

NON-PUBLIC?: N
ACCESSION #: 8605050270
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Three Mile Island Unit 2 PAGE: 1 of 4

DOCKET NUMBER: 05000320

TITLE: Performance of a Core Alteration Without the Supervision of a Fuel Handling SRO
EVENT DATE: 03/14/86 LER #: 86-005-01 REPORT DATE: 04/24/86

OPERATING MODE: N POWER LEVEL: 000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR: 50.73(a)(2)(i)

LICENSEE CONTACT FOR THIS LER:

NAME: Russell D. Wells-TMI-2 Licensing Engineer TELEPHONE #: 717-948-8244

SUPPLEMENTAL REPORT EXPECTED: No

ABSTRACT: At approximately 0043 hours on Friday, March 14, 1986, the Canister Positioning System (CPS) was rotated with canisters containing core material. This activity is classified as a core alteration per Technical Specification 1.15. Table 6.2-1 of the Technical Specifications requires core alterations to be directly supervised by a Senior Reactor Operator (SRO) or a Fuel Defueling Command Center to supervise the core alteration. However, due to a misunderstanding by the Lead Engineer, the core alteration was performed without the FHSRO's direct supervision. This resulted in a condition prohibited by the plant's Technical Specifications; therefore, this event is reportable pursuant to 10 CFR 50.73(a)(2)(i)(B). This event will be reviewed with each FHSRO, Task Supervisor, and Lead Engineer to stress the importance of proper communications.

PAGE: 2 of 4

TEXT:

I. PLANT OPERATING CONDITIONS BEFORE THE EVENT

The TMI-2 facility is in a long-term cold shutdown state; the defueling evolution is in progress. The reactor decay heat is being removed via loss to ambient. Throughout this event there was no effect on the Reactor Coolant System or the core.

II. STATUS OF STRUCTURES, COMPONENTS, OR SYSTEMS THAT WERE

INOPERABLE AT THE
START OF THE EVENT AND THAT CONTRIBUTED TO THE EVENT

N/A

III. EVENT DESCRIPTION

This event involves the following personnel:

- Fuel Handling Senior Reactor Operator (FHSRO)-Table 6.2-1 of the TMI-2 Technical Specifications requires a FHSRO or an SRO to directly supervise core alterations.
- Task Supervisor - This individual is stationed in the Command Center and assists the FHSRO in directing the core alteration activities.
- Lead Engineer - This individual is stationed in the Reactor Building and is responsible for implementing the directions issued by the Task Supervisor or FHSRO.

At approximately 0043 hours on Friday, March 14, 1986, a routine planned evolution, i.e., to rotate the Canister Positioning System (CPS) with defueling canisters attached, (no applicable IEEE Code), was performed. The purpose of this evolution was to perform a video inspection of the CPS. The CPS is part of the TMI-2 defueling system and is located within the reactor pressure vessel. The CPS is utilized to rotate defueling canisters for defueling operation.

TMI-2 Technical Specification 1.15 defines core alteration as "the movement or manipulation of any reactor component (including fuel) within the reactor pressure vessel with the vessel head removed." Since rotation of the CPS, including canisters containing core material, involves "movement of fuel" within the reactor vessel, this activity is classified as a core alteration.

PAGE: 3 of 4

TEXT:

During the above evolution, a FHSRO and Task Supervisor were stationed in the Command Center to control the core alteration and had prior knowledge of the planned evolution. However, due to a misunderstanding by the Lead Engineer, the CPS was rotated without the direct authorization and supervision of the FHSRO. This resulted in a condition prohibited by the plant's Technical Specifications; therefore, this event is reportable pursuant to 10 CFR50.73(a)(2)(i)(B).

IV. ROOT CAUSE OF THE EVENT

The root cause of this event was personnel error. At the time of this event, the FHSRO and Task Supervisor were stationed in the Command Center and had prior knowledge of the planned evolution. Due to a breakdown in communication between the Lead Engineer and Task Supervisor, the Lead Engineer instructed the personnel in the Reactor Building to rotate the CPS based on his understanding that the FHSRO had given his approval to commence the operation.

In actuality, neither the FHSRO nor the Task Supervisor were aware that the core alteration had occurred. The Lead Engineer should have requested permission from the Command Center prior to initiating the core alteration activity.

V. CORRECTIVE ACTIONS

This event will be reviewed with each FHSRO and Task Supervisor to stress the importance of proper and direct communications involving the performance or core alteration. Additionally, this event will be reviewed with the Lead Engineers to stress the fact that core alterations are not to be performed without the explicit direct authorization of the designated FHSRO.

VI. COMPONENT FAILURE DATA

N/A

VII. AUTOMATIC OR MANUALLY INITIATED SAFETY SYSTEM RESPONSES

N/A

PAGE: 4 of 4

TEXT:

VIII. ASSESSMENT OF THE SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT

The basis for requiring a licensed individual to supervise core alteration activities is to ensure that appropriate supervision is provided for those activities which could pose a significant criticality or radiological safety concern. With specific regard to rotation of the CPS, it has been demonstrated via the Defueling Canister Technical Evaluation Report and the Early Defueling Safety Evaluation Report that the defueling canisters do not present a criticality concern. Additionally, there was minimal potential for a radiological safety concern and such concern would have been detected by radiation monitors located in and around the reactor vessel. Furthermore, at the time of this event, a FHSRO was stationed in the Command Center and could have taken corrective/remedial action if a problem occurred. This event did

not result in a criticality or radiological safety concern.

ATTACHMENT # 1 TO ANO # 8605050270 PAGE: 1 of 1

NUCLEAR

GPU NUCLEAR CORPORATION
Post Office Box 480
Route 441 South
Middletown, Pennsylvania 17057-0191
717 944-7621
TELEX 84-2386
Writer's Direct Dial Number:
(717) 948-8461

4410-86-L-0070
Document ID 0418A

April 24, 1986

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Licensee Event Report 86-05, Revision 1

Attached is a revision to Licensee Event Report 86-05 concerning the performance of a core alteration without proper supervision on March 14, 1986. This revision is being submitted to correct a discrepancy in the Root Cause section of the report.

This event is considered reportable pursuant to Title 10 of the Code of Federal Regulations, Section 50.73(a)(2)(i)(B).

Sincerely,

F.R. Standerfer
Vice President/ Director, TMI-2

FRS/RDW/eml

Attachments

cc: Regional Administrator -Office of I & E, Dr. T. E. Murley
Director - TMI-2 Cleanup Project Directorate, Dr. W. D. Travers

GPU Nuclear Corporation is a subsidiary of the General Public Utilities
Corporation

*** END OF DOCUMENT ***
