Event Detail - Abnormal Occurrence

ITEM #:	060748	**AO #:**	07-04	**AO REPORT:**	NUREG-0090, Vol. 30
TITLE:	Medical Event at Kennedy Memorial Hospitals in Turnersville, New Jersey				
NAME:	Kennedy Memorial Hospitals				
DATE:	10/25/2006	**CITY:**	Turnersville	**STATE:**	NJ

Criteria:

Criteria III.C.1.b and III.C.2.b(iii), "For Medical Licensees," of Appendix A to this report states, in part, that a medical event that results in a dose that is equal to or greater than 10 Gy (1,000 rad) to any organ or tissue (other than a major portion of the bone marrow, or the lens of the eye, or the gonads) and represents a prescribed dose or dosage that is delivered to the wrong treatment site shall be considered for reporting as an AO.

Nature and Probable Consequences:

Kennedy Memorial Hospitals (the licensee) reported that a patient was prescribed a brachytherapy treatment of 145 Gy (14,500 rad) to the prostate gland for prostate cancer using 104 iodine-125 seeds, but instead received a dose of 145 Gy (14,500 rad) to an unintended treatment site. The brachytherapy seeds were implanted under ultrasound guidance; however, a post-treatment computed tomography scan showed that the implanted seeds were displaced inferior to the intended position, resulting in a dose of approximately 8 Gy (800 rad) delivered to the intended treatment site. The patient and the referring physician were informed of this event, and additional external beam radiation treatment was recommended.

The NRC staff conducted a reactive onsite inspection on December 12, 2006. The NRC-contracted medical consultant reviewed the case and agreed with the licensee's analysis and conclusions, stating that no significant adverse health effect to the patient is expected.

Cause:

The medical event was caused by the licensee's failure to accurately identify the position of the prostate during the intraoperative ultrasound guidance procedure.

Licensee Action:

The licensee revised its procedures, including the use of a contrast medium in the Foley catheter balloon to more clearly identify the bladder/prostate interface, and use of fluoroscopic imaging to confirm anatomical positioning and verify seed placement.

NRC Action:

There were no violations identified by the NRC.

Other Agency Action: