

From: Boyle, Patrick
Sent: Tuesday, September 02, 2014 9:39 AM
To: 'Chris Crouch'
Cc: Hassan, Yassin A; Adams, Alexander; Hardesty, Duane; Boyle, Patrick; Reed, Elizabeth
Subject: TAMU-AGN 2014 Shutdown information

Chris,

These items are in response to your email dated August 25, 2014 (ML14240A583) and phone call on August 28, 2014. The actions described below are examples for your consideration but are not intended to be a comprehensive list. Other items of concern may develop as this project evolves. Please feel free to call me if you have additional questions or conditions at your facility change.

Technical Specifications (TS):

Section 4.0 of the Technical Specifications states: "Actions specified in this section are not required to be performed if during the specified surveillance period the reactor has not been brought critical or is maintained in a shutdown condition extending beyond the specific surveillance period. However, the surveillance requirements must be fulfilled prior to subsequent startup of the reactor."

This condition applies to section 4 of the TS only. The approach to be taken to fulfill the surveillance requirements prior to subsequent restart needs to be specified in your restart plan.

Section 6.0 Administrative Controls remain in force during the shutdown period. This includes the annual meeting of the safety board and audits as required. The annual operating report is still required to be generated and submitted.

A notice of violation (two Severity Level IV violations) has been issued to your facility in the past (June 29, 2006) for failure to perform the required audits and to maintain the emergency plan during a period of extended shutdown.

NRC Inspection:

During the period of construction, the NRC staff must continue to have unfettered access to the reactor for routine or reactionary inspections at all times.

Electrical Power:

Special consideration should be made that electrical power is not interrupted to any security or safety system required while the reactor is shutdown. This may include provisions for backup electrical power if normal building power must be secured. Communication lines (e.g. telephone) may fall in this category as well.

Emergency Plan:

All elements of the emergency plan remain in force, including the ability to detect and respond to unexpected conditions. This can include damage to the reactor and surrounding environs as a consequence of the construction activities. Construction activities must not impede the ability to

assess the condition of the facility or to perform mitigating actions as called out in the plan and supporting procedures.

Physical Security:

Requirements of the physical security plan remain in place. The plan contains specific details regarding equipment to support detection. Any actions that modify this equipment must be evaluated per 10 CFR 50.54(p)(2) prior to implementation and if deemed a reduction in effectiveness require NRC approval. The construction activities may cause additional challenges to the physical protection of material from theft, misuse, or diversion so additional compensatory measures may need to be considered.

Operator Requalification Program:

The operator requalification program needs to be evaluated to determine when and how the requirements for control manipulations and annual exam requirements will be met during the period the reactor is not available for normal operations.

Relocation Option:

Movement of the reactor from its current location will require a license amendment.

Transportation of the reactor core materials must be in compliance with shipping regulations (Titles 10 and 49) for irradiated reactor fuel. This will include as a minimum an approved certified container where TAMU has been added as a user to the Certificate of Compliance.

Relocation to TEES will require a license amendment for that facility as well.

Depending on the final building location a construction permit may or may not be required [see 10 CFR 50.10(a)(2)(x)]. Additional consultation with the Office of General Counsel at the NRC will be necessary if this option is being pursued so the details can be reviewed for the legal implication.

License Renewal:

It would be prudent, once the immediate facility control is addressed, to continue making progress with the license renewal. This can include response to any open RAI and resolution of the safety review of the updated console. Review of the Physical Security Plan and licensed reactor operator requalification program has been added to the list of items for the reduced scope review. So, these items will need to be included as part of the license renewal process and can be reviewed during the extended shutdown.

Patrick Boyle

Nuclear Engineer, Research and Test Reactors Licensing Branch
One White Flint North
Mail Stop O-12D20
11555 Rockville Pike
Rockville, MD 20852-2738

(301)415-3936