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UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

Superseded

Docket No. 50-172
50-176

MAY 4 1964

Lockheed Aircraft Corporation
Dawsonville, Georgia

Attention: Mr. R. L. Mitchell
Vice President

Change No. 3
License No. R-86, as amended

Gentlemen:

This refers to (1) your letter dated March 10, 1964 requesting a change in the Technical Specifications to permit operation of the Radiation Effects Reactor with two river water samplers taking bi-monthly samples, and (2) to your letter dated April 6, 1964 and telegram dated April 29, 1964 which supplemented your request dated January 28, 1964 for authority to utilize a lithium hydride shield at power levels up to 3 MWT. Your requests have been combined and designated as Proposed Change No. 3 to License No. R-86, and have been considered pursuant to the provisions of Section 50.59 of 10 CFR Part 50.

We have reviewed the Proposed Change and have found that it does not present significant hazards considerations not described or implicit in the hazards summary report, and that there is reasonable assurance that the health and safety of the public will not be endangered. A copy of a related Hazards Analysis by the Test & Power Reactor Safety Branch is attached.

Accordingly, pursuant to Section 50.59, 10 CFR Part 50, the Technical Specifications of Facility License No. R-86, as amended, are changed as set forth in Attachment A to this letter.

This letter confirms the teletype authorization dated April 30, 1964.

Sincerely yours,

Edson G. Case

Edson G. Case
Acting Director
Division of Reactor Licensing

Attachments:
1. Attachment A
2. Hazards Analysis

A-14

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Change #2

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ATTACHMENT A

CHANGES TO TECHNICAL SPECIFICATIONS

1. Section C.5 "Environmental Monitors"

Delete the first paragraph and substitute the following:

"A minimum of two water samplers shall be located in the Etowah River, at least one being located 3600 or more feet upstream from the reactor and at least one 3600 or more feet downstream from the reactor. Samples shall be collected at least twice monthly; the collection interval shall be approximately two weeks except when weather conditions and operation of the reactor make the sample collecting points inaccessible. Samples shall be analyzed for gross beta-gamma-alpha activity."

2. Delete paragraph 2.d.(2) of Section J "EXPERIMENTAL FACILITIES" AND substitute the following:

"(2) The pressure within the shield will be maintained between 15 and 20 psia with appropriate alarms in the Operations Building. The safety valve shall be set to relieve at a pressure no greater than 5 psig. Should the upper limit on pressure be exceeded during the course of an experiment, or should a drop in pressure indicative of a shield leak occur, the reactor will be shutdown and lowered into the pool."

3. Delete paragraph 2.d.(4) and substitute the following:

"(4) Shield temperature shall not be permitted to exceed 750°F. Following initial measurement of temperature distribution, the shield may be utilized with a single operable thermocouple if that thermocouple is so located that the readings can be used to predict peak temperatures."

4. Add the following new paragraphs to Section J:

"2.d.(6) Gases vented from the shield will be monitored for tritium content prior to release to the environment. Monitor lines which enter the Operations Building will be checked for leaks at intervals not greater than three months."

"2.d.(7) The shield will be inspected for dimensional changes for changes in weld integrity and instrumentation operability prior to each test requiring use of the shield."