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NRC STAFF ISSUES NOTICE OF VIOLATION TO UNIVERSITY OF MISSOURI

The Nuclear Regulatory Commission staff has issued a Notice of Violation to the University of Missouri at Columbia for two violations of NRC safety regulations in the operation of the university's non-power research reactor.

The violations were associated with incidents at the reactor facility occurring on April 12 and June 12. Both incidents involved a reduction in safety margins at the reactor facility, but did not result in any radiation overexposures or releases of radioactivity. One violation was associated with each incident.

The Notice of Violation requires the university to respond to NRC within 30 days, describing the reason for the violations and corrective actions taken to prevent a recurrence. The NRC staff did not propose a fine for the violations.

The violations were discussed by the NRC staff and university representatives in a predecisional enforcement conference, open to public observation, in Columbia on September 6.

Prior to the April 12 incident, workers at the reactor facility removed shielding blocks from a portion of the reactor facility to inspect the pool liner. Then, during refueling operations on April 12, operators placed a fuel element in a storage location adjacent to the area where the shielding blocks had been removed. This increased the radiation level in the area nearby, and a radiation alarm sounded.

The fuel element was subsequently returned to its original position, reducing the radiation level in the area to normal and stopping the alarm. No workers were in the area where the increased high radiation levels occurred.

The June 12 incident occurred while the reactor was shut down for maintenance. Reactor operators removed a control blade from the reactor without first removing two of the eight fuel elements in the reactor, as required by procedures. There are four control blades, which control the power level of the reactor. One blade is removed every six months for replacement.

The procedural requirement to remove two fuel elements from the reactor is to provide additional safety margin to prevent an unexpected startup of the reactor. No such startup occurred in

the June 12 incident as the reactor had substantial safety margin even with the two elements present, and there were no safety consequences.

In notifying the university of the enforcement action, David Matthews, Director of the NRC's Division of Regulatory Improvement Programs, said:

Notwithstanding the fact that the NRC has concluded the violations that occurred had low actual and potential consequences, the NRC inspections as well as the University of Missouri's investigations revealed a number of root causes. Many of these root causes were common to both events. Problems in the areas of procedures, organizational function and structure, command and control of regulated activities, communications, fuel handling activities, and emergency response training were noted. The NRC will closely follow and evaluate the effectiveness of the University of Missouri's corrective actions.

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