

Vogle PEmails

From: Hoellman, Jordan
Sent: Wednesday, April 06, 2016 9:04 AM
To: Vogtle PEmails
Cc: Kallan, Paul; McKirgan, John
Subject: SNC draft Request for Exemption: Operating Test Plant Walk-through
Attachments: 2016-04-07 SNC draft CAS Exemption Request.docx

Jordan Hoellman
Project Manager
NRO / DNRL / LB4
U.S. Nuclear Regulatory Commission
office: TWFN 6-F33
phone: (301) 415-5481
email: Jordan.Hoellman2@nrc.gov

Hearing Identifier: Vogtle_COL_Docs_Public
Email Number: 18

Mail Envelope Properties (5f04542ae05b4daf9f00711c6e27067c)

Subject: SNC draft Request for Exemption: Operating Test Plant Walk-through
Sent Date: 4/6/2016 9:04:11 AM
Received Date: 4/6/2016 9:04:13 AM
From: Hoellman, Jordan

Created By: Jordan.Hoellman2@nrc.gov

Recipients:

"Kallan, Paul" <Paul.Kallan@nrc.gov>
Tracking Status: None
"McKirgan, John" <John.McKirgan@nrc.gov>
Tracking Status: None
"Vogtle PEmails" <Vogtle.PEmails@nrc.gov>
Tracking Status: None

Post Office: HQPWMSMRS01.nrc.gov

Files	Size	Date & Time
MESSAGE	229	4/6/2016 9:04:13 AM
2016-04-07 SNC draft CAS Exemption Request.docx		77123

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Karen D. Fili
Site Vice President
Plant Vogtle Units 3&4

**Southern Nuclear
Operating Company, Inc.**
7825 River Road
Waynesboro, GA 30830

Tel 706.848.7717
kdfili@southernco.com



A SOUTHERN COMPANY

Month XX, 2016

Docket Nos.: 52-025
52-026

ND-16-XXXX
10 CFR 55.11
10 CFR 55.40(a) and (b)
10 CFR 55.45(b)

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Ms. Jennifer L. Uhle
Director, Office of New Reactors
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Units 3 and 4
Request for Exemption:
Operating Test Plant Walk-through

Ladies and Gentlemen:

Pursuant to 10 CFR 55.11, "Specific Exemptions," Southern Nuclear Operating Company (SNC) requests NRC approval of an exemption from the plant walk-through requirement of 10 CFR 55.45(b) and, to the extent the NRC deems necessary, from the plant walk-through requirement in NUREG-1021, which is incorporated by reference into 10 CFR 55.40(a) and (b).

An exemption from the plant walk-through requirement of 10 CFR 55.45(b) is necessary because it is not possible for NRC Examiners to administer the plant walk-through portion of the operating test as described in NUREG-1021 given the current state of VEGP Unit 3 construction. The exemption is necessary to have licensed operators to support fuel load following the 10 CFR 52.103(g) finding.

As a compensatory measure, SNC recommends NRC Staff use the same cold license training alternatives described in the NRC approved Vogtle Electric Generating Plants (VEGP) 3&4 Updated Final Safety Analysis Report (UFSAR), Section 13.2A.3, "Conduct of On-the-Job Training (OJT)" for the administration of the plant walk-through portion of the operating test.

U. S. Nuclear Regulatory Commission

ND-16-XXXX

Page 2 of 4

SNC recommends termination of this exemption within 30 days after completion of the first refueling outage. This termination point aligns with VEGP 3&4 UFSAR, Section 13.2A.6, "Cold Licensing Process Applicability and Termination."

SNC believes this exemption is authorized by law, will not endanger life or property, and is otherwise in the public interest.

The Enclosure provides the background and supporting basis for this exemption request.

This letter contains no regulatory commitments as the exemption only affects activities regulated and performed by NRC Staff. It does not impact licensee activities approved under the current license.

SNC requests staff approval of this exemption by Month XX, 2016.

Should you have any questions, please contact Michael Yox at (706) 848-6459.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY

Karen D. Fili
KDF/MC/amm

Enclosure : Exemption Request From Operating Test Plant Walk-through

cc:

Southern Nuclear Operating Company / Georgia Power Company

Mr. S. E. Kuczynski (w/o enclosures)

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

Mr. M. D. Meier

Mr. J. T. Gasser (w/o enclosures)

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

Ms. K. D. Fili (w/o enclosures)

Mr. D. L. McKinney (w/o enclosures)

Mr. J. G. Aufdenkampe

Mr. D. R. Madison

Mr. B. H. Whitley

Mr. C. R. Pierce

Mr. M. J. Yox

Mr. W. A. Sparkman

Mr. J. P. Redd

Mr. R. K. Pope

Mr. J. G. Austin

Mr. G. H. Crosby

Ms. A. L. Pugh

Mr. D. L. Mickinac

Ms. K. A. Roberts

Mr. M. A. Chitty

Mr. D. R. Culver

Document Services RTYPE: VND.LI.L00

File AR.01.02.06

Nuclear Regulatory Commission

Ms. C. Haney (w/o enclosures)

Mr. M. Delligatti (w/o enclosures)

Mr. L. Burkhart (w/o enclosures)

Mr. M. A. Junge

Mr. P. Kallan

Mr. C. Patel

Mr. B. M. Bovol

Ms. R. Reyes

Ms. M. A. Sutton

Mr. M. E. Ernestes

Mr. T. E. Chandler

Mr. J. D. Fuller

Ms. S. Temple

Ms. P. Braxton

U. S. Nuclear Regulatory Commission

ND-16-XXXX

Page 4 of 4

Oglethorpe Power Corporation

Mr. M. W. Price

Ms. K. T. Haynes

Ms. A. Whaley

Municipal Electric Authority of Georgia

Mr. J. E. Fuller

Mr. S. M. Jackson

Dalton Utilities

Mr. T. Bundros

Westinghouse Electric Company, LLC

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

Mr. L. Woodcock

Mr. P. A. Russ

Mr. T. G. Rubenstein

Mr. G. F. Couture

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. K. C. Greene, *Troutman Sanders*

Mr. S. Blanton, *Balch Bingham*

Mr. R. Grumbir, *APOG*

Southern Nuclear Operating Company
Vogtle Electric Generating Plant (VEGP) Units 3 and 4

ND-16-XXXX

Enclosure

Exemption Request From Operating Test Plant Walk-through

(This Enclosure consists of 7 pages, including this cover page)

TABLE OF CONTENTS

- 1.0 Background/Request
- 2.0 Regulations
 - 2.1 10 CFR Part 55, "Operators' Licenses"
 - 2.2 NUREG-1021, "Operator Licensing Examination Standards for Power Reactors"
 - 2.3 VEGP 3&4 UFSAR, Rev. 4.2, Section 13.2A, "Cold License Training Plan"
- 3.0 Discussion
 - 3.1 Authorized By Law
 - 3.2 Will Not Endanger Life or Property
 - 3.3 Otherwise in the Public Interest
- 4.0 Conclusion
- 5.0 References

1.0 Background:

Pursuant to 10 CFR 55.11, "Specific Exemptions," Southern Nuclear Operating Company (SNC) requests an exemption from the plant walk-through requirement of 10 CFR 55.45(b) and, to the extent the NRC deems necessary, from the plant walk-through requirement in NUREG-1021, which is incorporated by reference into 10 CFR 55.40(a) and (b).

10 CFR 55.40(a) directs the Commission to use the criteria in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," to evaluate operating tests. 10 CFR 55.45(b) requires the operating test administered to licensed operator applicants include a plant walk-through. NRC Staff (Examiners) administer the plant walk-through. NUREG-1021, section ES-301.B, states the walk-through portion of the operating test consists of two parts, "Administrative Topics" and "Control Room/In-Plant Systems." NUREG-1021, section ES-301.D.4.a, breaks the "Control Room/In-Plant Systems" into two distinct parts; Control Room and In-Plant. NUREG-1021, Appendix E, section D.1, states that Examiners will use job performance measures (JPMs) to evaluate the areas covered during the walk-through test.

SNC is required to have trained and licensed operators prior to fuel load following the 10 CFR 52.103(g) finding (All Inspections, Tests, Analyses, and Acceptance Criteria Complete) and the loading of fuel. SNC's Operational Readiness Plan projects that all activities necessary to support the 10 CFR 52.103(g) finding for Unit 3 should be complete late in 2019 (projection based on data that was available on April 25, 2015). The 10 CFR 52.103(g) milestone represents a well-defined point in the life of the project when a sufficient amount of plant construction and equipment will be installed, tested and accepted to ensure a quality testing environment for administering the plant walk-through.

An exemption from the plant walk-through requirement of 10 CFR 55.45(b) is necessary because it is not possible for NRC Examiners to administer the plant walk-through as described in NUREG-1021 given the current state of VEGP Unit 3 construction. The exemption is necessary to have licensed operators available for plant startup and the testing required by 10 CFR 52.103(g). To the extent the NRC concludes that an exemption is also needed from the plant walk-through requirements in NUREG-1021, which is incorporated into 10 CFR 55.40(a) and (b), the same justifications provided herein to support SNC's requested exemption from 10 CFR 55.45(b) apply to an exemption from 10 CFR 55.40(a) and (b).

In a Safety Evaluation Report dated December 5, 2008, NRC Staff approved Appendix A, "Cold License Training Plan," of NEI 06-13A, Revision 1, as an acceptable template for describing the licensed operator training program and the licensed operator cold license eligibility requirements for Combined License Applications (COLAs). NEI 06-13A, Revision 2 was issued to incorporate the NRC's December 5, 2008, Safety Evaluation Report. The requirements of NEI 06-13A, Revision 2 were subsequently incorporated into VEGP 3&4 UFSAR, Section 13.2A. Section 13.2A.3, "Conduct of On-the-Job Training (OJT)," states, "Until plant construction is completed, acceptable methods for the conduct of on-the-job training include discussion, simulation, and use of mockup equipment and virtual reality technology."

SNC requests NRC Examiners administer the plant walk-through portion of the operating test utilizing the same methods the NRC licensed SNC to use for cold licensing OJT. By employing these methods, NRC will ensure the equitable and consistent administration of the operating test because this exemption aligns the administration of the walk-through portion of the operating test with the cold license training program that was used to train operators.

SNC recommends termination of this exemption within 30 days after completion of the first refueling outage. This termination point aligns with VEGP 3&4 UFSAR, Section 13.2A.6, "Cold Licensing Process Applicability and Termination."

2.0 Regulations

This section provides a summary of regulations applicable to this exemption request.

2.1 10 CFR Part 55, "Operators' Licenses"

Section 55.40, "Implementation," states in part that:

(a) The Commission shall use the criteria in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," to evaluate the operating tests prepared by power reactor facility licensees pursuant to paragraph (b) of this section.

(b) Power reactor facility licensees may prepare, proctor, and grade the written examinations required by 55.41 and 55.43 and may prepare the operating tests required by 55.45, subject to the following conditions:

(1) Power reactor facility licensees shall prepare the required examinations and tests in accordance with the criteria in NUREG-1021 as described in paragraph (a) of this section.

Section 55.45(b), "Implementation--Administration," states in part that:

(b) The operating test will be administered in a plant walk-through and in either:

(1) A simulation facility that the Commission has approved;

(2) A plant-referenced simulator; or

(3) The plant.

2.2 NUREG-1021, "Operator Licensing Examination Standards for Power Reactors"

The "Abstract" states in part that, *"The examination standards are intended to help NRC examiners and facility licensees better understand the processes associated with initial and requalification examinations. The standards also ensure the equitable and consistent administration of examinations for all applicants."*

ES-301, "Preparing Initial Operating Tests"

Section B, "Background," states in part that:

The plant walk-through consists of two parts ("Administrative Topics" and Control Room/In-Plant Systems"), each of which focuses on specific knowledge and abilities required for licensed operators to safely discharge their assigned duties and responsibilities.

Section D, "Instructions," paragraph 4.a, differentiates between Control Room JPMs and In-Plant Systems JPMs.

Appendix E, "Policies and Guidelines for Taking NRC Examinations"

Section D.1, "Walk-Through Test Guidelines," states in part that:

The walk-through test covers control room systems, local system operations, and administrative requirements. The examiner will evaluate these areas using job performance measures (JPMs) and specific follow-up questions, as necessary.

2.3 VEGP 3&4 UFSAR, Rev. 4.2, Section 13.2A, "Cold License Training Plan"

Section 13.2A.3, "Conduct of On-the-Job Training (OJT)," states:

"Until plant construction is completed, acceptable methods for the conduct of on-the-job training include discussion, simulation, and use of mockup equipment and virtual reality technology."

Section 13.2A.6, "Cold Licensing Process Applicability and Termination," states in part that:

"The cold licensing process will terminate after completion of the first refueling outage."

3.0 Discussion

The criteria for granting specific exemptions from 10 CFR 55 regulations are stated in 10 CFR 55.11. Pursuant to 10 CFR 55.11, the Commission is authorized to grant an exemption upon:

- determining that the exemption is authorized by law;
- will not endanger life or property; and,
- is otherwise in the public interest.

3.1 Authorized By Law

The Commission has the authority to grant exemptions and such exemptions are authorized by law in accordance with the regulatory process of 10 CFR 55.11. Further, since the exemption SNC is requesting remains within the current licensing basis, the exemption will only be in effect until after completion of the first refueling outage, and only affects activities performed by NRC Staff. SNC believes this exemption is justified,

is fully within the authority of the Commission to grant the relief requested in accordance with 10 CFR 55.11, and would not result in a violation of the Atomic Energy Act of 1954, as amended or other laws.

SNC also believes that this exemption would not impact the ability to maintain equitable and consistent testing under uniform conditions.

3.2 Will Not Endanger Life or Property

During the period this exemption is in place, SNC will continue to train its operators to operate the plant in accordance with the VEGP Unit 3 license.

During construction of a new plant, the majority of the operating test can be performed (i.e., the simulator operating test, the Control Room JPMs, and the Administrative Topic JPMs) can be performed independent of construction activities. Only the In-Plant Systems JPMs cannot be completed until a sufficient amount of equipment is installed in the plant to ensure a quality testing environment. Although SNC's combined operating license includes in its UFSAR a cold licensing training plan that describes acceptable methods the licensee can use to meet OJT requirements until plant construction is completed, 10 CFR 55.45(b) makes no such provision for NRC Staff to administer the plant walk-through portion of the operating test. The requested exemption would temporarily reconcile the requirements in 10 CFR 55.45(b) to the Vogtle 3 & 4 licensing bases and would permit examination on applicable actions described in 10 CFR 55.45(a). Each operator license applicant would still be evaluated based on In-Plant Systems JPMs as described in NUREG-1021, the evaluation would just occur using discussion, simulation, and use of mockup equipment and virtual reality technology rather than using a plant walk-through.

Additionally, as previously mentioned, the NRC has already endorsed and approved the cold license training plan that incorporates these alternatives to walk-through activities. During cold licensed operator training, applicants are trained to evaluate the safety functions of in-plant systems and evolutions that one might expect to see included in an operating test. The method SNC is recommending for administering the plant walk-through portion of the operating test aligns with the cold license training plan contained in the license. For the same reasons that the use of alternative methods instead of the plant itself provides adequate training as approved in the Vogtle Units 3 and 4 cold license training plan, the use of those alternative methods allows for an examination satisfying the intent of 10 CFR 55.45(a). Therefore, SNC believes this exemption will not endanger life or property.

SNC recommends termination of this exemption within 30 days after completion of the first refueling outage. This termination point aligns with VEGP 3&4 UFSAR, Section 13.2A.6, "Cold Licensing Process Applicability and Termination."

The requested exemption meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(25). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this exemption.

3.3 Otherwise in the Public Interest

The proposed exemption is in the public interest and necessary to have licensed operators available to support fuel load following the 10 CFR 52.103(g) finding; thereby avoiding unnecessary delay in start-up of the reactors.

4.0 **Conclusion**

SNC believes that the Commission has the authority under the law to grant this exemption from the plant walk-through portion of the operating test. SNC believes that the exemption would not endanger life or property and that such an exemption would be in the public interest.

SNC also believes that this exemption would not impact the ability to maintain equitable and consistent testing under uniform conditions.

5.0 **References**

1. Final Safety Evaluation for Topical Report NEI 06-13A, "Template for an Industry Training Program Description," Revision 1, dated December 5, 2008 [ML082950140]
2. VEGP 3&4 Updated Final Safety Analysis Report (UFSAR), Revision 4.2
3. NEI 06-13A, Rev 2, "Template for an Industry Training Program Description"
4. NUREG-1021, Rev 10, "Operator Licensing Examination Standards for Power Reactors"