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September 27, 2016 Docket Number 50-59 / License No. R-23 2016-0048

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk

Washington DC 20555 Ref: 10 CFR 50.90

SUBJECT: Changes to the Texas A&M University AGN-201M Technical Specification

Page 15 Associated with License Amendment Request Dated November 11, 2015, for the AGN-201M Reactor, Facility License R-23, Docket Number 50-59

(ADAMS Accession No. ML15315A027)

Attn: Mr. Alexander Adams Jr., Chief, Research and Test Reactors Branch Office of Nuclear Reactor Regulation

> Mr. Patrick M. Boyle, Project Manager, Research and Test Reactors Branch Office of Nuclear Reactor Regulation

The purpose of this letter is to submit proposed changes to the Texas A&M University (TAMU) AGN-201M Technical Specifications (TSs) page 15. In the TAMU supplement dated June 3, 2016 (ADAMS Accession No. ML16169A346) to the noted November 11, 2015 amendment request, we proposed to delete Section 5.2 of the AGN-201M TS in its entirety. Upon further review, we have chosen not to delete or modify Section 5.2 of the AGN-201M TSs. Firther, TAMU will seek to modify TS Section 5.2 as part of the pending application for the unrestricted release of the current AGN site in the Zachry Engineering Center. Therefore, enclosed is the revised proposed change to TS page 15 of the AGN-201M TSs.

In addition, in the June 3, 2016 supplement, TAMU requested implementation of the proposed license and TS changes to be based on specific events taking place. Upon review, TAMU finds that the normal Nuclear Regulatory Commission practice of making the proposed TS changes effective as of the date of issuance of the license amendment and implementation within 30 days is appropriate and acceptable for the proposed license and TS changes.

The proposed TS change does not change the initial "no significant hazards determination" stated in the November 11, 2015, application. Should you have any questions regarding the information provided in this submittal, please contact me or Mr. Jerry Newhouse at (979) 845-7551 or via email at mcdeavitt@tamu.edu or newhouse@tamu.edu.

Oath of Affirmation

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

Sean M. McDeavitt, PhD

Director, TEES Nuclear Science Center

Submitted with Level 2 Delegation Authorization from Dr. Yassin Hassan by letter dated

February 8, 2016 (ADAMS Accession No. ML16043A048)

Enclosure: AGN-201M TS Page 15

CC: next page

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ENCLOSURE

TEXAS A&M UNIVERSITY

FACILITY LICENSE R-23, DOCKET NO. 50-59

AMENDED FACILITY OPERATING LICENSE

AGN-201M REACTOR

PROPOSED CHANGES TO THE TECHNICAL SPECIFICATIONS

- c. The core, reflector, and lead shielding are enclosed in and supported by a fluid-tight steel reactor tank. An upper or "thermal column tank" may serve as a shield tank when filled with water or a thermal column when filled with graphite.
- d. The 6 ½ foot diameter, fluid-tight shield tank is filled with water constituting a 55 cm thick fast neutron shield. The fast neutron shield is formed by filling the tank with approximately 1000 gallons of water. The complete reactor shield shall limit doses to personnel in unrestricted areas to levels less than permitted by 10 CFR 20 under operating conditions.
- e. Two safety rods and one control rod (identical in size) contain less than 15 grams of U-235 each in the same form as the core material. These rods are lifted into the core by electromagnets, driven by reversible DC motors through lead screw assemblies. Deenergizing the magnets causes a spring-driven, gravity-assisted scram. The fourth rod or fine control rod (approximately one-half the diameter of the other rods) is driven directly by a lead screw. This rod may contain fueled or unfueled polyethylene.

5.2 Fuel Storage

Fuel, including fueled experiments and fuel devices not in the reactor, shall be stored in locked rooms in the nuclear engineering department laboratories. The storage array shall be such that K eff is no greater than 0.8 for all conditions of moderation and reflection.

5.3 Reactor Room, Reactor Control Room, Accelerator Room

The AGN-201M reactor and associated components shall be housed in the following locations approved by the AGN-201M License:

- Zachry Engineering Center
 - o Reactor Room
 - Control Room
 - Accelerator Room
- Texas A&M Engineering Experiment Station Nuclear Science Center facility
 - Accelerator Building
 - Cargo Container

6.0 ADMINISTRATIVE CONTROLS

6.1 <u>Organization</u>

The administrative organization for control of the reactor facility and its operation shall be as set forth in Figure 1 attached hereto. The authorities and responsibilities set forth below are designed to comply with the intent and requirements for administrative controls of the reactor facility as set forth by the Nuclear Regulatory Commission.