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NRC WILL STUDY JAPANESE ACCIDENT FOR POSSIBLE SAFETY ENHANCEMENTS

In response to the President's request, the Nuclear Regulatory Commission, in close cooperation with other federal agencies, is working to learn more about the unfortunate criticality accident that recently occurred at a nuclear fuel fabrication plant in Tokaimura, Japan, to see whether lessons learned there might further improve the existing programs at commercial fuel fabrication facilities in the United States. Thus far, as a result of the Tokaimura event, NRC has not identified any safety concerns that would require immediate action. NRC will continue to evaluate lessons learned from the Tokaimura event as they become available and appropriate changes will be made, if and when information is identified that potentially impacts the health and safety of plant workers or the public.

The Japanese government has accepted the President's offer to send a small team to Japan to learn first hand about the accident. NRC plans an in-depth review of the details surrounding the event following the team's return to determine whether further improvements in the existing U.S. regulatory program would be prudent. NRC plans to issue an Information Notice to alert our fuel facility licensees of the circumstances surrounding the accident and acquaint our licensees with what the U.S. and Japanese governments are doing to address the situation.

NRC has also been informed that the commercial nuclear fuel facilities are themselves planning to conduct a self assessment of their criticality programs in light of what is known and will become known about the Japanese event. Industry's initiative is of course welcomed by NRC, since periodic self-assessment is a necessary and important part of safety.

There has not been a criticality event at a commercial U.S. nuclear fuel facility in 35 years, but efforts are constantly underway to improve safety. To ensure prevention of such an event, NRC has a very robust regulatory program, with a highly trained and experienced staff. This program includes both licensing and inspection activities.

NRC performs detailed licensing reviews before a facility is granted a license and is allowed to process nuclear material. These reviews include detailed analyses of the proposed criticality safety programs to include the specific controls that are in place to prevent a criticality for all new operations, as well as for significant modifications. Licensed designs must ensure that safety controls are developed and implemented such that two unlikely and unrelated events must occur before a criticality is possible. Licensees are required to report to NRC when any of these criticality controls fail or are not available.

NRC regulations require criticality alarms in all fuel cycle facilities where nuclear material is stored or processed and all employees are trained in emergency procedures. All of these facilities are required to have an Emergency Plan which defines how the licensee will respond to radiological events, such as a criticality, and these plans are exercised periodically. These plans include the identification of all significant events that could conceivably occur at the site and the development of recommendations for each event to be communicated to Federal, State and local authorities.

Facilities that handle higher enriched uranium, similar to the type of material that was being processed in Japan, have resident inspectors who work at the facility on a full time basis. These facilities receive at least two criticality safety inspections a year, plus pre-startup inspections for any new processes or for the restart of processes that have been shut down for any extended period of time. NRC inspectors verify that the licensees have effectively implemented regulatory safety requirements for the safe handling, storage, and processing of licensed materials regarding criticality safety. NRC resident inspectors have been directed to heighten focus on the implementation of the criticality safety programs at these facilities. In addition, NRC conducts routine nuclear criticality safety inspections commensurate with safety risk and licensee performance at all commercial fuel cycle facilities. All facilities have been inspected this year.

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