

08-03604-04

DCS No: 03009588901221
Date: December 21, 1990

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE--PNO-I-90-106

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region I staff on this date.

Facility:
Washington Hospital Center
110 Irving Street, N.W.
Washington, D.C. 20010
DN 030-09588

Licensee Emergency Classification:
 Notification of Unusual Event
 Alert
 Site Area Emergency
 General Emergency
 Not Applicable

Subject: MALFUNCTION OF TELETHERAPY UNIT RESULTING IN NON-RETRACTION OF SOURCE

At 11:00 a.m. on December 21, 1990 the radiation safety officer at the Washington Hospital Center, Washington, D.C. informed Region I that the teletherapy source of their teletherapy unit had been stuck in the "on" position while taking a port film to determine correct treatment field of a patient's chest area prior to treatment. The teletherapy unit is an Atomic Energy of Canada Limited (AECL) Theratron Model 780 containing a cobalt-60 sealed source used in the treatment of cancer by external beam therapy. The radiation safety officer at the hospital stated that the cobalt-60 teletherapy source had not retracted to its fully shielded position at the end of a prescribed exposure time. The radiation therapy technologist pressed an emergency stop button, but the source did not retract. The technologist then opened the treatment room (which normally causes the source to retract) but the source remained in the "on" position. The technologist immediately removed the patient from the treatment room. The licensee stated that the exposure to technologist was minimal. After removing the patient, the key on the teletherapy unit console was turned from the on to off position several times, but the source did not retract.

The radiation safety officer informed Region I that the exposure time for the port film was scheduled for 0.06 minutes but lasted 0.12 minutes. This caused the patient to receive an extra 4.7 rads. The licensee determined that the additional dose would not result in any adverse health effects to the patient and was not reportable to the NRC.

The radiation safety officer confirmed that there will be no further treatment of patients until the teletherapy machine has been repaired. The licensee's consulting teletherapy physicist was contacted and went to the facility to determine the cause of the malfunction.

The radiation officer stated that the machine would be repaired by Theratronics, a teletherapy service licensee.

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The licensee will provide NRC Region I with a report specifying the cause of the malfunction when it is determined. All treatments have been cancelled by the licensee until repairs and corrective actions are completed.

Region I will examine the circumstances of the malfunction during an inspection in the near future.

The District of Columbia has been notified. Region I is prepared to respond to any media inquiries.

This information is current as of 2:00 p.m., December 21, 1990.

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