

DOE-ID NEPA CX DETERMINATION

SECTION A. Project Title: Reactor Power Up Rate, Compressor Replacement, Neutron Radiography Restore, Liquid Scintillation Counter – Texas A&M University

SECTION B. Project Description

Texas A&M will replace an existing 54-year old compressor to improve reliability of the reactor operation and purchase a liquid scintillator counter to give the facility the ability to perform tritium analysis. Additionally, under NRC License R-83, Texas A&M will up rate the reactor power from 1MW to 1.5 MW and purchase equipment to restore capability to perform Neutron Radiography.

SECTION C. Environmental Aspects / Potential Sources of Impact

Radioactive Material Use – To calibrate the liquid scintillator, radioactive standards are used. Procedures are in place to handle.

Radioactive Waste Generation – Negligible amounts of waste are expected, but should waste be generated, procedures are in place to handle.

SECTION D. Determine the Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

Note: For Categorical Exclusions (CXs) the proposed action must not: 1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not “connected” nor “related” (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: B2.2 Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and safeguards and security equipment).

B3.6 Siting, construction, modification, operation, and decommissioning of facilities for small-scale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial development.

The existing NRC license R-83 for the facility addresses the increase of reactor power from 1MW to 1.5 MW and purchase equipment to restore capability to perform Neutron Radiography.

Justification: The activity consists of purchasing and upgrading equipment for operational and research purposes.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) Yes No

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on 5/17/2012