

APR 05 1991

Docket No. 030-00234  
CAL No. 1-91-008

License No. 20-02452-03

Worcester Memorial Hospital  
(Medical Center of Central  
Massachusetts/Memorial)  
ATTN: Laurence E. Kelly  
Vice President, Professional Services  
119 Belmont Street  
Worcester, Massachusetts 01605

Dear Mr. Kelly:

Subject: Confirmatory Action Letter No. 1-91-008

On April 4, 1991, Dr. Mabini Castro of your staff reported to NRC Region I an incident involving the malfunction of a teletherapy machine operated at your facility. The malfunction of the machine involved the failure of the source to restart to its standard position, as well as the failure of the console interlock and door interlocks to effect retraction of the source. The source had to be manually pushed back to its shielded position by the physicist using a "push rod". This delay resulted in the addition of a small increment of time (estimated at between 30 seconds and one minute) to the prescribed treatment time for the patient. Pursuant to a telephone conversation between Dr. Higano and Dr. Castro of your staff and Ms. Jean Gresick-Schugsta of this office on April 5, 1991, it is our understanding that you have taken or will take the following actions with regard to the use of the Theratron 780C teletherapy machine involved in that incident:

1. Immediately terminated ongoing treatment and suspended future treatment.
2. Determine the cause(s) of the teletherapy machine malfunction (failure of source to retract) and take appropriate corrective action, including all necessary repairs, post-maintenance tests, and calibrations to ensure safe conduct of teletherapy operations prior to the resumption of patient treatment.
3. Identify the causes of the interlock failures, and perform all needed repairs.
4. Verify proper operation of the teletherapy machine and all associated safety systems, including the emergency interlocks.

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5. Review the manufacturer's emergency operating procedures and revise your written emergency operating procedures as appropriate for the T-780C to ensure that timely and appropriate action is taken to minimize radiation exposure to patients and hospital personnel.
6. Provide training to all personnel who use the teletherapy machine on the revised emergency operating procedures and any significant lessons learned that resulted from your review of the machine's malfunction. This training will be completed prior to the resumption of teletherapy treatment.
7. Prior to resumption of patient treatment, notify the NRC Region I directly (215-337-5000) or through the NRC Headquarters Operations Center (301-951-0550) that actions 1 through 6 described above have been completed.

Further, we understand that all actions established by this letter will be adhered to and will not be changed unless you receive authorization from the Regional Administrator, NRC Region I.

The response directed by this letter is not subject to the clearance procedures of the Office of Management and Budget, as required by the Paperwork Reduction Act of 1980, Pub. L. 96-511. In accordance with 10 CFR 2.790(a), a copy of this letter will be placed in the NRC Public Document Room.

If your understanding differs from that set forth above, please call me immediately. Issuance of this Confirmatory Action letter does not preclude the issuance of an Order formalizing the above commitments or requiring other actions on part of Worcester Memorial Hospital. Nor does it preclude NRC from taking enforcement action for violations of NRC requirements that may have prompted the issuance of this letter.

Sincerely,

Original Signed By:  
Malcolm R. Knapp

Malcolm R. Knapp, Director  
Division of Radiation Safety  
and Safeguards

cc:  
Public Document Room (PDR)  
Nuclear Safety Information Center (NSIC)  
State of Massachusetts

Medical Center of Central  
Massachusetts/Memorial

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bcc:

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