLICATION DATED
APRIL 23, 1985 AND ITS SUPPLEMENT DATED
MAY 20, 1985

Background

GA Technologies, Inc. (GA), by application dated April 23, 1985, and its supplement dated May 20, 1985, requested authorization to modify its radiological safety and environmental surveillance requirements during periods of specified limited facility operations. In the supplement dated May 20, 1985, GA further clarified the criteria for the calibration of the criticality monitoring and alarm system and the specified criteria for exemption from the 10 CFR 70.24 criticality monitoring system requirements. In a discussion with W. R. Mowry, GA Licensing Administrator, on May 22, 1985, Mr. Mowry requested an interim authorization for modification of the criticality alarm requirements as soon as possible so that GA can start on the modification of the criticality alarm system in the SV-A building while the NRC continues its review of the full amendment request. He has informed the NRC that all SNM, other than contamination quantities in the building outside that in the quality control laboratory and in the non-destructive testing area, has been returned to the vault.

Discussion

A. Nuclear Criticality Safety

The current license does not authorize the licensee an exemption from the requirements of 10 CFR 70.24 when performing system repair or modifications. The request for such authorization as part of the GA nuclear criticality and radiation safety control programs is currently under review. However, a request for exemption from the criticality alarm requirements during major modification of the alarm system in preparation for operations under GA's reduced activities is needed as soon as possible. The "Criticality Accident Requirements," 10 CFR Part 70.24, states that an alarm system is required for all licensees possessing more than 700 grams of contained U-235, 520 grams of U-233, 450 grams of plutonium, 1500 grams of contained U-235 if no uranium enriched to more than 4 percent by weight of U-235, or 450 grams of any combination thereof. However, a licensee who believes that good cause exists why he should be granted an exemption in whole or in part from the requirements of this section may apply to the Commission

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for such exemption. Section 70.14(a) of 10 CFR Part 70 authorizes the Commission to grant an exemption from the requirements of the regulations as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

The staff requires additional review of the application to authorize the exemption to be applied by the licensee, under specified conditions, as a general criterion in the operation of the facility. However, the staff is prepared to authorize the requested exemption during the planned modification of the licensee's criticality alarm system subject to the following conditions:

1. The criticality alarm system shall be in service in all areas where the quantity of special nuclear material (SNM) does not meet the exemption criteria in Section 4.2.1.4 of the specification volume with the exception of the SNM storage vaults in the SV-A building.
2. There shall be no movement of any special nuclear material (SNM) into, out of, or within the SV-A building SNM storage vaults while the criticality alarm system is not in service.

B. Radiation Safety

There has been no request for modification of the radiation safety control program during this period of modification of the criticality alarm system. Therefore, all presently required radiation safety controls are in effect until such time as the staff completes its review of the request for modification of the radiation safety controls and an amendment is issued authorizing their modification.

C. Environmental Effects

Since there is greatly reduced activity in the SV-A building, there should be a corresponding decrease in the amount of effluents that may be released offsite and decrease the individual and cumulative occupational radiation exposure and in the potential for or consequences from radiological accidents. Therefore, in accordance with 10 CFR 51.22(c)(11) neither an Environmental Assessment nor an Environmental Impact Statement is warranted for this proposed action.

D. General

The amendment application and its supplement were discussed on May 23, 1985, with Mr. B. L. Brock, Region V Inspector of the facility. He foresaw no safety or environmental problem with the issuance of the requested interim amendment subject to the two conditions specified above under "Nuclear Criticality Safety."

Conclusion

Issuance of the interim amendment authorizing the exemption from the criticality alarm requirements of 10 CFR 70.24(a) is recommended subject to the following conditions:

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2. There shall be no movement of any special nuclear material (SNM) into, out of, or within the SV-A building SNM storage vaults while the criticality alarm system is not in service.

Original Signed By:

N. Ketzlach

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