

Michael J. Yox
Regulatory Affairs Director
Vogtle 3 & 4
Nuclear Development

Southern Nuclear
Operating Company, Inc.
7825 River Road
Waynesboro, GA 30830
Tel: 706.848.6459



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10 CFR 52.99(c)(1)

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC 3.2.00.01c.i [Index Number 741]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 3.2.00.01c.i [Index Number 741] for verifying that the Integrated System Validation (ISV) was conducted in conformance with the implementation plan and includes an evaluation using performance based tests to determine whether the integrated Human Factors Engineering (HFE) system design (i.e., hardware, software, and personal elements) meets performance requirements and acceptably supports safe operation of the plant. The closure process for this ITAAC is based on the guidance described in NEI 08-01, Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52, which was endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact David Woods at 706-848-6903.

Respectfully submitted,


Michael J. Yox
Regulatory Affairs Director Vogtle 3&4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 3.2.00.01c.i [Index Number 741]

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To:

Southern Nuclear Operating Company/ Georgia Power Company

Mr. D. A. Bost (w/o enclosures)

Mr. M. D. Meier

Mr. M. D. Rauckhorst (w/o enclosures)

Mr. D. H. Jones (w/o enclosures)

Ms. K. D. Fili

Mr. D. L. McKinney

Mr. D. L. Fulton

Mr. C. E. Morrow

Mr. M. J. Yox

Mr. D. Woods

Ms. A. L. Pugh

Ms. K. M. Stacy

Mr. A. S. Parton

Mr. W. A. Sparkman

Mr. J. P. Redd

Mr. D. R. Culver

Mr. F. H. Willis

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cc:

Nuclear Regulatory Commission

Ms. C. Haney (w/o enclosures)

Ms. J. M. Heisserer

Mr. C. P. Patel

Mr. M. E. Ernstes

Mr. G. J. Khouri

Mr. J. D. Fuller

Mr. T. E. Chandler

Ms. S. E. Temple

Ms. P. Braxton

Mr. T. C. Brimfield

Mr. A. J. Lerch

Mr. C. J. Even

Ms. V. L. Ordaz

Oglethorpe Power Corporation

Mr. K. T. Haynes

Mr. R. B. Brinkman

Municipal Electric Authority of Georgia

Mr. J. E. Fuller

Mr. S. M. Jackson

Dalton Utilities

Mr. T. Bundros

WECTEC

Mr. C. A. Castell

Westinghouse Electric Company, LLC

Mr. R. Easterling (w/o enclosures)

Mr. J. W. Crenshaw (w/o enclosures)

Mr. F. Gill

Ms. L. Iller

Mr. J. Hopkins

Mr. D. Hawkins

Mr. C. F. Landon

Mr. M. Y. Shaqqo

Ms. S. DiTommaso

Mr. A F. Dohse

Other

Mr. J. E. Hesler, *Bechtel Power Corporation*

Ms. L. Matis, *Tetra Tech NUS, Inc.*

Dr. W. R. Jacobs, Jr., Ph.D., *GDS Associates, Inc.*

Mr. S. Roetger, *Georgia Public Service Commission*

Ms. S. W. Kernizan, *Georgia Public Service Commission*

Mr. K. C. Greene, *Troutman Sanders*

Mr. S. Blanton, *Balch Bingham*

**Southern Nuclear Operating Company
ND-16-2243
Enclosure**

**Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 3.2.00.01c.i [Index Number 741]**

ITAAC Statement

Design Commitment:

1. The HFE verification and validation program is performed in accordance with the HFE verification and validation implementation plan and includes the following activities:

c) Integrated system validation

Inspections, Tests, Analyses:

c) (i) An evaluation of the implementation of the integrated system validation will be performed.

Acceptance Criteria:

c) (i) A report exists and concludes that: The test scenarios listed in the implementation plan for integrated system validation were executed in conformance with the plan and noted human deficiencies were addressed.

ITAAC Determination Basis

Multiple ITAAC are performed to confirm that the Human factors Engineering (HFE) verification and validation program, as described in Chapter 18 of the AP1000 UFSAR, is performed in accordance with the HFE verification and validation implementation plan. The subject ITAAC performs an evaluation of Integrated System Validation (ISV) implementation.

Following the execution of the ISV, an evaluation of the ISV activity (including operating procedures, operator performance, and Control Room design) was performed and documented. This evaluation concluded that the ISV was conducted in conformance with the NRC approved HFE ISV Plan (Reference 1), ISV participants received appropriate training, simulator scenarios contained appropriate detail and were executed in conformance with the plan, the simulator replicating the Main Control Room (MCR) Human System Interface (HSI) resource provided an appropriate ISV test bed, test data was collected and analyzed in accordance with the plan, and deficiencies were appropriately documented.

The ISV results and supporting data are documented in the AP1000 HFE Integrated System Validation Report (Reference 2). The ISV results demonstrate, via the successful management of complex operational and accident scenarios, that the MCR design, Human-System Interface resources, procedures, MCR staffing, and operator training are adequate to support safe operation. The human deficiencies resulting from ISV were identified and have been entered into the Human Factors Tracking System database as required by the ISV plan (Reference 3).

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all ITAAC findings pertaining to the subject ITAAC and associated corrective actions. This review found that there are no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review document number is included in the Vogtle Unit 4 ITAAC Completion Package for ITAAC 3.2.00.01c.i (Reference 4) and available for NRC inspection.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 3.2.00.01c.i was performed for VEGP Unit 4 and that the prescribed acceptance criteria are met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. APP-OCS-GEH-320, Revision 6, "AP1000 Human Factors Engineering Integrated System Validation Plan"
2. APP-OCS-GER-320, Revision 3, "AP1000 Human Factors Engineering Integrated System Validation Report"
3. LTR-OPB-WAPP-16-230, Revision 0, "Confirmation that Human Engineering Discrepancies are entered in the Human Factors Tracking System"
4. SVP_SV0_004282, Attachment 1, "Submittal of Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) Completion Package for Unit 4 ITAAC 3.2.00.01c.i [COL Index Number 741] (HFE ISV Evaluation)"