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# NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

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## **NRC IMPROVES METHOD FOR MEASURING REACTOR PERFORMANCE DURING UNPLANNED SHUTDOWNS**

The Nuclear Regulatory Commission has updated its Reactor Oversight Process (ROP) by introducing the Unplanned Scrams with Complications (USWC) performance indicator, which tracks events that can increase the risk associated with a reactor's unplanned manual or automatic shutdowns, which are called "scrams."

The agency created the ROP seven years ago to improve its inspection and enforcement programs for commercial nuclear power plants. NRC staff use performance indicators as part of the ROP to evaluate several areas of plant activity. In 2000, the process included a performance indicator that measured the ability of a reactor's cooling systems to remove heat from its core after a scram. As the NRC and industry evaluated that performance indicator, enough questions were raised to point out the need for revisions. The agency and industry formed a task force in late 2004 to work on the issue, and the group's work led to the USWC indicator.

"This revision will keep better track of the small percentage of scrams that require extra work from reactor operators, since those conditions could represent more risk than uncomplicated scrams," said Jim Dyer, Director of the NRC's Office of Nuclear Reactor Regulation. "If we see a plant having too many complicated scrams in a short period of time, we'll know it's time to increase our oversight."

The USWC indicator will monitor conditions that could complicate a plant's scram recovery, including:

- maintaining control over conditions needed for a chain reaction;
- providing electricity to emergency systems;
- activating emergency sources of cooling water;
- maintaining availability of normal cooling water sources, and;
- using emergency operating procedures to address complicated scrams.

Triggering any one of the criteria during an unplanned scram counts as an event, and two or more events in a 12-month period will result in increased NRC oversight.

The development of the new indicator has included multiple public meetings and public comments. More information on the USWC indicator is available on the NRC Web site at: <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/unplanned-scrams-with-complications.html>. Notification to nuclear power plant licensees issued in a Regulatory Issue Summary (RIS 2007-12) will be available at: <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/reg-issues/2007/>.

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