WASHINGTON STATE UNIVERSITY

PULLMAN, WASHINGTON 99164

NUCLEAR RADIATION CENTER

September 23, 1980

Mr. Robert L. Tedesco, Assistant Director Division of Licensing U.S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Mr. Tedesco:

I am working on the response to your letter of September 5, 1980 which we received on September 12th. The reactor pool was designed and constructed 25 years ago and the facility did not retain any technical information on the design procedure. We are endeavoring to obtain appropriate information from Campbell Engineers in Spokane, Washington who did the actual design work. This information will be forthcoming but I doubt that we will be able to meet the September 30, 1980 submittal date.

I have not been able to locate copies of the documents referred to on Question 3 and 4. Please send copies so that I can respond. I presume that these documents are relevant to fuel storage pools for power reactors.

I hasten to point out that a loss of pool water accident does not produce a fuel cladding rupture in the W.S.U. TRIGA reactor. This is covered in section 9.0 of the SAR for conversion to FLIP fuel dated February 1979 that was submitted with the license renewal request.

Sincerely,

W. E. Wilson

W. E. Wilson Associate Director

WEW: efm

A020



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

Docket No. 50-27

SEP 5 1980

Mr. W. E. Wilson, Associate Director Nuclear Radiation Center Washington State University Pullman, Washington 99164

Dear Mr. Wilson:

During the review of your application for a license renewal for your TRIGA reactor, our Structural Engineering Branch has identified some areas where additional information is required in order to determine whether it is appropriate to allow operation of your facility for the next twenty years. Please furnish the information requested in the attached enclosure by c.o.b. on September 30, 1980.

Sincerely,

Robert L. Tedesco, Assistant Director

Division of Licensing

Dupe of 8009150191

Request for Additional Information Structural Engineering Branch Washington State University Research Plant

Docket No. 50-27

- Provide sufficient details (discussion and sketches) of the reactor pool structure and interior.
- Provide a description of all objects which may be moved over the pool. State which of these objects is the critical one and also state whether a postulated accident with this object has been considered in the design of the pool and the interior.
- 3. Indicate whether any fuel racks are in the pool and, if so, to what extent the pool and the racks conform with the NRC position on fuel pools entitled "OT Position for Review and Acceptance of Spent Fuel Storage and Handling Applications", issued on April 14, 1978 and later amended on Jan. 18, 1979. If any deviations exist, identify and justify the deviations.
- 4. Provide all the loading combinations used in the design of the pool structure, and the racks. An acceptable position is stated in Standard Review Plans 3.8 and the NRC position on fuel pools.
- 5. Discuss in detail the assumptions and method of analysis used in the design of the pool and racks. State which codes and standards are used in the design of the pool structure and the racks.
- Provide a step by step general discussion on the seismic analysis of the pool and the racks. The effect of three earthquake components should be considered.
- 7. Indicate whether the leak tightness of the pool is a design criteria under all postulated loading combinations. If this is the case, provide your methods for maintaining the leak tight integrity of the pool.