

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
OFFICE OF NEW REACTORS
WASHINGTON, DC 20555-0001

March 29, 2018

**NRC REGULATORY ISSUE SUMMARY 2017-01, REVISION 1,
HUMAN RELIABILITY AND HUMAN PERFORMANCE DATABASE**

ADDRESSEES

All holders of, or applicants for, a power reactor operating license under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," except those that have certified that they have permanently ceased operations and have permanently removed all fuel from the reactor vessel.

All holders of and applicants for a power reactor early site permit, combined license, standard design approval, or manufacturing license under 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." All applicants for a standard design certification, including such applicants after initial issuance of a design certification rule.

INTENT

The U.S. Nuclear Regulatory Commission (NRC) is issuing this regulatory issue summary (RIS) to inform addressees about the NRC's Scenario, Authoring, Characterization, and Debriefing Application (SACADA) software for operator simulator training. In addition, the NRC is seeking industry partners to voluntarily use SACADA to support the NRC's research in Human Reliability Analysis (HRA) method improvements. This RIS supersedes in its entirety RIS 2017-01, "Human Reliability and Human Performance Database" (Agencywide Documents Access and Management System [ADAMS] Accession No. ML16257A399) and requires no action or written response on the part of an addressee. Addressee actions to collect and transmit information requested are strictly voluntary.

BACKGROUND INFORMATION

The NRC's Office of Nuclear Regulatory Research worked with the South Texas Project Nuclear Operating Company (STPNOC) to develop SACADA to collect operator performance information in simulator training. SACADA can be used to develop simulation scenarios, guide post-simulation debriefings, and generate reports for various purposes. A general overview of SACADA is available in ADAMS (Accession No. ML17053B558).

The STPNOC has used SACADA since 2012 and determined that the software helped the company meet training objectives as described below:

- SACADA automatically e-mails personnel performance information to managers once it is saved into the SACADA database, typically immediately after a debriefing. This facilitates timely communication about personnel performance. In addition, nuclear

power plants within the same organization can use SACADA as a common platform to exchange and compare performance information in simulator training.

- SACADA provides an efficient and effective way to track and trend simulator performance issues, identify performance strengths and weaknesses, and generate information for crew notebooks. A common crew performance issue in a training cycle can be immediately identified and addressed by the licensee in the next training cycle instead of requiring two or more training cycles to identify the common issue.

SUMMARY OF ISSUE

The NRC is seeking to partner with additional NRC licensees to use SACADA to collect operator performance information in simulator training. For licensees that request the use of SACADA, the NRC staff will provide free software licenses, training, and technical support. In exchange, the licensee using SACADA will grant the NRC access to the collected operator performance data. The NRC will use the collected data solely to support its research in HRA method improvement. An agreement will be developed to reflect the details of any partnership.

Any licensees interested in learning more about SACADA should contact the NRC technical contacts listed in this document. For licensees interested in using SACADA, the NRC will support a negotiable evaluation period. Typically, this period is three training cycles. After the evaluation period, if the licensee decides to continue using SACADA, the NRC would continue to provide free software licenses, perform software maintenance and updates, and provide technical support. The licensee would also continue to grant the NRC use of the collected data for HRA research.

BACKFITTING AND ISSUE FINALITY DISCUSSION

This RIS requires no action or written response. Any action on the part of addressees in accordance with the information contained in the RIS is strictly voluntary and, therefore, does not constitute backfitting under 10 CFR Part 50.109 or a violation of issue finality provisions under 10 CFR Part 52. Consequently the staff did not perform a backfit analysis.

FEDERAL REGISTER NOTIFICATION

The NRC did not publish a notice of opportunity for public comment on this RIS in the *Federal Register* because the RIS is administrative.

CONGRESSIONAL REVIEW ACT

This RIS is not a rule as defined in the Congressional Review Act (5 U.S.C. §§ 801-808) and, therefore, is not subject to the requirements of the Act.

PAPERWORK REDUCTION ACT STATEMENT

This RIS contains voluntary information collections that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). The Office of Management and Budget (OMB) approved these information collections, approval number 3150-0234. The burden to the public for these information collections is estimated to average 1 hour to review the RIS and 0.5 hours per response. Send comments regarding this information collection to the Information Services Branch, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0234) Office of Management and Budget, Washington, DC 20503.

Public Protection Notification

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

CONTACT

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

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

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