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ND-10-1202

U.S. Nuclear Regulatory Commission
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Southern Nuclear Operating Company
Vogtle Electric Generating Plant Units 3 and 4 Combined License Application
Response to Request for Additional Information Letter No. 058

Ladies and Gentlemen:

By letter dated March 28, 2008, Southern Nuclear Operating Company (SNC) submitted an application for combined licenses (COLs) for proposed Vogtle Electric Generating Plant (VEGP) Units 3 and 4 to the U.S. Nuclear Regulatory Commission (NRC) for two Westinghouse AP1000 reactor plants, in accordance with 10 CFR Part 52. During the NRC's detailed review of this application, the NRC identified a need for additional information, involving license conditions related to the initial testing program. By letter dated May 26, 2010, the NRC provided SNC with Request for Additional Information (RAI) letter No. 058 concerning this information need. The enclosure to this letter provides the SNC response to this request.

This letter identifies changes that will be made to a future revision of the VEGP Units 3 and 4 Combined License Application (COLA).

If you have any questions regarding this letter, please contact Mr. Wes Sparkman at (205) 992-5061 or Ms. Amy Aughtman at (205) 992-5805.

DO92
NRW

Mr. B. L. Ivey states he is a Vice President of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



B. L. Ivey

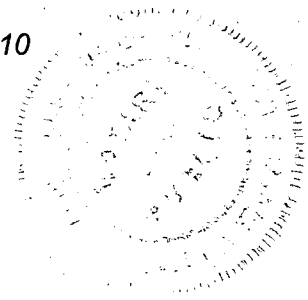
Sworn to and subscribed before me this 18th day of June, 2010

Notary Public: Nancy Louise Henderson

My commission expires: March 23, 2014

BLI/BJS

Enclosure: VEGP Units 3 and 4 COL Application Response to NRC RAI Letter No. 058
Involving the Initial Testing Program



cc: Southern Nuclear Operating Company

Mr. J. H. Miller, III, President and CEO (w/o enclosure)
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Mr. J. T. Gasser, Executive Vice President, Nuclear Operations (w/o enclosure)
Mr. D. H. Jones, Site Vice President, Vogtle 3 & 4 (w/o enclosure)
Mr. T. E. Tynan, Vice President - Vogtle (w/o enclosure)
Mr. M. K. Smith, Technical Support Director (w/o enclosure)
Mr. D. M. Lloyd, Vogtle 3 & 4 Project Support Director (w/o enclosure)
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Mr. M. J. Ajluni, Nuclear Licensing Manager
Mr. T. C. Moorer, Manager, Environmental Affairs, Chemistry and Rad. Services
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Mr. W. A. Sparkman, COL Project Engineer
Document Services RTYPE: AR01.1053
File AR.01.02.06

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Southern Nuclear Operating Company

ND-10-1202

Enclosure

VEGP Units 3 and 4 COL Application

Response to NRC RAI Letter No. 058

Involving the Initial Testing Program

NuStart Qb Tracking No. 4141

NRC eRAI No. 4716

VEGP RAI 14.02-01

License Condition for First Plant Only and First-Three Plant Only Testing

Certain design features of the AP1000 plant will be subjected to special tests to establish unique phenomenological performance parameters of the AP1000 design. Because of the standardization of the AP1000 design, these special tests (designated as first plant only tests and first three plant only tests) are not required on subsequent plants. These tests will be controlled through license conditions to ensure that relevant test results are reviewed, evaluated, and approved by the designated licensee management before proceeding with the next testing phase. Accordingly, the licensee will provide written notification to the Director of the Office of New Reactors once it determines that:

- (a) It has completed all first plant only tests and confirmed that the test results are within the range of values predicted in the acceptance criteria in the facility's FSAR.
- (b) It has completed all first three plant only tests and confirmed that the test results are within the range of values predicted in the acceptance criteria in the facility's FSAR.

Response:

As requested, Part 10 of the COLA is proposed to be revised as shown below to include a license condition that requires the requested notifications. Some editorial modifications to the wording proposed by NRC are included. In particular, the revised wording makes it clear that the ability to proceed with the next phase of testing is based on the internal reviews and not on the notification. Additionally, it is noted that most of these tests occur during pre-operational and low power testing, and thus, will be consistent with the reporting requested / required and provided in accordance with the License Condition related to power ascension testing (proposed in response to RAI 14.02-02, RAI Letter 059). As such, a clarifying statement to avoid duplication of reporting is added to the end of the proposed wording.

Of the remaining tests (as described in DCD Subsection 14.2.5), two will be completed at power levels above the low power testing (14.2.10.4.6 and 14.2.10.4.22) and one will be partially completed during hot functional testing but will not be fully complete until after one full cycle of operation (14.2.9.1.5(d)).

The changes identified in the COL Application Revisions section below will be included in a future COLA revision.

This response is expected to be STANDARD for the S-COLAs.

Associated VEGP COL Application Revisions:

COLA Part 10, Proposed License Conditions, including ITAAC, will be revised to include a new License condition. Line item 7 will be revised from:

7. Not Used

To read:

7. First-Plant-Only and First-Three-Plant-Only Testing

Certain design features of the AP1000 plant will be subjected to special tests to establish unique phenomenological performance parameters of the AP1000 design. Because of the standardization of the AP1000 design, these special tests (designated as first-plant-only tests and first-three-plant-only tests) are not required on subsequent plants. These tests will be controlled through license conditions to ensure that relevant test results are reviewed, evaluated, and approved by the designated licensee management before proceeding with the next testing phase. Accordingly, the following license condition is proposed:

First-Plant-Only and First-Three-Plant-Only Testing

Following completion of the testing, the licensee completing the testing shall review and evaluate individual test results. Test exceptions or results which do not meet acceptance criteria are identified to the affected and responsible organizations, and corrective actions and tests, as required, are performed.

Additionally, the licensee completing the testing shall also provide written notification of completion of the testing to the Director of the Office of New Reactors.

1. For testing completed during pre-critical testing, criticality testing, and during low-power testing, these reports may be in conjunction with the test completion reports required for the power ascension test phase as identified below.
2. For tests completed during operation above 5% RTP, the reports shall be provided for each individual test within thirty (30) calendar days of the licensee confirmation of completion of the testing.

Subsequent plant licensees crediting completion of testing by the first-plant or by the first-three-plants shall provide a report referencing the written notification of completion submitted by the plant(s) completing the testing to the Director of the Office of New Reactors.