



NUCLEAR SCIENCE & ENGINEERING

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December 11th, 1996

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: Facility License R-80; Docket 50-157: Request for a License Amendment to allow the transfer a 16.0 gram plutonium-beryllium neutron source from Cornell's ZPR Reactor license (R-89; Docket 50-97) to the Cornell TRIGA Reactor license.

References: 1) Letter requesting a License Amendment to withdraw NRC authorization to operate the Cornell Zero Power Reactor, sent to U.S. NRC Dec. 11th, 1996.

Dear Sir:

Cornell University has concluded that there is not sufficient foreseeable future utilization of its Zero Power Reactor to warrant the capital and personnel costs associated with maintaining the reactor's operating license (Facility License R-89). Therefore, whereas Cornell does not intend to continue operating its Zero Power Reactor, Cornell University has requested (in a separate amendment request letter, Ref. #1 above) that its Facility License R-89 be amended so as to withdraw U.S. Nuclear Regulatory Commission authorization to operate the subject reactor.

Subsequently, to administratively consolidate the SNM in Cornell's possession, Cornell University hereby requests that its TRIGA Reactor license R-80 be amended to include the 16.0 gram Pu-Be startup source currently covered under its ZPR license. The Pu-Be neutron source will be used for teaching purposes and instrument calibration at Ward Laboratory in the same manner that the two sources already on R-80 are used. Having the third source available will increase the range of instrument testing capabilities the lab can offer, and give university faculty more options in teaching nuclear laboratory courses. The source will not be used as a reactor startup source.

To allow the transfer of the source to the TRIGA license, Cornell University hereby requests that license condition B.2 in its TRIGA Reactor License R-80 be amended to read as follows:

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PDR ADOCK 05000097
P PDR

AD2010

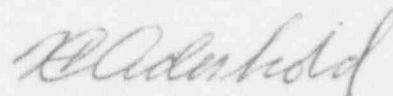
- B.2 Pursuant to the Act and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Materials," to receive, possess and use up to 5.491 kilograms of contained Uranium 235, 50 grams of Plutonium 239, 250 grams of Plutonium 238, and 0.03 microcuries of Plutonium as plated alpha sources in connection with the operation of the reactor;

The amendment of the above license condition, to allow for the possession of 50 grams (up from 35 grams) of Plutonium 239, will include the two 16.0 gram Pu-Be neutron sources already on the license and the 16.0 gram Pu-Be neutron source being transferred from R-89.

The Technical Specifications, specifically section 4.7, "Special Nuclear Materials", stated in the TRIGA license currently requires the surveillance of the neutron sources already included on the license. The Pu-Be neutron source being transferred will be covered by this same technical specification. All other relevant TRIGA license technical specifications and conditions will also apply. The source will be stored in accordance with existing technical specification requirements for safe and secure SNM storage.

Cornell University appreciates your assistance in considering this request and is hopeful of an expeditious approval. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,



Mr. Howard Aderhold
Laboratory Director

cc: Dr. Seymour H. Weiss; Director, Non-Power Reactors and Decommissioning Project Directorate, U.S.N.R.C.

Mr. Theodore Michaels; Sr. Project Manager, Non-Power Reactors and Decommissioning Project Directorate, U.S.N.R.C.

Mr. Thomas F. Dragoun; Regional Administrator, N.R.C. Region I.

Dr. Norman Scott; V.P. for Research & Advanced Studies, Cornell University.

Dr. K.B. Cady; Chairman, Ward Laboratory Safety Committee.