

**Southern Nuclear
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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 ACRS Question on Common Technical Support Center

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). The NRC has since notified SNC that during a recent Advisory Committee for Reactor Safeguards (ACRS) review of the VEGP application, a question was raised with regard to the common, four-unit (i.e., VEGP Units 1, 2, 3 and 4) Technical Support Center (TSC) that SNC intends to utilize at the VEGP site. The enclosure to this letter describes the subject ACRS question and provides the SNC response to the question.

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.

D092
NRO

Mr. C. R. Pierce states he is the AP1000 Licensing Manager 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

Charles R. Pierce

Charles R. Pierce

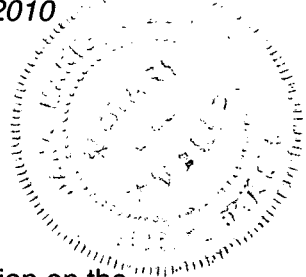
Sworn to and subscribed before me this 2nd day of November, 2010

Notary Public: Dana Marie Williams

My commission expires: 12/29/2010

CRP/TEA

Enclosure: VEGP Units 3 and 4 COL Application – Response to ACRS Question on the
Common Technical Support Center



cc: Southern Nuclear Operating Company

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Enclosure

**VEGP Units 3 and 4 COL Application –
Response to ACRS Question
on the
Common Technical Support Center**

eRAI Tracking No: n/a

NuStart Qb Tracking No. 4243

ACRS Question

Based on recent interactions with the NRC, an additional question has been raised with respect to the planned common Technical Support Center (TSC) that will serve the four units at the VEGP site. There may be different requirements for a TSC, depending on whether the facility supports – on a common site – a single reactor, multiple reactors of similar design, or multiple reactors of different designs (e.g., the VEGP site). Specifically, the criteria to evaluate the Human Factors Engineering (HFE) implementation for the new, common VEGP TSC should be identified.

SNC Response

TSC requirements are found in NUREG 0696, *Functional Criteria for Emergency Response Facilities*. The TSC functions are:

- Provide plant management and technical support to plant operations personnel during emergency conditions.
- Relieve the reactor operators of peripheral duties and communications not directly related to reactor system manipulations.
- Prevent congestion in the control room.
- Perform Emergency Operations Facility (EOF) functions for the Alert Emergency class, Site Area Emergency class and General Emergency class until the EOF is functional.

Specific requirements for the use of TSCs for multiple units of different reactor design are not listed in NUREG 0696. However, the NRC has approved other TSCs and EOFs for concurrent use involving multiple reactor designs. In approving these facilities, the NRC applies certain HFE elements when evaluating the effectiveness of TSCs using multiple units with multiple reactor designs. These include:

- Facility resources
 - Size
 - Data retrievability and analysis
 - Communications equipment
- Equipment and Data display differentiation
- Training and Staffing

SNC intends to design, outfit, and staff the TSC using similar criteria established by the NRC for the SNC common EOF located in Birmingham, Alabama. SECY-04-0236 states, "The staff observed the licensee's notification process, staffing, communication, technical support, dose assessment, protective action recommendation process, coordination with offsite officials, and overall command and control. The licensee demonstrated the capability to effectively respond to a dual-site emergency event."

Design of the TSC is discussed in Section H.1.1, *Technical Support Center*, of the VEGP Emergency Plan (EP). The TSC will be established consistent with NUREG 0696 and will accommodate the required personnel to support an event on any or all Units. As shown on EP Figure H-1, *VEGP TSC Layout*, the TSC command center will contain at least 3750 sq ft of

space with an additional support area of 3750 sq ft. As is the case in the EOF, the TSC will contain selected dedicated communications equipment for both reactor designs. In addition, data displays for both reactor designs will be available. Communications equipment is described in EP Table F-1, *Emergency Response Communications Summary*. Additional detail will be added to emergency implementing procedures describing communication devices which will be dedicated for each technology used.

Consistent with the approach used to staff and train the EOF, SNC plans to staff the VEGP TSC with personnel trained and qualified to perform required duties on either set, or both sets concurrently, of reactor designs used at VEGP. The following positions will be trained and staffed as reactor design-specific positions (i.e., not as a shared position) to perform emergency response functions for both types of reactor designs used at VEGP:

- TSC Engineering Supervisor
- TSC Operations Supervisor

Additional detail will be added to EP Table B-2, *Emergency Response Organization Assignments*. A proposed modified Table B-2 is shown in the Associated VEGP COL Application Revisions section that follows.

Training will be provided to key positions on both reactor designs used at VEGP. Specifically, training will be provided on the emergency classification systems used at VEGP in accordance with assigned positions. Course descriptions contained in EP Table O-2, *Training Course Description*, will be clarified as shown in the Associated VEGP COL Application Revisions section that follows.

To demonstrate the implementation of the HFE attributes of facility resources, equipment and data display differentiation, and training and staffing described above, SNC proposes an addition to EP ITAAC Item 8.1.1.D as shown in the Associated VEGP COL Application Revisions that follows.

This response is PLANT SPECIFIC.

Associated VEGP COL Application Revisions:

The following changes will be made in a future revision to the VEGP Units 3 and 4 COLA:

1. Add the following supplements after the second paragraph of COLA Part 5:

On Table B-2, *Emergency Response Organization Assignments*, of the Base Plan, revise the table row for Emergency Position "TSC Engineering Supervisor" to read:

TSC Engineering Supervisor **VEGP 1 and 2**
TSC Engineering Supervisor **VEGP 3 and 4**

Supervision from onsite staff as designated in emergency implementing procedures
Supervision from onsite staff as designated in emergency implementing procedures

On Table B-2, *Emergency Response Organization Assignments*, of the Base Plan, revise the table row for Emergency Position "TSC Operations Supervisor" to read:

TSC Operations Supervisor	VEGP 1 and 2	Supervision from onsite staff as designated in emergency implementing procedures
TSC Operations Supervisor	VEGP 3 and 4	Supervision from onsite staff as designated in emergency implementing procedures

2. Add the following supplements after the seventh paragraph of COLA Part 5:

On Table O-2, *Training Course Description*, of the Base Plan, revise the table row for Training Course "Emergency Plan Overview (EPO)" to read:

Emergency Plan Overview (EPO) (1)	This course covers an overview of the emergency plan with special attention to emergency planning zones (EPZs); emergency classification systems; onsite emergency response organizations; responsibilities of emergency response personnel; and site accountability and site dismissal.
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On Table O-2, *Training Course Description*, of the Base Plan, revise the table row for Training Course "Management of Radiological Emergencies (MREs)" to read:

Management of Radiological Emergencies (MREs)	This course covers classification of emergencies using classification systems used by VEGP 1 and 2 and VEGP 3 and 4 as appropriate; emergency notification of onsite and offsite emergency response personnel and agencies; activation and staffing of emergency response facilities; protective action recommendation decision making based on EPA PAGs; retrieval of available plant computer data; reentry and repair operations; and communications and information management; and recovery.
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3. COLA Part 10, Appendix B, *Inspections, Tests, Analyses and Acceptance Criteria*, Emergency Planning ITAAC, will be modified by adding a new entry as shown below:

Add the following emergency planning acceptance criteria to item 8.1.1.D.2, Exercises and Drills, of the Unit 3 emergency planning ITAAC included in Appendix E of Early Site Permit ESP-004:

- d. Demonstrate the capability of TSC and EOF equipment and data displays to clearly identify and reflect the affected unit.

ASSOCIATED ATTACHMENTS/ENCLOSURES:

None.