

Union Electric
Callaway Plant

Garry L. Randolph
Vice President and
Chief Nuclear Officer

PO Box 620
Fulton, MO 65251
573.676.8245
573.676.4056 fax

March 13, 2000



U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Stop P1-137
Washington, DC 20555-0001

ULNRC-4201

Gentlemen:

DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
UNION ELECTRIC CO.
FACILITY OPERATING LICENSE NPF-30
CALLAWAY PLANT SIMULATOR CERTIFICATION

The purpose of this letter is to submit a change to the Certification of the Callaway Plant Simulator. We have previously been committed to the ANSI/ANS-3.5-1985 standard and wish to update to the latest version of this standard ANSI/ANS-3.5-1998.

Please find enclosed the Callaway Plant Simulator NRC Form-474, Simulator Facility Certification, and our testing program description for your review and comment.

If there are any questions concerning this certification, please contact us.

Very truly yours,


Garry L. Randolph

GLR/SMH/tmw

Attachment: 1) NRC Form-474, Simulator Facility Certification

ULNRC-4201
March 13, 2000
Page 2

cc: Mr. Ellis W. Merschoff
Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Senior Resident Inspector
Callaway Resident Office
U.S. Nuclear Regulatory Commission
8201 NRC Road
Steedman, MO 65077

Mr. Jack N. Donohew (2 copies)
Licensing Project Manager, Callaway Plant
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop OWFN-4D3
Washington, DC 20555-2738

Manager, Electric Department
Missouri Public Service Commission
PO Box 360
Jefferson City, MO 65102

Superintendent, Licensing
Wolf Creek Nuclear Operating Corporation
PO Box 411
Burlington, KS 66839

SIMULATION FACILITY CERTIFICATION

Estimated burden per response to comply with this mandatory information collection request: 120 hours. This information is used to certify a simulation facility. Forward comments regarding burden estimate to the Information and Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0138), Office of Management and Budget, Washington, DC 20503. NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

INSTRUCTIONS: This form is to be filed for initial certification, recertification (if required), and for any change to a simulation facility performance testing plan made after initial submittal of such a plan. Provide the following information and check the appropriate box to indicate reason for submittal.

FACILITY Callaway Plant	DOCKET NUMBER 50-483
----------------------------	-------------------------

LICENSEE Union Electric Company (a wholly-owned subsidiary of Ameren Corp.)	DATE 2/29/2000
--	-------------------

This is to certify that:

- The above named facility licensee is using a simulation facility consisting solely of a plant-referenced simulator that meets the requirements of 10 CFR 55.45.
- Documentation is available for NRC review in accordance with 10 CFR 55.45(b).
- This simulation facility meets the guidance contained in ANSI/ANS 3.5-1985 or ANSI/ANS 3.5-1993, as endorsed by NRC Regulatory Guide 1.149.

If there are any **EXCEPTIONS** to the certification of this item, **CHECK HERE [X]** and describe fully on additional pages as necessary.

NAME (or other identification) AND LOCATION OF SIMULATION FACILITY.

Callaway Plant Simulator - Fulton, Missouri

SIMULATION FACILITY PERFORMANCE TEST ABSTRACTS ATTACHED. (For performance tests conducted in the period ending with the date of this certification.)

DESCRIPTION OF PERFORMANCE TESTING COMPLETED. (Attach additional pages as necessary and identify the item description being continued.)

See attached description.

SIMULATION FACILITY PERFORMANCE TESTING SCHEDULE ATTACHED. (For the conduct of approximately 25* of performance tests per year for the four-year period commencing with the date of this certification.)

DESCRIPTION OF PERFORMANCE TESTING TO BE CONDUCTED. (Attach additional pages as necessary and identify the item description being continued.)

See attached description.

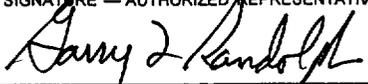
PERFORMANCE TESTING PLAN CHANGE. (For any modification to a performance testing plan submitted on a previous certification.)

DESCRIPTION OF PERFORMANCE TESTING PLAN CHANGE (Attach additional pages as necessary and identify the item description being continued.)

See attached description.

RECERTIFICATION (Describe corrective actions taken, attach results of completed performance testing in accordance with 10 CFR 55.45(b)(5)(v). (Attach additional pages as necessary and identify the item description being continued.)

Any false statement or omission in this document, including attachments, may be subject to civil and criminal sanctions. I certify under penalty of perjury that the information in this document and attachments is true and correct.

SIGNATURE — AUTHORIZED REPRESENTATIVE 	TITLE Vice President and Chief Nuclear Officer	DATE 3/17/2000
--	--	-------------------

In accordance with 10 CFR 55.5, Communications, this form shall be submitted to the NRC as follows:

BY MAIL ADDRESSED TO: DIRECTOR, OFFICE OF NUCLEAR REACTOR REGULATION U.S. NUCLEAR REGULATORY COMMISSION WASHINGTON, DC 20555-0001	BY DELIVERY IN PERSON TO THE NRC OFFICE AT:	ONE WHITE FLINT NORTH 11555 ROCKVILLE PIKE ROCKVILLE, MD
---	---	--

Description of Performance Testing

This is to certify that:

1. The above named facility licensee is using a simulation facility consisting solely of a plant-referenced simulator that meets the requirements of 10CFR55.45.

Item 1 has not been changed or modified.

No exceptions or exemptions are being taken to 10CFR55.45.

2. Documentation is available for NRC review in accordance with 10CFR55.45(b)

Item 2 has not been changed or modified.

No exceptions or exemptions are being taken to 10CFR55.45.

3. This simulation facility meets the guidance contained in ANSI/ANS-3.5-1998, as endorsed by Draft Regulatory Guide DG-1080, dated August 1999.

Item 3 has been changed.

No exceptions or exemptions are being taken to ANSI/ANS-3.5-1998.

The only exception being taken is to commit to the latest ANSI/ANS Standard and the applicable Draft Regulatory Guide that points to this standard. This allows simulator performance testing to be coupled with scenario-based testing in the training and examination preparation processes, providing improved assurance of acceptable simulator performance over that provided by previous simulator capabilities-based, stand-alone testing programs.

Attachment to
NRC Form 474

Description of Performance Testing

Description of performance testing completed

Refer to previous submitted four-year reports

1987 Four Year Report

1991 Four Year Report

1995 Four Year Report

1999 Four Year Report

Description of Performance Testing to be conducted

No exceptions or exemptions are being taken to the new standard.

Testing will be conducted as described in the ANSI/ANS-3.5-1998 Standard Section 4.4 Simulator Testing. This includes Verification Testing per section 4.4.1, Validation testing per Section 4.4.2, Simulator Performance testing per Section 4.4.3, Simulator Performance Testing per Section 4.4.3, Simulator Operability Testing per Section 4.4.3.1 and Simulator Scenario-Based Testing per Section 4.4.3.2.

Simulator performance testing will be coupled with scenario-based testing in the training and examination preparation processes, providing improved assurance of acceptable simulator performance over that provided by previous simulator capabilities-based, stand-alone testing programs. A performance testing checklist will be used to document the scenario-based testing process. Any items identified, that may need correction or modification, will be placed into the on-going simulator configuration management process.

There is no change to the configuration control verification and validation testing used in the software development process.

Description of Performance Testing Plan Change

Performance tests will include pre-testing of all licensed operator simulator scenarios used for examination and training. A "Pilot Program Guide-Simulator Scenario" has been issued to implement the pre-testing plan and process. A performance testing checklist will be used to document the pre-testing of the scenario. These performance tests will include not only malfunction tests, but review of any instructor interface items used in the course of the simulator scenario. This replaces the twenty five per cent per year stand-alone testing of malfunctions, as required per the previous standard.

The scheduling and evaluation of simulation facility testing under ANSI/ANS-3.5-1998 is a function of the accredited training program. The licensed operator training program simulator schedule will be used as guidance for the sequence in which the simulator scenarios will be tested.

There is no change to the configuration control verification and validation testing used in the software development process.

A new "COMBINED TRAINING SCHEDULE" has been attached to show training that will be conducted as a function of the accredited training program.

