



50-274

Department of the Interior
US Geological Survey
Box 25046 MS-974
Denver CO, 80225
June 20, 2007

U.S. Nuclear Regulatory Commission
Attn: Alexander Adams NRR/ADRO/DPR/PRT
MS O-12 G-13
Washington, DC 20555-0001

Mr. Adams,

This letter is to provide final details concerning the May 16 violation that was reported for the US Geological Survey TRIGA reactor facility (license R-113, Docket 50-274).

After careful consideration of the actions of the licensed operator who caused the key control violations of May 16 and April 12-13, I concluded that the operator should be removed from his position at the USGS reactor facility. Following several discussions with the USGS employee relations personnel, I met with the operator on May 30, 2007, and informed him that actions were being taken to remove him from his position at the facility. At that same time, I revoked his unescorted access, collected his keys to the key box and vital area, and removed his code from the security system. I strongly recommended that he contact the employee relations office in order to understand his options. The operator met with an employee relations person the afternoon of May 30 and, on May 31, 2007, he submitted his resignation to be effective on June 7, 2007. The operator's ID badge, proxy card, and last building key were collected on June 5 and he was given administrative leave for his remaining two days of employment.

The operator did not operate the reactor during the period from May 17 through June 7.

The GSTR Reactor Operations Committee has been informed of the above actions.

Please contact me if you have any further questions regarding this issue.

Sincerely,

Tim DeBey
USGS Reactor Supervisor

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Department of the Interior
US Geological Survey
Box 25046 MS-974
Denver CO, 80225
May 25, 2007

U.S. Nuclear Regulatory Commission
Attn: Alexander Adams NRR/ADRO/DPR/PRT
MS O-12 G-13
Washington, DC 20555-0001

Mr. Adams,

This letter is a follow-up to the May 16 violation that was reported for the US Geological Survey TRIGA reactor facility (license R-113, Docket 50-274).

On Tuesday, May 15, 2007, the reactor control console was left unattended for approximately two hours with the key in the switch and in the "ON" position. The reactor had been operated for seven hours at full power that day, ending at 12:30 p.m. The reactor operator shutdown the reactor by pressing the manual scram button, but he failed to turn the key switch to "OFF" and failed to remove the key. The operator then left the control console area to perform various maintenance actions. The key was discovered at 2:30 p.m. by the Senior Reactor Operator at the facility. The condition of the key being left in the console does not meet the "shutdown" definition in the GSTR Technical Specifications and is therefore a violation of 10 CFR 50.54 (k): "An operator or senior operator licensed pursuant to part 55 of this chapter shall be present at the controls at all times during the operation of the facility". It is also a violation of GSTR Procedure Number 1, Shutdown step 3(d): "The key switch should be turned to the OFF position and key removed."

During the two hours that the key was in the console and unattended, all control rods were at their full down positions, magnet power was off, and there were no visitors in the facility. There was also at least one member of the GSTR staff inside the protected area at all times during the two hour period.

This violation was caused by failure of the operator to remove the control console key prior to leaving the control room. The operator was aware that the key must be turned off and removed in order for the reactor to be "shutdown", but he was preoccupied with maintenance activities that he had planned for the afternoon. This operator had been reprimanded for other console key control problems in the prior ten months (since he received his RO license), so this incident is not considered to be unique or isolated.

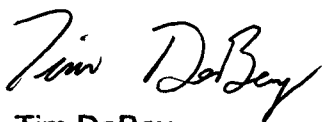
As a result of this event, the following actions have been taken:

1. The operator has been reprimanded again about the importance of key control. Disciplinary actions through the USGS personnel office are being pursued but are not complete at this time. The operator has been restricted to "minimal" operations and will be used only to give short breaks to other operators as needed until the disciplinary actions are solidified. I will provide you with a future update as those actions occur.
2. The normal shutdown procedure has been changed to be the sequence of driving the control rods down and then de-energizing the magnets by turning the key switch off. This will result in the operator having his hand on the key, with the expectation that it will then be removed from the console immediately after turning it to the "off" position. Prior to this change, the rods were normally dropped by actuating the manual scram switch. An alternate shutdown method will be allowed by manual initiation of any of the other scrams that can be actuated from the console.
3. The GSTR procedure for reactor operation has been amended to require that a second person, independent of the operator, go to the control room and verify that the key has been removed and locked in the key box. This verification will be recorded in the log book.
4. A physical barrier has been placed between the control console and the remainder of the control room. This is currently a short chain, but could be a rope, chain, or similar device. This barrier serves as a reminder to the operator to ensure that all console actions are completed prior to leaving the console area.

The GSTR Reactor Operations Committee approved the above changes and they, along with GSTR management, believe these steps will be effective in preventing any future console key control problems at the facility.

Please contact me if you have any further questions regarding this issue.

Sincerely,



Tim DeBey
USGS Reactor Supervisor

Copies to: Johnny Eads
Craig Bassett



Department of the Interior
US Geological Survey
Box 25046 MS-974
Denver CO, 80225
May 16, 2007

U.S. Nuclear Regulatory Commission
Attn: Alexander Adams NRR/ADRO/DPR/PRT
MS O-12 G-13
Washington, DC 20555-0001

Mr. Adams,

This letter is to provide preliminary notification of a violation at the US Geological Survey TRIGA reactor (GSTR) facility (license R-113, Docket 50-274).

On Tuesday, May 15, 2007, the reactor control console was left unattended for approximately two hours with the key in the switch and in the "ON" position. The reactor had been operated for seven hours at full power that day, ending at 12:30 p.m. The reactor operator shutdown the reactor by pressing the manual scram button, but he failed to turn the key switch to "OFF" and failed to remove the key. The operator then left the control console area to perform various maintenance actions. The key was discovered at 2:30 p.m. by the Senior Reactor Operator at the facility. This condition does not meet the "shutdown" definition in the GSTR Technical Specifications and it is a violation of GSTR Procedure Number 1. During the two hours that the key was in the console, all control rods were at their full down positions, magnet power was off, and there were no visitors in the facility. There was also at least one member of the GSTR staff inside the protected area at all times during the two hour period.

This violation was caused by failure of the operator to remove the control console key prior to leaving the control room. The operator was aware that the key must be turned off and removed in order for the reactor to be "shutdown", but he was preoccupied with maintenance activities that he had planned for the afternoon. This operator had been reprimanded for prior console key control problems in the prior ten months, so this incident is not considered to be unique or isolated.

As an interim measure, this operator has been reprimanded again about the importance of key control and he has been instructed that he is not to leave the control console station after a reactor shutdown until a Senior Reactor Operator has verified that the console key has been turned off, removed, and locked in the designated key lock box.

The GSTR management does not consider this issue to be resolved at this time. One or more permanent solutions will be found, proposed to the Reactor Operations Committee, and implemented as approved. A final report will be submitted after the final resolution is implemented.

Please contact me if you have any further questions regarding this issue.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim DeBey". The signature is written in a cursive style with a large, stylized "T" and "D".

Tim DeBey