

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, D.C. 20555-0001

June 26, 2007

**NRC REGULATORY ISSUE SUMMARY 2007-12
CHANGES TO THE UNPLANNED SCRAMS WITH LOSS OF NORMAL
HEAT REMOVAL PERFORMANCE INDICATOR**

ADDRESSEES

All holders of operating licenses for nuclear power reactors except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to inform addressees that beginning on July 1, 2007, the agency will replace the unplanned scrams with a loss of normal heat removal (LONHR) performance indicator (PI) with the unplanned scrams with complications (USwC) performance indicator. This RIS and Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," provide guidance to participating addressees for calculating and submitting USwC data to the NRC. This RIS also contains background information for interested members of the public and other stakeholders. Addressee participation in the PI program is voluntary. Therefore, this RIS requires no action or written response on the part of an addressee.

BACKGROUND INFORMATION

Regulatory oversight is implemented within the framework of the Reactor Oversight Process (ROP). The ROP includes two major inputs into the assessment of licensee performance. These inputs are inspection findings and PIs. From the beginning of the development of the ROP, the staff recognized the need to refine the use of PIs as noted in SECY-99-007, "Recommendations for Reactor Oversight Process Improvements," dated January 8, 1999.

The LONHR PI has resulted in many frequently asked questions (FAQs) since the initiation of the ROP and has been the subject of two prior RISs. In an attempt to address the challenges with the PI, the NRC/Industry Working Group began development of a replacement indicator in October 2004. The NRC/Industry Working Group consists of NRC management and staff, NEI

ML063470041

management, and senior industry representatives. The PI development process is described in Inspection Manual Chapter 0608, "Performance Indicator Program."

Industry performance data from 1995 to 2000 was gathered to provide a foundation for evaluating the new PI. The NRC/Industry Working Group met in monthly public meetings to refine the proposed replacement indicator, plan and conduct a table-top pilot, and develop the criteria to be used to evaluate the pilot results. A basis document was developed for the USwC, complete with examples from industry events to aid in implementation. The table-top pilot was performed using industry events from the past few years. The purpose of the pilot was to ensure that the guidance was sufficiently clear to achieve the same response from both NRC staff and industry representatives given the same set of facts. Twelve representatives from the industry and staff evaluated 20 selected Licensee Event Reports. Some minor enhancements were made to the guidance to incorporate recommendations from the table-top pilot. Information concerning the new PI has been posted on the ROP page of the NRC public web site.

SUMMARY OF ISSUE

The USwC PI developed by the NRC/Industry Working Group is replacing the LONHR PI. The USwC is designed to identify facilities that are outliers in complications that can elevate the risk of an unplanned manual or automatic reactor trip or scram. The PI will monitor the following six actions or conditions that have the potential to complicate the post trip recovery; reactivity control, pressure control (boiling water reactors)/turbine trip (pressurized water reactors), availability of power to emergency buses, actuation of emergency injection sources, availability of main feedwater, and the use of emergency operating procedures to address complicated scrams. A complete description of the PI basis document is available on the ROP page of the NRC public website. The web site has been set up to give stakeholders general information on the USwC PI, and implementation guidance documents.

The USwC PI is based on a 1-year rolling time-frame; it represents more current performance than the LONHR PI, which is based on 3 years. Triggering any one of the above criteria during an unplanned scram counts in the USwC PI. Two or more such events in a 12-month period will cause the indicator to change from green to white, which results in increased regulatory response. There are no yellow or red bands for this PI.

It is expected that the number of plants that receive increased regulatory oversight based on the new PI will be similar to that of the LONHR PI. There may be some plants that are currently green under the LONHR PI that will go white under the USwC or conversely. This impact is not because of a change in performance, but because the USwC PI is a much broader PI that measures different attributes than the LONHR PI, and the criteria for loss of main feedwater are different for USwC.

The applicable NRC procedures and NEI 99-02 will be changed prior to implementation to reflect the latest guidance for the USwC PI. Changes to databases and software necessary for each licensee to be able to implement the new PI, and the training of industry and staff will also be completed prior to implementation. This new PI will take effect July 1, 2007. Licensees will report the results of the USwC PI quarterly, as is done for the current PI. The third quarter data

will be reported on October 22, 2007, in accordance with NEI 99-02 guidance. The NRC will post the results of the USwC PI on its public website in a fashion similar to other PIs.

COMPLETENESS AND ACCURACY OF INFORMATION DISCUSSION

This RIS requires no action or written response. The reporting of USwC data, as with any PI data, will be used for assessment under the ROP.

Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.9 requires that information provided to the Commission by a licensee shall be complete and accurate in all material respects. This includes the voluntary submittal of PI information by licensees. This information is considered material because the NRC uses it to assess licensee performance and to make decisions on regulatory action.

BACKFIT DISCUSSION

This RIS requires no action or written response. Any action on the part of the addressees to collect and transmit PI data in accordance with the guidance contained in this RIS is strictly voluntary and; therefore, is not a backfit under 10 CFR 50.109. Therefore, the staff did not perform a backfit analysis.

FEDERAL REGISTER NOTIFICATION

A notice of opportunity for public comment on this RIS was not published in the *Federal Register* because this RIS is informational.

SMALL BUSINESS REGULATORY ENFORCEMENT FAIRNESS ACT of 1996

The NRC has determined that this action is not subject to the Small Business Regulatory Enforcement Fairness Act of 1996.

PAPERWORK REDUCTION ACT STATEMENT

This regulatory issue summary contains information collection requirements subject to the Paperwork Reduction Act of 1995 ((44 U.S.C. 3501 et seq.). These information collection requirements were approved by the Office of Management and Budget (OMB), approval number 3150-0195, which expires November 30, 2008.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

CONTACT

Please direct any questions about this matter to the technical contacts listed below.

/RA by TQuay for/

Michael J. Case, Director
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Technical Contacts: Donald Hickman, NRR
301-415-8541
Email: deh2@nrc.gov

Mark E. Tonacci, NRR
301-415-4045
E-mail: met@nrc.gov

Note: NRC generic communications may be found on the NRC public Web site, <http://www.nrc.gov> under Electronic Reading Room/Document Collections.

CONTACT

Please direct any questions about this matter to the technical contacts listed below.

/RA by TQuay for/
 Michael J. Case, Director
 Division of Policy and Rulemaking
 Office of Nuclear Reactor Regulation

Technical Contacts: Donald Hickman, NRR
 301-415-8541
 Email: deh2@nrc.gov

Mark E. Tonacci, NRR
 301-415-4045
 E-mail: met@nrc.gov

Note: NRC generic communications may be found on the NRC public Web site, <http://www.nrc.gov> under Electronic Reading Room/Document Collections.

DISTRIBUTION:
 RIS File

ADAMS ACCESSION NUMBER: ML063470041

*concurring via email

OFFICE	Tech Editor*	IPAB:DIRS	IPAB:DIRS	BC:IPAB:DIRS	D:DIRS	D:DORL
NAME	CClark	DHickman	MTonacci	JAndersen	ECollins	CHaney
DATE	2/21/07	3/13/07	2/28/07	3/9/07	3/19/07	3/29/07
OFFICE	OE	OGC (SBREFA)	OGC (NLO)	PMAS	OIS	
NAME	CCarpenter	SCrockett	DRoth	MLSapp	MJanney	
DATE	4/17/07	5/4/07	04/17/07	04/20/07	04/30/07	
OFFICE	PGCB:DPR*	PGCB:DPR	BC:PGCB:DPR	D:DPR		
NAME	CHawes CMH	AWMarkley	MMurphy	TQuay for MCase		
DATE	6/22/07	06/22/07	06/25/07	6/26/07		

OFFICIAL RECORD COPY