



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

March 16, 2011

*mailed  
4-4-11*

Mr. Edward Halpin, President and Chief Executive Officer  
STP Nuclear Operating Company  
P.O. Box 289  
Wadsworth, TX 77483

Dear Mr. Halpin:

Please find enclosed two copies of the memorandum of agreement between the U.S. Nuclear Regulatory Commission (NRC) and the STP Nuclear Operating Company on participation in the collection of licensed operator simulator training data for human reliability analysis. NRC's Office of Nuclear Regulatory Research staff and Mr. Rick Grantom, Mr. Jonathan Pierce, and Mr. Rodney Nowell of your staff collaborated on the development of this memorandum. NRC looks forward to working with you on the agreement. Toward that end, please return an executed copy of the memorandum at your earliest convenience. If you have any questions, please contact Dr. James Chang at (301) 251-7589.

Sincerely,

*Brian W. Sheron*

Brian W. Sheron, Director  
Office of Nuclear Regulatory Research

Enclosures:  
As stated

**AGREEMENT BETWEEN THE  
U.S. NUCLEAR REGULATORY COMMISSION  
AND THE  
STP NUCLEAR OPERATING COMPANY  
REGARDING PARTICIPATION IN THE COLLECTION OF  
LICENSED OPERATOR SIMULATOR TRAINING DATA FOR  
HUMAN RELIABILITY ANALYSIS**

WHEREAS, the U.S. Nuclear Regulatory Commission (hereinafter NRC) and STP Nuclear Operating Company (hereinafter STPNOC), have a mutual interest in a cooperative study involving collection of simulator data for human reliability analysis (hereinafter STUDY);

WHEREAS, STPNOC is a company operating the South Texas Project Electric Generating Station;

WHEREAS, NRC intends to use the staff of selected national laboratories of the U.S. Department of Energy (hereafter LABORATORY) to assist in the STUDY;

WHEREAS, STPNOC is interested in participating cooperatively in the STUDY as set forth in this Agreement;

WHEREAS, STPNOC is neither a contractor nor an offeror to the NRC for purposes of this Agreement.

The Parties AGREE as follows:

**ARTICLE 1. OBJECTIVE**

- 1.1 NRC and STPNOC, in accordance with the provisions of this Agreement and Section 31 of the Atomic Energy Act of 1954, as amended, and subject to other applicable laws, regulations, and national policy in force in the United States, will join together for cooperative research in the STUDY. It is understood by the Parties that STPNOC is the provider of simulator training data for the STUDY and shall not provide technical support, analysis, advice, evaluations, or recommendations to NRC in connection with cooperating and participating in the STUDY. However, STPNOC shall provide written feedback to NRC on its lessons learned through cooperation with this STUDY to facilitate improvements in future human reliability analysis (HRA) data collection using nuclear power plant simulators.
- 1.2 NRC's goal under this Agreement is to improve the HRA methods and techniques by aggregating the simulator data provided by STPNOC with other data that NRC has.
- 1.3 In view of the significant data to be acquired and potential human performance insights to be derived from this unique demonstration project, NRC considers this project to be appropriate for collaboration with STPNOC.

## ARTICLE 2. SCOPE OF AGREEMENT

- 2.1 NRC shall provide to STPNOC data collection tools (e.g., software) and training on the use of the tools as necessary. NRC shall work with STPNOC to develop the data collection tools and to ensure the tools serve the interests of NRC and STPNOC in this STUDY.
- 2.2 STPNOC shall provide the licensed operator requalification training data to NRC including simulator scenarios and job performance measures.

Once a process has been established using the requalification training simulator sessions, the scope may be increased to include the emergency response drills with the mutual agreement of the representatives of NRC and STPNOC as specified in Articles 4.1 and 4.2.

- 2.3 The simulator training data specified in Article 2.2 may include the following:
- Simulator scenario descriptions including critical tasks and human actions modeled in the probabilistic risk assessment model of STPNOC.
  - Performance evaluation criteria.
  - Evaluation results.
  - Crew composition.
  - Individual crew's experience level in the position.
  - Type of training (e.g., "As Found"; licensed operator requalification training (LORT), exam practice, exam; E-plan drill).
  - Training frequency.
  - Crew and individual evaluation write ups and critique comments.
  - Items documented for the individual/crew to work on in future training.

The above data shall be transmitted to NRC on a regular basis that corresponds to the LORT cycle.

During development of the data-collection tools mentioned in Article 2.1, STPNOC may wish to include data collection for STPNOC internal use that is outside the bulleted items above or data processing functions not specified in this Article and Article 2.4. The NRC and STPNOC representatives will jointly decide the technical coverage of the data collection tools and what collected data need not be sent to NRC.

- 2.4 The data transmitted to NRC shall not include any operator's name or identification that can be used to identify the individual. Instead, the individual crew member shall be identified based on his/her responsibility (e.g., unit supervisor) in the simulation.
- 2.5 NRC and the LABORATORY shall not reveal the identities of the plant and crew in any reports, documents, presentations, or other communication means related to the STUDY. Instead, generic descriptions shall be used for identification in this study (e.g., Westinghouse four-loop pressurized-water reactor, Crew 1, and SRO 1).
- 2.6 NRC and STPNOC agree that NRC will decide the direction, determinations, and decisions regarding publication of the results from the STUDY. However, NRC will solicit the review and comments of STPNOC in developing the final reports.
- 2.7 This Agreement does not relieve STPNOC of its responsibility to ensure exam security requirements are met per 10 CFR 55.49.
- 2.8 NRC shall not issue any enforcement action (findings or violations) to STPNOC for nonwillful violations identified as a result of NRC's analysis of the data collected through the STUDY. However, apparent violations identified by NRC from its analysis of the data will be reported back to STPNOC for implementation in STPNOC's corrective action program. Findings and violations identified during implementation of the Reactor Oversight Program (including inspections of the licensed operator requalification program) will continue to be enforced.
- 2.9 STPNOC's participation in the STUDY will not affect NRC's evaluation of licensed operator requalification at STPNOC.
- 2.10 STPNOC shall not use information from the STUDY as a means to meet STPNOC licensee reporting responsibilities under 10 CFR 50.72, "Immediate Notification Requirements for Operating Nuclear Power Stations," and 10 CFR 50.73, "Licensee Event Report System," or any other reporting requirement. Any compensatory measures devised shall not be considered as satisfying the NRC regulatory requirements without formal review and/or inspection of the condition or facility. Such reviews and inspections are outside the scope of this Agreement.
- 2.11 STPNOC will provide advice or make recommendations, if any, to the NRC on regulatory or policy matters through the established procedures of the NRC, and the NRC will consider them in the same manner as other offers of advice or recommendations made through established NRC procedures.
- 2.12 The data analysis to be performed by NRC under this Agreement is intended to generate results that will be of mutual interest to the NRC and STPNOC. Any additional data analysis requested by STPNOC to be performed by NRC shall be agreed by NRC representative as stated in the Article 4.1 of this Agreement.

- 2.13 NRC, the LABORATORY, and STPNOC will regularly exchange information and communicate regarding issues related to the STUDY. All meetings are for information exchange regarding the STUDY. Meetings are not to be construed as requests or opportunities for (or used by NRC for obtaining) advice or recommendations of STPNOC or its personnel on policy or regulatory matters within the scope of the NRC responsibilities.
- 2.14 STPNOC shall provide feedback on the cooperative experience to NRC prior to the termination of the Agreement.

### ARTICLE 3. ESTIMATED PROJECT COSTS

- 3.1 This Agreement does not obligate any funds, and all activities under this Agreement are subject to the availability of appropriated funds. Each party will be responsible for payment of any costs that it incurs in connection with this Agreement, and neither party has agreed to pay or reimburse costs incurred by the other party.
- 3.2 NRC agrees to fund the activities of the NRC and LABORATORY staff (including travel-related costs) under this Agreement.
- 3.3 NRC agrees to fund the development of the data collection tools.
- 3.4 STPNOC agrees to fund the activities of its staff (including travel related cost, if any) under this Agreement.

### ARTICLE 4. PROGRAM MANAGEMENT

- 4.1 NRC shall appoint a representative for the STUDY. NRC shall furnish STPNOC with the name of the appointed representative, which may change from time to time.
- 4.2 STPNOC shall appoint a representative for the STUDY. STPNOC shall furnish NRC with the name of the appointed representative, which may change from time to time.

### ARTICLE 5. EXCHANGE AND USE OF INFORMATION

- 5.1 All data obtained from the STUDY will be handled as proprietary information to STPNOC according to applicable laws and regulations. The NRC may use the information provided by STPNOC pursuant to this Agreement solely for purposes of the STUDY and for no other purpose without the prior written consent of STPNOC.
- 5.2 NRC shall not transfer any data obtained to another party without STPNOC agreement under this Agreement.

### ARTICLE 6. DISPUTES

Cooperation under this Agreement shall be in accordance with the laws and regulations of the United States. Any questions or disputes concerning the interpretation or application of this

Agreement arising during its term shall be settled by mutual agreement of the Parties. This Agreement does not confer an enforceable payment obligation on any party.

#### ARTICLE 7. RESPONSIBILITY

7.1 NRC shall have the following responsibilities:

7.1.1 Provide funding and project management for the NRC staff and the LABORATORY to participate in the STUDY to the extent appropriated funds are available.

7.1.2 Provide funding for the development of data collection tools and results documentation for the STUDY to the extent appropriated funds are available.

7.2 STPNOC shall have the following responsibilities:

7.2.1 Provide funding for STPNOC staff members to participate in the STUDY to the extent appropriated funds are available.

7.2.2 Provide all simulator data as specified in Articles 2.2 and 2.3 to NRC.

7.2.3 Provide a summary of the cooperation experience to NRC before the termination of the Agreement.

7.2.4 Identify to NRC any items of concern relating to the release of proprietary or private information.

7.2.5 Document the lessons learned from the collaborative project.

#### ARTICLE 8. TERMINATION

NRC or STPNOC may withdraw from the present Agreement after providing the other Party written notice at least 30 days before the withdrawal date; provided, however, that the use restrictions and confidentiality provisions applicable to the information provided by STPNOC pursuant to this Agreement will survive and remain in effect for a period of ten (10) years following any termination of this Agreement.

#### ARTICLE 9. MODIFICATION AND INTEGRATION

No modification to this Agreement shall be valid unless written and signed by the undersigned representatives (or their successors) of NRC and STPNOC. This Agreement contains the entire understanding between the Parties, and all understandings are either set forth or incorporated by reference.

ARTICLE 10. ENTRY INTO FORCE

- 10.1 This Agreement shall enter into force upon signature by both Parties and shall remain in force through June 30, 2013, unless terminated in accordance with Article 8. The use restrictions and confidentiality provisions applicable to the information provided by STPNOC pursuant to this Agreement will survive and remain in effect for a period of ten (10) years following any termination of this Agreement.
- 10.2 NRC and STPNOC can mutually agree to extend this Agreement through an exchange of letters and amendment to Article 10 of this Agreement.

<p>FOR THE U.S. NUCLEAR REGULATORY COMMISSION,</p> <p>BY: <u>Brian W. Sheron</u> Brian W. Sheron</p> <p>TITLE: <u>Director, Office of Nuclear Regulatory Research</u></p> <p>DATE: <u>March 17, 2011</u></p> <p>PLACE: <u>Rockville, MD</u></p>	<p>FOR THE STP NUCLEAR OPERATING COMPANY,</p> <p>BY: <u>Eha</u> Edward Halpin</p> <p>TITLE: <u>President and Chief Executive Officer</u></p> <p>DATE: <u>March 31, 2011</u></p> <p>PLACE: <u>STPNOC Woodworth TX</u></p>
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