April R. Rice
Manager, Nuclear Licensing
New Nuclear Deployment

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NND-17-0118
10 CFR 50.90
10 CFR 52.63

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Virgil C. Summer Nuclear Station (VCSNS) Units 2 & 3
Combined License Nos. NPF-93 and NPF-94
Docket Nos. 52-027 & 52-028

Subject: LAR 17-06: VCSNS Units 2 & 3 Request for License Amendment and Exemption: Combined Operational Support Center

Pursuant to 10 CFR 52.98(c) and in accordance with 10 CFR 50.90, South Carolina Electric & Gas Company (SCE&G), acting on behalf of itself and South Carolina Public Service Authority (Santee Cooper), the licensees for Virgil C. Summer Nuclear Station (VCSNS) Units 2 & 3, request an amendment to Combined License (COL) Numbers NPF-93 and NPF-94, for VCSNS Units 2 & 3, respectively. The proposed amendment would revise the licensing basis information to reflect combining the Units 2 & 3 individual operational support centers (OSCs) into a common OSC serving both units, and standardizing the titles of the combined OSC and the offsite notification system.

The requested amendment proposes to depart from approved AP1000 Design Control Document (DCD) Tier 2 information and associated COL Appendix C emergency planning inspections, tests, analyses, and acceptance criteria (ITAAC) information incorporated into the Updated Final Safety Analysis Report (UFSAR) as plant-specific DCD information, and also proposes to depart from related plant-specific Tier 1 and Radiation Emergency Plan - Units 2 & 3 (REP) information.

Pursuant to the provisions of 10 CFR 52.63(b)(1), an exemption from elements of the design as certified in the 10 CFR Part 52, Appendix D, design certification rule, is being requested for the plant-specific DCD Tier 1 material departures.

Enclosure 1 provides the description, technical evaluation, regulatory evaluation (including the significant hazards consideration determination), and environmental considerations for the proposed changes. Enclosure 2 provides the background and supporting basis for the requested exemption. Enclosure 3 provides the proposed changes to UFSAR Tier 1 text. Enclosure 4 provides the proposed changes to COL Appendix C text and tables. Enclosure 5 provides the proposed changes to UFSAR Tier 2 text. Enclosure 6 provides the proposed changes to the REP (public version). Enclosure 7 provides the proposed changes to the REP (non-public version).

Enclosure 7 to this letter contains Security-Related Information, and accordingly, SCE&G requests that the enclosure be withheld from public disclosure under 10 CFR 2.390(d). Sections containing 2.390(d) material have been identified on the applicable pages.

In order to support the VCSNS Unit 2 emergency planning schedule, SCE&G requests NRC staff review and approval of the license amendment no later than May 31, 2018. Approval by this date will allow sufficient time to implement licensing basis changes prior to emergency planning drills and exercises. SCE&G expects to implement this proposed amendment (through incorporation into the licensing basis documents; e.g., the UFSAR) within 120 days of approval of the requested changes.

In accordance with 10 CFR 50.91, SCE&G is notifying the State of South Carolina of this LAR by transmitting a copy of this letter and its publically available enclosures to the designated State Official.

This letter contains no regulatory commitments.

Should you have any questions, please contact Mr. Nick Kellenberger by telephone at (803) 941-9834, or by email at nicholas.kellenberger@scana.com.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 28th day of June, 2017.

Sincerely,

April R. Rice
Manager, Nuclear Licensing
New Nuclear Deployment

ARR/gt

Enclosure 1: Request for License Amendment, Combined Operational Support Center (OSC) for Units 2 & 3 (LAR 17-06)

Enclosure 2: Request for Exemption, Combined Operational Support Center (OSC) for Units 2 & 3 (LAR 17-06)

Enclosure 3: Proposed Changes to UFSAR Tier 1 Text (LAR 17-06)

Enclosure 4: Proposed Changes to COL Appendix C Text and Tables (LAR 17-06)

Enclosure 5: Proposed Changes to UFSAR Tier 2 Text (LAR 17-06)

Enclosure 6: Proposed Radiation Emergency Plan Changes (LAR 17-06) (Public Version)

Enclosure 7: Proposed Radiation Emergency Plan Changes (LAR 17-06) (Non-Public Version) **(Security Related Information, Withhold under 10 CFR 2.390d)**

c (with all enclosures including withheld enclosure):
Billy Gleaves
Ruth Reyes
Chandu Patel
Paul Kallan
Bob Williamson
Tim Bonnette
Greg Travers
DCRM-EDMS@SCANA.COM

c (without withheld enclosure):
Tom Fredette
Tomy Nazario
Jennifer Dixon-Herrity
Cathy Haney
Jim Reece
Stephen A. Byrne
Jeffrey B. Archie
Ronald A. Jones
Alvis J. Bynum
Kathryn M. Sutton
April Rice
Justin Bouknight
Nick Kellenberger
Matt Kunkle
Mory Diane
Bryan Barwick
Dean Kersey
Cynthia Lanier
Lisa Spears
Frederick Willis
Neil Haggerty
Carl Churchman
Pat Young
Zach Harper
Brian McIntyre
Brian Bedford
Joseph Cole
Chuck Baucom
Lisa Alberghini
Curt Castell
Susan E. Jenkins
William M. Cherry
Rhonda O'Banion
vcsummer2&3project@westinghouse.com

South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station Units 2 & 3

NND-17-0118

Enclosure 1

Request for License Amendment,

Combined Operational Support Center (OSC) for Units 2 & 3

(LAR 17-06)

(This enclosure contains 21 pages including this cover page.)

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1. Summary Description

Pursuant to 10 CFR 52.98(c) and in accordance with 10 CFR 50.90, South Carolina Electric & Gas Company (SCE&G), acting on behalf of itself and South Carolina Public Service Authority (Santee Cooper), the licensees for Virgil C. Summer Nuclear Station (VCSNS) Units 2 & 3, request an amendment to Combined License (COL) Numbers NPF-93 and NPF-94, for VCSNS Units 2 & 3, respectively.

The proposed changes would revise the Virgil C. Summer Nuclear Station (VCSNS) Radiation Emergency Plan - Units 2 & 3 (REP) and Updated Final Safety Analysis (UFSAR) Tier 1, Tier 2, and COL emergency planning Appendix C inspections, tests, analyses, and acceptance criteria (ITAAC) licensing basis documents with regard to relocating and combining the Units 2 & 3 individual operational support centers (OSCs) into a common OSC serving both units, standardizing the title for the combined OSC as the operational support center, and replacing specific reference to the emergency planning ESSX communications line with the more generic title of offsite notification system.

The Units 2 & 3 OSCs are being proposed to be combined and relocated from the control support areas (CSAs) of each unit to a common OSC located in the Service Building. This combined OSC approach has been evaluated under 10 CFR 50.54(q) and reductions in effectiveness related to Emergency Response Organization (ERO) staffing levels and staffing timeliness in the OSC have been identified. As a result, NRC approval prior to implementation of this change is required. Standardization on operational support center for the title of the combined OSC is also proposed to eliminate an alternate reference to operations support center found throughout the licensing bases documents. Additionally, replacing a specific reference to the emergency planning ESSX communications system with the more generic term of offsite notification system is proposed to address a system change from ESSX to EMNet and to accommodate potential changes related to system technological advances in the future. The change to the communications system was evaluated under a previous 10 CFR 50.54(q) and was determined not to be a reduction in effectiveness. This proposed change is a title change only.

The requested amendment proposes to depart from the REP, approved AP1000 Design Control Document (DCD) Tier 2 information, and associated COL Appendix C emergency planning ITAAC information as incorporated into the UFSAR as plant-specific DCD information to address the combined OSC and standardization of the OSC title as the operational support center. Pursuant to the provisions of 10 CFR 52.63(b)(1), an exemption from elements of the design as certified in the 10 CFR Part 52, Appendix D, design certification rule is also being requested (see Enclosure 2) for the plant-specific DCD Tier 1 material departures related to the standardization of the combined OSC title. Additionally, the requested amendment proposes to depart from UFSAR Tier 2 and COL Appendix C emergency planning ITAAC information by replacing the specific reference to the emergency planning ESSX communications system with the generic offsite notification system reference.

2. Detailed Description and Technical Evaluation

2.1 Combining and Relocating the Operational Support Center

The REP, Annexes 2 & 3, Sections 4.1, currently identify the location of the Units 2 & 3 OSCs as being in the CSA in the Annex Building for each respective unit. Subsequently,

with the development of support building details, SCE&G determined that a more effective approach for the OSCs will be as a combined OSC located in the Service Building. This combined OSC location will provide an onsite area separate from the Control Rooms and the technical support center (TSC) where licensee operations support personnel will assemble in an emergency. It will also provide a location where plant logistic support can be coordinated during an emergency.

Currently, Unit 2 and Unit 3 have independent OSCs located within their respective CSAs. The REP requires the activation of the affected Unit's OSC, but requires separate OSC Supervisors for each OSC (Units 1, 2, & 3). The activation of the OSC is not being changed by this LAR. The staffing of the OSC Supervisor ERO position for Unit 1 is not being changed by this LAR. The Staffing change for requiring a separate Unit 2 and Unit 3 OSC Supervisor will be reduced to a single OSC Supervisor (Units 2 & 3). This will allow additional resources to support the single OSC Supervisor position who are trained and qualified to the same materials and standards to assess and mitigate an emergency for either unit. This also creates one command and control structure for the Units 2 & 3 Protected Area, making decisions more consistent and allowing the command team to dispatch a larger contingent of personnel for single tasks during an emergency. Accountability of personnel will be more efficient and timely in a common OSC by allowing a single control point for all personnel to enter and exit for missions needed during an emergency, and a single Security access report to review and complete accountability for personnel inside the Protected Area.

The impact on OSC activation time is identified as a reduction in effectiveness since personnel working inside the power block for Unit 2 and Unit 3 will have to leave the area and report to the OSC in the Service Building. It is estimated that personnel from Unit 3 will have to walk an additional 1800 feet around Unit 2 to reach the Service Building. Personnel from Unit 2 will have to walk an approximate 600 feet to reach the Service Building. This is expected to delay activation by 4 to 7 minutes depending on the location of personnel when activation is required. There are no additional Security measures to process through to reach the Service Building.

The relocation of the OSC to the Service Building will provide for more timely activation of the OSC by the augmented ERO during off-hour emergencies. The Service Building is located on the edge of the Units 2 & 3 Protected Area, immediately adjacent to the security access point (Personnel Entry Building) for the Protected Area and closer to the parking areas. This reduces the overall walk/response time for personnel responding to an emergency to reach and activate the OSC during augmentation. The building also houses the Maintenance Shops, and work areas for Health Physics, Chemistry, Operations, and other personnel assigned to respond to the OSC. During normal working hours, this will allow for timelier response to and activation of the OSC due to not having to process through additional security points/doors and not having to walk into the plant proper.

During an emergency at VCSNS, all ERO personnel are expected to respond to their designated emergency facilities and all emergency facilities are expected to activate in accordance with the Emergency Plan and implementing procedures. The staffing of the combined Units 2 & 3 OSC will be done by personnel from both Unit 2 and Unit 3 to support an emergency. The staffing of the common OSC by personnel from both Unit 2 and Unit 3 does not impact the overall number of discipline personnel responding on-shift or augmented, just the location to which they respond and the command and control

structure. Although Unit 2 and Unit 3 construction is currently on different time schedules, the hiring of personnel to be trained and qualified is being done simultaneously. There is no expected impact based on the construction schedules for qualifying personnel.

REP Tables 2-1, V.C. Summer On-Shift Staffing and ERO Positions, Revision 7 (Non-Public Version), shows the current on-shift staffing levels for Unit 2 and Unit 3 (see Enclosure 2, pages 137 of 220 and 151 of 220, respectively, of SCE&G letter NND-16-0159 dated May 3, 2016 [ML16125A246]). These staffing levels are not impacted by this LAR.

Table 1 (see Page 10 of 21 below) is REP Table B-1a, which is derived from NUREG-0654 Table B-1. Yellow highlighting has been provided in the table to identify those personnel with assigned OSC responsibilities. In addition, Table 1 has one indicated change in Functional Area 4, placing the on-shift dose assessment function (represented by the "(h)" footnote) in the OSC and removing it from the EOF (corresponding Table B-1a mark-ups are also shown in Enclosures 6 and 7). This change was identified as a typographical error after reviewing Section 13.3C.2.3 of NUREG-2153 Volume 2, Final Safety Evaluation Report for Combined Licenses for Virgil C. Summer Nuclear Station, Units 2 and 3 [ML13275A126], which references Table 2-1 as the "V.C. Summer ERO On-shift Staffing" table. Otherwise, REP Table B-1a is not impacted by this LAR. This change to the table does not impact the personnel assigned or reporting to the EOF to perform dose assessment functions.

In accordance with the REP, responsibilities and priorities for the OSC are directed by the OSC Supervisor. The OSC Supervisor has the responsibility of reporting to the Emergency Director (ED) and supervising the activities of OSC personnel while implementing the mitigation strategies and procedures, as described in the REP. The OSC Supervisor directs the composition of teams to ensure that appropriately qualified personnel are assigned. The OSC Supervisor provides specific instructions to the OSC staff to ensure the missions and priorities are implemented. Reducing the overall number of OSC Supervisors to one in a common OSC does not impact the ability to provide oversight for one or both units. It allows for a single point of command and control. The change will allow for the Supervisor position to be staffed for longer duration emergencies, including relief, with a level of personnel more suited to a command and control role.

Units 2 & 3 will maintain two independent Health Physics Count Rooms and dose assessment capabilities. However, both will be using the same assessment software, training, and qualifications. This will allow the Shift HP staff to perform the dose projections using the dose projection software during any combination of emergencies impacting Unit 2 or Unit 3 and from either Count Room. This information will be provided to the Lead Control Room in the event of an emergency.

Activation and Support Function:

The proposed combined OSC will be activated at an Alert or higher classification which affect either Unit 2 or Unit 3 and may be activated at the discretion of the Interim Emergency Director at an Unusual Event. The activation time requirement for the OSC is 75 minutes from the time of declaration in order to augment the on-shift personnel. The OSC is established to be consistent with the NUREG-0696, "Functional Criteria for Emergency Response Facilities," guidelines for function, habitability, and communications.

Additionally, 10 CFR Part 50, Appendix E, Sections IV.E.8.a(ii) requires an onsite OSC for licensees to ensure that an adequate facility is provided.

The combined OSC will provide personnel and support for Units 2 & 3 onsite emergency maintenance and mitigation. It will also support personnel staging areas large enough to accommodate all OSC personnel from Units 2 & 3 responding to the emergency as a ready-resource to support actions initiated by the Lead Control Room and as requested by the unaffected Control Room or the TSC for actions within the Units 2 & 3 Protected Area. The combined OSC will be physically separated from the Control Rooms and the TSC. It will also provide a location where plant logistic support can be coordinated during an emergency. The combined OSC for Units 2 & 3 will continue to meet the requirements of the REP for providing an area for coordinating and planning of OSC activities and the staging of personnel.

The combined OSC command area will be housed on the second floor of the Service Building. The Service Building supports maintenance, planning and scheduling, and engineering, along with other functions for Units 2 & 3. Additional space will be available in adjacent offices, locker rooms, and facilities to accommodate additional personnel in an emergency response. During an actual emergency, the entire Service Building will become the OSC. This will allow adequate space to be available to support all OSC functions in the event of an emergency affecting both Units 2 and Units 3. The Service Building provides larger staging areas, maintenance shops, and document libraries and planning resource facilities that would be needed and utilized by OSC personnel.

The OSC Command Area is designed to support a minimum of twelve (12) workstations. The Support Work Area immediately adjacent to the Command Area is designed to support an additional minimum of twelve (12) work stations for additional personnel, such as Planning and Scheduling personnel, dispatched Engineering personnel, personnel for unit specific evaluations or actions, etc. These areas will provide sufficient workstations for any combination of Unit 2 or Unit 3 personnel in support of the emergency.

The function of the combined OSC will continue to allow evaluators and decision makers access to plant data and network computer systems, communication systems, and supplies and documents to support event evaluations and implementation of mitigation strategies and missions, while planning to support recovery and reentry following the emergency.

Sufficient radiation protection equipment for initial dispatch of teams (i.e., protective clothing, respiratory protection, KI, and other health physics equipment and supplies) will be stored and maintained near the OSC Command Area and within the Service Building. Damage Control Team equipment is available in the maintenance shops in the Service Building, which become part of the overall OSC. This equipment will include items such as portable lighting, portable communications equipment, tools, etc. An area within the overall OSC will be stocked with first aid and medical treatment equipment and supplies. Storerooms in the building will maintain a supply of parts and equipment for normal plant maintenance. These parts, supplies, and equipment are available for damage control use as necessary.

Habitability:

The Service Building is a commercial building consisting of three stories to house work areas for Maintenance, Plant Support Engineering, Planning & Scheduling, and other work groups. The OSC Command Area is housed on the second floor of the Service Building and is heated and cooled with conventional HVAC and humidity controls. Access to the OSC will be done by allowing one ingress and egress point and by placing radiological monitoring equipment at the entrance to monitor returning personnel to prevent radiological contamination of the facility. VCSNS has Emergency Plan Implementing Procedures (EPIP) in place for exposure controls in the combined OSC. These include procedures for radiological surveying of the OSC to be performed by HP personnel on a periodic basis. In the event the OSC becomes uninhabitable, EPIPs provide details on how to relocate OSC personnel.

In the event that the proposed OSC becomes uninhabitable, the functions of the OSC will be conducted from the dedicated Back-up OSC room and work stations adjacent to the TSC in the basement of the Nuclear Operations Building (NOB). Additional personnel may be staged in the basement areas (break-out rooms, command area, and break area) or on the first floor in the NOB Cafeteria. Evacuation of the OSC will be conducted according to emergency implementing procedures and under the guidance and direction of the TSC command staff. The OSC Supervisor will keep the Emergency Director in the TSC informed of the initiation, progress, and completion of the evacuation and relocation of the OSC personnel. The design and configuration of the TSC meets the requirements of NUREG-0696 as approved in the Units 2 & 3 COL by having HVAC and filtration systems to remove radioactive materials from potential releases, and provides data and communications links to the Control Rooms, EOF, and OSC. The Back-up OSC has computer work stations, telephones, and additional work space to support OSC operations.

The NOB is approximately 1/2 mile north of Units 2 & 3. The Back-up OSC has designated workstations and telephones with additional space available. The NOB Cafeteria is located on the ground level of the NOB and has adequate space to stage, brief, and monitor response personnel.

If the Back-up OSC becomes uninhabitable, the functions will be relocated to the Emergency Operations Facility (EOF), which has a designated area for a Remote OSC. In the event of a hostile action, plant procedures provide guidance for the ERO to activate utilizing remote/alternate facilities, outside of potential hostile action areas, and provide procedure guidance for moving personnel under protective measures. This change will not impact the use or capabilities of the Back-up OSC or the Remote OSC, as described in the REP.

Communications and Data:

Communication requirements will be maintained for the proposed common OSC in the Service Building. The common OSC will be equipped with communication links to the Control Rooms, TSC and the EOF to maintain reliable voice communications. The proposed combined OSC has communications equipment such as telephones (commercial/VOIP and Satellite systems), the SCANA radio system, and SCANA network connections for electronic logging and data sharing. A plant page system is also available, if needed. Status boards providing plant conditions and tracking mitigation strategies and

emergency classifications are available in the OSC. The OSC will have access to plant data via SCANA network connections in order to facilitate evaluations and implementation of mitigation strategies and if needed access to email and internet.

Location of the OSC:

The combined OSC will be the Unit 2 & 3 onsite area separate from the Control Rooms and the TSC where licensee operations support personnel will assemble in an emergency. It will also provide a location where plant logistic support can be coordinated during an emergency.

The proposed OSC location in the Service Building locates the OSC within the Units 2 & 3 Protected Area and immediately East of the Personnel Entry Building. This proposed new location will place the OSC approximately 600 feet to the northeast of the Unit 2 Annex Building and approximately 1800 feet to the northeast of the Unit 3 Annex Building. These additional distances may cause a time delay of approximately 4 to 7 minutes in the minimal staffing of the OSC from in-plant responders. It should be noted, however, that many personnel assigned to the OSC normally work in the Service Building. These personnel will have a much shorter walk to the OSC, which will provide for a quicker response. SCE&G believes the changes will continue to allow the OSC to be staffed and activated as required by 10 CFR 50.47(b), 10 CFR 50 Appendix E, NUREG-0696, NUREG-0654, NUREG-0737 Sup 1, NUREG-0800, and the REP.

The location of the proposed OSC will provide additional protection from radiological conditions during an emergency by physically relocating the command staff and staged personnel out of the operational portions of the plant, which may be impacted by high dose rates during a severe accident. Since many of the personnel assigned to the OSC, including the OSC Supervisor, routinely work in areas within the Service Building, the relocation of the OSC will allow timelier activation of the facility and provide relief and support of the Control Rooms. In addition to a single command area, the Service Building has additional office space, locker rooms, and support facilities to maintain the OSC operational through most emergency conditions. The relocation of the OSC also places support personnel closer to supplies and equipment needed to respond to emergencies.

A single ingress and egress point will be designated by the OSC Supervisor with guidance from the Health Physics Lead at the time of an emergency and controlled using barriers and signs to assist with maintaining accountability of personnel and to prevent or control the spread of contamination. The design of the Service Building allows OSC personnel to choose single ingress and egress point from multiple locations and from different geographical directions in order to eliminate or minimize potential contamination. In the event of a radioactive release during an emergency, Health Physics personnel will establish control and monitoring points at the ingress point.

The proposed changes maintain the Planning Standards 10 CFR 50.47(b)(1) and (2) by providing a full single OSC staffing comprised of on-shift personnel from both units and augmented staffing from the all-call, all-come ERO. As described in this enclosure, the on-shift staffing counts for Units 2 & 3 are beyond the requirements of the OSC Activation Staff counts needed for a single reactor design basis accident. This allows additional personnel to fill Support Staff counts and provide additional resources to the Lead Control Room immediately. As the common OSC activates, using on-shift and augmented

personnel and a single command and control structure, the single OSC will be capable of providing both Unit 2 and Unit 3 operational, assessment, evaluation, and mitigation support. The augmented ERO will also be able to respond to and activate the OSC in a timelier and more effective manner and to provide more effective relief by responders.

The change to a combined OSC for Units 2 & 3 will continue to meet the requirements of the REP for planning Standard 10 CFR 50.47(b)(8) by providing adequate facilities and equipment to support an emergency for Units 2 & 3 and by meeting the requirements of NUREG-0696.

The proposed change will combine the Unit 2 and Unit 3 OSCs into a single command structure in a common OSC facility and relocate them from the CSAs of each unit into the Service Building. This change will cause a reduction in effectiveness by combining the two REP required OSC Supervisors (i.e., one for each unit) into a single position in the common OSC. This change will also cause a reduction in effectiveness due to the change in physical location of the combined OSC which will require a longer walk for in-plant personnel, but a shorter walk for personnel working in the Service Building or augmentation responders. Thus, prior NRC approval is required for the common Units 2 & 3 OSC.

The change to a combined OSC for Units 2 & 3 results in proposed changes to the following documents as shown in Enclosures 4 through 7: COL Appendix C ITAAC C.3.8.01.05.01.06; UFSAR Tier 2 Subsections 9.4.2.2.1.1 and 13.3*; REP Part 2 Section B.5.a.13 and Section H.1; REP Annex 2: Unit 2 Section 4.1.B; and REP Annex 3: Unit 3 Section 4.1.A.

*The first sentence of the first paragraph of UFSAR Tier 2 Subsection 13.3 states: “See Subsection 1.2.5 for the locations of the technical support center, the operations support center and the decontamination facilities.” Since Subsection 1.2.5 describes the facilities and equipment in the Annex Building, this first sentence is proposed to be changed as follows: “See Subsection 1.2.5 for the locations of ~~the technical support center,~~ the ~~operations support center~~control support area and the decontamination facilities.” The bases for these changes are: the technical support centers were previously approved by the NRC in NUREG-2153 to be relocated from the Units 2 and 3 Annex Buildings to a combined location outside the Protected Areas for the units; the operations (operational) support centers are being proposed in this LAR to be relocated from the Units 2 and 3 Annex Buildings to a combined location in the Service Building; and per Subsection 1.2.5, the control support areas and decontamination facilities will continue to be located in the Units 2 and 3 Annex Buildings. Therefore, the changes related to the technical support center and control support area in the first sentence of Subsection 13.3 are proposed as editorial only changes.

Table 1. Radiation Emergency Plan (Revision 7) Table B-1a: Staffing Requirements for the VCSNS ERO (highlights provided for emphasis and changes (see Functional Area 4.) are identified as added text and ~~deleted text~~)

Functional Area	Major Tasks	Emergency Positions (Facility)		Staffing - Shift/ERO (75 Minute Response Time*) Unit Shift Staffing	ERO Facility Activation Staffing**	ERO Facility Essential Staffing
1. Plant Operations and Assessment of Operational Aspects	Control Room Staff	Shift Manager/Interim ED	(CR)	(h)		
		Control Room Supervisor	(CR)	(h)		
		Reactor Operator	(CR)	(h)		
		Auxiliary Operator	(CR/OSC)	(h)		
		Operational Support Operator	(CR)	----------	----------	1(i)
2. Emergency Direction and Control	Command and Control	Interim Emergency Director	(CR)	(h)		
		Emergency Director	(TSC)	----------	1(a)	
		Emergency Control Officer	(EOF)	----------	1(a)	
		Offsite Emergency Coordinator	(EOF)	----------	1(a)	
3. Notification & Communication	Emergency Communications	Interim Emergency Director	(CR)	(h)		
		State/County Communicator	(CR)	(h)	----------	
		Offsite Emergency Coordinator	(EOF)	----------	1(a)	
		State/County Communicator	(EOF)	----------	1(g)	
		Communications Coordinator	(EOF)	----------	1	
		Emergency Preparedness Advisor	(EOF)	----------	----------	1
		Emergency Preparedness Advisor	(TSC)	----------	----------	1
	Plant Status	ENS Communicator	(TSC)	----------	----------	1
		Technical Support Communicator	(TSC)	----------	----------	1
		HPN Communicator	(EOF)	----------	----------	1
		Plant Engineering Advisor	(EOF)	----------	----------	1
		Plant Operations Advisor	(EOF)	----------	----------	1

Functional Area	Major Tasks	Emergency Positions (Facility)		Staffing - Shift/ERO (75 Minute Response Time*) Unit Shift Staffing	ERO Facility Activation Staffing**	ERO Facility Essential Staffing
4. Radiological Assessment and Support of Operational Accident Assessment	Offsite Dose Assessment	Health Physics Specialist	(OSC)	~~----------~~(h)	1	
		Offsite Rad Monitoring Coordinator	(EOF)	----------	----------	1
		Dose Assessor/Health Physics	(EOF)	----------~~(h)~~	----------	1
	Offsite Radiological Monitoring	Field Monitoring Teams	(EOF)			
		Health Physics Specialist (or qualified personnel)		----------	1	1
		Drivers		----------	1	1
	Onsite Radiological Monitoring	Damage Control	(OSC)			
		Health Physics Specialist (or qualified personnel)		----------	1	1
		Radiological Assessment Supervisor	(TSC)	----------	----------	1
	In-plant Surveys	Health Physics Specialist	(OSC)	(h)	----------	1
	Chemistry	Chemistry Specialist	(OSC)	(h)	----------	1
		Chemistry Supervisor	(TSC)	----------	----------	1
	HP Supervisory	Health Physics	(OSC)	----------	----------	1

Functional Area	Major Tasks	Emergency Positions (Facility)		Staffing - Shift/ERO (75 Minute Response Time*) Unit Shift Staffing	ERO Facility Activation Staffing**	ERO Facility Essential Staffing
5. Plant System Engineering, Repair, and Corrective Actions	Technical Support	Shift Engineer	(CR)	(h)		
		Operations Supervisor	(TSC)	----------	----------	1(i)
		Technical Support Supervisor	(TSC)	----------	1(i)	
		Core Thermal Engineer	(TSC)	----------	1(i)	
		Mechanical Engineer	(TSC)	----------	----------	1(i)
		Electrical Engineer	(TSC)		----------	1(i)
		I&C Engineer	(TSC)			1(i)
	Repair and Corrective Actions	Mechanical Maintenance Mechanic	(OSC)	(h)	----------	1
		Electrical Maintenance Electrician	(OSC)	(h)	1	1
		I&C Maintenance Mechanic	(OSC)	(h)	1	1
		Health Physics Specialist (Rad Waste)	(OSC)	----------	----------	1
		OSC Supervisor	(OSC)	----------	1	
		Maintenance Supervisor	(TSC)	----------	----------	1(i)
6. In-Plant Protective Actions	Radiation Protection	Health Physics Specialists	(OSC)	(h)	2	4
7. Fire Fighting	—	Fire Brigade		(h) (f)		
8. Rescue Operations and First Aid	—	Medical Emergency Response Team		(h) (f)		
9. Site Access Control and Personnel Accountability	Security & Accountability	Security Force		(h)		
		Security Manager	(TSC)	----------	----------	1
		Plant Security Advisor	(EOF)	----------	----------	1

Functional Area	Major Tasks	Emergency Positions (Facility)		Staffing - Shift/ERO (75 Minute Response Time*) Unit Shift Staffing	ERO Facility Activation Staffing**	ERO Facility Essential Staffing
10. Public Information	Media Interface, Information Development, Media and Rumor Control Monitoring, and Facility Operations and Control	Company Spokesperson	(JIC)	----------	----------	1
		JIC Coordinator	(JIC)	----------	----------	1

(a) The Shift Manager shall function as the IED until relieved by the Emergency Director and Offsite Emergency Coordinator
(f) Supported by Offsite Response Organizations (ORO)
(g) Telephone Communicator Only
(h) Shift personnel are listed in each Unit's Annex Table 2-1
(i) Per Unit/Technology (with exception of I&C Eng, Units 2 & 3 only)
* Response time is based on optimum travel conditions
** Facility Activation Staffing also includes Shift Staffing Personnel assigned to the respective facilities. These personnel must be available, but are not required to be in the facility to activate.

Technical Evaluation – Combining and Relocating the Operational Support Center

10 CFR 50.47(b)(8) requires that adequate emergency facilities and equipment to support the emergency response be provided and maintained. 10 CFR 50, Appendix E, Section IV.E.8.a(ii) requires that the emergency facilities include an onsite operational support center. NUREG-0696, Functional Criteria for Emergency Response Facilities, and NUREG-0737 Supplement 1, Clarification of TMI Action Plan Requirements: Requirements for Emergency Response Capability, contain regulatory guidance for the capabilities of an OSC.

The NUREGs contain guidance in the areas of OSC function; habitability; and communications similar to the following:

- Regarding functional criteria, the OSC is to be an area separate from the control room and the TSC where licensee operations support personnel will assemble in an emergency. The OSC shall provide a location where plant logistic support can be coordinated during an emergency, and restrict control room access to those support personnel specifically requested by the shift supervisor. When the OSC is activated, it shall be supervised by licensee operations management personnel designated in the licensee's emergency plan to perform these functions.

- Regarding habitability criteria, if the OSC habitability is not comparable to that of the control room, the licensee's emergency plan shall include procedures for evacuation of OSC personnel in the event of a large radioactive release. These procedures also shall include provisions for the performance of the OSC functions by essential support personnel from other onsite locations.

- Regarding communications criteria, the OSC shall have direct communications with the control room and with the TSC so that the personnel reporting to the OSC can be assigned to duties in support of emergency operations. The OSC communications system shall consist of one dedicated telephone extension to the control room, one dedicated telephone extension to the TSC, and one dial telephone capable of reaching onsite and offsite locations, as a minimum. Direct voice intercommunications and/or reliable direct radio communications may be used to supplement these telephone communication links.

NUREG-0654, “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants,” contains additional detailed guidance related to the OSC. NUREG-0654, Section II.H.1, requires that an onsite operational support center be provided. NUREG-0654, Section II.H.9, requires that each licensee shall provide for an onsite operational support center (assembly area) which shall have adequate capacity and supplies, including, for example, respiratory protection, protective clothing, portable lighting, portable radiation monitoring equipment, cameras, and communications equipment for personnel present in the assembly area.

10 CFR 52.97(a)(2) requires that the Commission identify within the combined license the inspections, tests, and analyses, including those applicable to emergency planning, that the licensee shall perform, and the acceptance criteria that, if met, are necessary and sufficient to provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of the Act, and the Commission's rules and regulations. Regulatory guidance for the content of EP ITAAC is found in NUREG-0800,

Subsection 14.3.10, “Emergency Planning - Inspections, Tests, Analyses, and Acceptance Criteria.” Generic EP ITAAC is presented in Table 14.3.10-1. Item 8.0, “Emergency Facilities and Equipment,” and contains the generic EP ITAAC from which EP ITAAC C.3.8.01.05.01.06 was developed. The generic acceptance criteria states, “The OSC is located onsite, separate from the control room and TSC. [The TSC and OSC may be combined at a single location.] [The COL applicant will adopt design certification criteria, if applicable, or otherwise specify OSC location and identify specific capabilities.]”

The Service Building is located onsite, north of VCSNS Units 2 & 3. Therefore, the relocation of the OSC into the Service Building will continue to meet the acceptance criteria that the OSC be located onsite, but separate from the control room and the TSC. The underlying functions of the OSC will not be impacted by this change. The relocated OSC will continue to satisfy the requirements of the functional, habitability and communications criteria identified in this technical evaluation.

2.2 Operational Support Center Title Standardization

The title for the OSC is not cited consistently in the licensing basis documents in that both operational support center and operations support center are used. Therefore, VCSNS has determined that the title prescribed in a majority of regulations and industry documents (i.e., operational support center) will be the standard used and as a result, title changes to the following documents have been proposed as shown in Enclosures 3 through 7: UFSAR Tier 1 List of Acronyms and Abbreviations; UFSAR Tier 1 Subsection 3.1; COL Appendix C ITAAC List of Acronyms and Abbreviations; COL Appendix C ITAAC Subsection 3.1; UFSAR Subsections 1.2.3, 9A.2.1, 12.3.1.2, 13.3, and 18.8.3.6; UFSAR Tier 2 Chapter 18 Table of Contents; REP Annex 2: Unit 2 Section 4.1.B; and REP Annex 3: Unit 3 Section 4.1.A. Although the proposed title changes do not result in a reduction in effectiveness of emergency planning functions, the changes will require NRC approval prior to implementation due to their impact to UFSAR Tier 1 (see Enclosure 2) and ITAAC licensing basis documents.

Technical Evaluation – Operational Support Center Title Standardization

The following documents identify the OSC as the operational support center: 10 CFR 50 Appendix E Part IV, Section E, Emergency Facilities and Equipment; NUREG-0696, Functional Criteria for Emergency response Facilities; NUREG-0654/FEMA – REP - 1, Rev 1 Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants; NUREG-0737 Supplement No. 1, Clarification of TMI Action Plan Requirements; NSIR/DPR-ISG-01, Interim Staff Guidance: Emergency Planning for Nuclear Power Plants; NEI 99-02, Rev 7, Regulatory Assessment Performance Indicator Guideline; NRC Inspection Procedures 71114.07, 71114.06, 71114.08; and FEMA P-1028, Program Manual Radiological Emergency Preparedness. Therefore, standardization of the title of the OSC as the operational support center does not impact the underlying function of the OSC.

2.3 Offsite Notification System Title Standardization

The VCSNS emergency communications system was changed from the ESSX system to the EMNet system. A previous 10 CFR 50.54(q) evaluation determined that no reductions in

effectiveness of emergency planning functions were identified as a result of this change. Thus, the change was implemented without requiring prior NRC approval. References to the ESSX System have been identified in COL Appendix C ITAAC C.3.8.01.02.01 and UFSAR Tier 2 Subsection 9.5.2.5.2 for which changes are being proposed as shown in Enclosures 4 and 5. The title change will require NRC approval prior to implementation due to the impact to the COL Appendix C ITAAC.

Technical Evaluation – Offsite Notification System Title Standardization

The communications system title change to the ITAAC does not impact underlying communications requirements. However, the reference to the ESSX system in the ITAAC needs to be corrected. To avoid the potential for future ITAAC changes if another communications system replacement were to occur, VCSNS is proposing to use instead the generic term of offsite notification system as opposed to citing the EMNet system.

Summary:

The proposed changes revise the REP and VCSNS Units 2 & 3 UFSAR Tier 1, Tier 2, and COL emergency planning Appendix C ITAAC licensing basis documents with regard to relocating and combining the Units 2 & 3 individual OSCs into a common OSC serving both units, standardizing the title for the combined OSC as the operational support center, and replacing specific reference to an ESSX communications line with the more generic title of offsite notification system. The proposed changes are in compliance with applicable emergency preparedness and ITAAC regulations and meet the requirements of the supporting regulatory guidance. Although the combined OSC changes result in a reduction in effectiveness of the REP requiring NRC approval prior to implementation, the proposed OSC will continue to meet the requirements of 10 CFR 50.47(b), 10 CFR 50 Appendix E, NUREG-0696, NUREG-0654, NUREG-0737 Sup 1, and NUREG-0800. The REP will continue to maintain adequate facilities and equipment, and will ensure that the station's emergency response will protect the public health and safety while monitoring, evaluating, and implementing mitigation strategies in response to the emergency conditions. In addition, since the proposed OSC title change impacts UFSAR Tier 1 (see Enclosure 2) and the ESSX communications line title change impacts Appendix C ITAAC, these changes will also require NRC approval prior to implementation; however, these changes do not involve a reduction in effectiveness. The proposed changes do not affect the design of a system, structure, or component (SSC) used to meet the design bases of the nuclear plant, nor do the changes affect the construction or operation of the nuclear plant. Therefore, based on the technical evaluation above, the regulatory analysis in Section 4 below, and the exemption request in Enclosure 2, the proposed changes to the REP and VCSNS Units 2 & 3 UFSAR Tier 1, Tier 2, and COL emergency planning Appendix C ITAAC licensing basis documents are acceptable.

3. Technical Evaluation (Incorporated into Section 2 above)

4. Regulatory Evaluation

4.1 Applicable Regulatory Requirements/Criteria

10 CFR 50.47(b) requires that the onsite emergency response plan meet the requirements of 16 planning standards. The applicable planning standards related to the change in the location/combination of the OSC are discussed below.

- 10 CFR 50.47(b)(1) requires that primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis. Based on the technical evaluation provided in Section 2 above, relocation and combination of the OSC meets the requirements of 10 CFR 50.47(b)(1).

- 10 CFR 50.47(b)(2) requires that the on-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified. Based on the technical evaluation provided in Section 2 above, relocation and combination of the OSC meets the requirements of 10 CFR 50.47(b)(2).

- 10 CFR 50.47(b)(8) requires that adequate emergency facilities and equipment to support the emergency response are provided and maintained. Based on the technical evaluation provided in Section 2 above, relocation and combination of the OSC meets the requirements of 10 CFR 50.47(b)(8).

10 CFR 50, Appendix E provides additional requirements for emergency planning and emergency preparedness. The section of 10 CFR 50, Appendix E, applicable to the change in the location of the OSC is discussed below.

- 10 CFR 50, Appendix E, Section IV.E.8.a(ii) requires that the emergency facilities include an onsite operational support center. Based on the technical evaluation provided in Section 2 above, relocation and combination of the OSC meets the requirements of 10 CFR 50 Appendix E, Section IV.E.8.a(ii).

10 CFR 52.97(a)(2) requires that the Commission shall identify within the combined license the inspections, tests, and analyses, including those applicable to emergency planning, that the licensee shall perform, and the acceptance criteria that, if met, are necessary and sufficient to provide reasonable assurance that the facility has been constructed and will be operated in conformity with the license, the provisions of the Act, and the Commission's rules and regulations. Based on the technical evaluations provided in Section 2 above, the proposed changes to the EP ITAAC continue to meet the requirements of 10 CFR 52.97(a)(2).

10 CFR 52.98(f) requires NRC approval for any modification to, addition to, or deletion from the terms and conditions of a COL. This activity involves a change from plant-specific emergency preparedness information, and a corresponding change to COL Appendix C, Inspections, Tests, Analyses and Acceptance Criteria information; therefore, this activity requires a proposed amendment to the COL. Accordingly, NRC approval is required prior to making the plant-specific changes in this license amendment request.

4.2 Precedent

A license amendment request was filed on March 27, 2014 [ML14086A544] for Vogtle Electric Generating Plant (VEGP) Units 3&4 requesting a combined OSC arrangement for the Vogtle units. The NRC approved the VEGP request in a letter dated October 7, 2014 [ML14245A075 – Package].

4.3 Significant Hazards Consideration Determination

The proposed changes would revise the Virgil C. Summer Nuclear Station (VCSNS) Radiation Emergency Plan - Units 2 & 3 (REP) and the VCSNS Units 2 & 3 Updated Final Safety Analysis (UFSAR) Tier 1, Tier 2, and Combined License (COL) emergency planning Appendix C inspections, tests, analyses, and acceptance criteria (ITAAC) licensing basis documents with regard to relocating and combining the Units 2 & 3 individual operational support centers (OSCs) into a common OSC serving both units, standardizing the title for the combined OSC as the operational support center, and replacing specific reference to an ESSX communications line with the more generic title of offsite notification system.

An evaluation to determine whether or not a significant hazards consideration is involved with the proposed amendment was completed by focusing on the three standards set forth in 10 CFR 50.92, “Issuance of Amendment,” as discussed below:

4.3.1 Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed changes, which include combining the Units 2 & 3 individual OSCs into a common OSC serving both units and standardizing the OSC and offsite notification system titles, do not impact the physical function of plant structures, systems, or components (SSCs), or the manner in which SSCs perform their design function. The proposed changes do not adversely affect accident initiators or precursors, nor do they alter design assumptions. The proposed changes do not alter or prevent the ability of SSCs to perform their intended function to mitigate the consequences of an initiating event within assumed acceptance limits. No operating procedures or administrative controls that function to prevent or mitigate accidents are affected by the proposed changes.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

4.3.2 Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed changes do not affect the design of an SSC used to meet the design bases of the nuclear plant or involve a change in the method of plant operation. The proposed changes will not introduce failure modes that could result in a new accident, and the changes do not alter assumptions made in the safety analysis. The proposed changes, which include combining the Units 2 & 3 individual OSCs into a common OSC serving both units and standardizing the OSC and offsite notification system titles, are not initiators of any accidents.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

4.3.3 Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No

Margin of safety is associated with the ability of the fission product barriers (i.e., fuel cladding, reactor coolant system pressure boundary, and containment structure) to limit the level of radiation dose to the public. The proposed changes, which include combining the Units 2 & 3 individual OSCs into a common OSC serving both units and standardizing the OSC and offsite notification system titles, do not impact operation of the plant or its response to transients or accidents. The proposed changes do not alter requirements of the Technical Specifications. The proposed changes do not involve a change in the method of plant operation and no accident analyses will be affected by the proposed changes.

Additionally, the proposed changes will not relax any criteria used to establish safety limits and will not relax any safety system settings. The safety analysis acceptance criteria are not affected by these proposed changes. The proposed changes will not result in plant operation in a configuration outside the design basis. The proposed changes do not adversely affect systems that respond to safely shut down the plant and to maintain the plant in a safe shutdown condition.

Therefore, the proposed amendment does not involve a significant reduction in a margin of safety.

4.4 Conclusion

Based on the above, SCE&G concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92 and accordingly, a finding of “no significant hazards consideration” is justified.

5. Environmental Considerations

The proposed changes would revise the VCSNS REP and VCSNS Units 2 & 3 UFSAR Tier 1, Tier 2, and COL emergency planning Appendix C ITAAC licensing basis documents with regard to relocating and combining the Units 2 & 3 individual operational support centers (OSCs) into a common OSC serving both units, standardizing the title for the combined OSC as the operational support center, and replacing specific reference to an ESSX communications line with the more generic title of offsite notification system.

The proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9), in that:

(i) There is no significant hazards consideration.

As documented in Section 4.3, Significant Hazards Consideration Determination, of this license amendment request, an evaluation was completed to determine whether or not a significant hazards consideration is involved by focusing on the three standards set forth in 10 CFR 50.92, “Issuance of amendment.” The Significant Hazards Consideration determined that; (1) the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated; (2) the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated; and (3) the proposed amendment does not involve a significant reduction in a margin of safety. Therefore, it is concluded that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of “no significant hazards consideration” is justified.

(ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

The requested amendment proposes changes to the VCSNS REP and VCSNS Units 2 & 3 UFSAR Tier 1, Tier 2, and COL emergency planning Appendix C ITAAC licensing basis documents with regard to relocating and combining the Units 2 & 3 individual operational support centers (OSCs) into a common OSC serving both units, standardizing the title for the combined OSC as the operational support center, and replacing specific reference to an ESSX communications line with the more generic title of offsite notification system. The proposed changes do not affect how a SSC is used to meet the design bases of the nuclear plant, nor is there an effect on the construction or operation of the nuclear plant. The changes are unrelated to any aspects of plant construction or operation that would introduce any changes to effluent types (e.g., effluents containing chemicals or biocides, sanitary system effluents, and other effluents) or affect any plant radiological or non-radiological effluent release quantities. Furthermore, these changes do not diminish the functionality of any design or operational features that are credited with controlling the release of effluents during plant operation. Therefore, the proposed amendment does not involve a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite.

(iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The requested amendment proposes changes to the VCSNS REP and VCSNS Units 2 & 3 UFSAR Tier 1, Tier 2, and COL emergency planning Appendix C ITAAC licensing basis documents with regard to combining the Units 2 & 3 individual OSCs into a common OSC serving both units and standardizing the OSC and offsite notification system titles. The proposed changes do not affect how a SSC is used to meet the design bases of the nuclear plant, nor is there an effect on the construction or operation of the nuclear plant. Consequently, the changes have no effect on individual or cumulative occupational radiation exposure during plant operation. Therefore, the proposed amendment does not involve a significant increase in individual or cumulative occupational radiation exposure.

Based on the above review of the proposed amendment, it has been determined that anticipated construction and operational effects of the proposed amendment do not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in the individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9).

Therefore, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment of the proposed amendment is not required.

6. References

None

South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station Units 2 & 3

NND-17-0118

Enclosure 2

Request for Exemption,

Combined Operational Support Center (OSC) for Units 2 & 3

(LAR 17-06)

(This enclosure contains 6 pages including this cover page.)

1.0 Purpose

South Carolina Electric & Gas Company (SCE&G), acting on behalf of itself and South Carolina Public Service Authority (Santee Cooper) (the Licensees) request a permanent exemption from the provisions of 10 CFR 52, Appendix D, Section III.B, "Design Certification Rule for the AP1000 Design, Scope and Contents," to allow a departure from elements of the certification information in Tier 1 of the Generic DCD. The regulation, 10 CFR 52, Appendix D, Section III.B, requires an applicant or licensee referencing Appendix D to 10 CFR Part 52 to incorporate by reference and comply with the requirements of Appendix D, including certification information in DCD Tier 1.

The Tier 1 information for which a plant-specific departure and exemption is being requested includes the title for the combined operational support center (OSC) for V.C. Summer Nuclear Station (VCSNS) Units 2 & 3. Standardizing on operational support center for the OSC title is being proposed to eliminate alternate references to an operations support center found in VCSNS Units 2 & 3 Updated Final Safety Analysis Report (UFSAR) Tier 1 and other licensing bases documents, and is presented as an editorial change.

UFSAR Tier 1 Subsection 3.1, Emergency Response Facilities, and the List of Acronyms and Abbreviations, identify the OSC as the operations support center as opposed to the operational support center. A review of multiple regulatory and industry documents (NUREGs, NEI, 10 CFR 50, Interim Staff Guidance, and FEMA) was conducted and it was determined that a majority of those documents referred to the OSC as the operational support center. To establish consistency throughout the VCSNS licensing basis documents, the usage of operations support center is proposed to be revised to operational support center in the two UFSAR Tier 1 locations listed.

2.0 Background

The Licensees are the holders of Combined License Nos. NPF-93 and NPF-94, which authorize construction and operation of two Westinghouse Electric Company AP1000 nuclear plants, named Virgil C. Summer Nuclear Station (VCSNS) Units 2 & 3, respectively.

In the VCSNS Units 2 & 3 UFSAR Tier 1 and other licensing basis documents, the OSC is referred to as either the operational support center or the operations support center. In an effort to standardize on one title, it was determined that operational support center was the most common identifier used for the OSC in regulatory and industry documents. Therefore, it is proposed that the OSC title of operations support center referred to in VCSNS Units 2 & 3 UFSAR Tier 1 be changed to operational support center. This title change will be consistent with the title changes being proposed in Enclosure 1 for other VCSNS Units 2 & 3 licensing basis documents.

3.0 Technical Justification of Acceptability

UFSAR Tier 1 Subsection 3.1, Emergency Response Facilities, describes various facilities associated with emergency response activities at VCSNS Units 2 & 3 including the OSC. The only purpose of this exemption is to standardize the title of the OSC facility as the operational support center. This title change will provide consistency between VCSNS Units 2 & 3 UFSAR Tier 1 and other licensing basis documents, and bring the title for the VCSNS OSC into alignment with a majority of regulatory and industry documents which address emergency

response facilities. Renaming the facility from the operations support center to the operational support center does not modify the role or function of the OSC.

4.0 Justification of Exemption

10 CFR Part 52, Appendix D, Section VIII.A.4 and 10 CFR 52.63(b)(1) govern the issuance of exemptions from elements of the certified design information for AP1000 nuclear power plants. Because the Licensees have identified changes to the Tier 1 information related to the Tier 2 departure discussed in Enclosure 1 of the accompanying License Amendment Request, an exemption from the certified design information in Tier 1 is needed.

10 CFR Part 52, Appendix D, and 10 CFR 50.12, §52.7, and §52.63 state that the NRC may grant exemptions from the requirements of the regulations provided six conditions are met: 1) the exemption is authorized by law [§50.12(a)(1)]; 2) the exemption will not present an undue risk to the health and safety of the public [§50.12(a)(1)]; 3) the exemption is consistent with the common defense and security [§50.12(a)(1)]; 4) special circumstances are present [§50.12(a)(2)]; 5) the special circumstances outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption [§52.63(b)(1)]; and 6) the design change will not result in a significant decrease in the level of safety [Part 52, App. D, VIII.A.4].

The requested exemption satisfies the criteria for granting specific exemptions, as described below.

1. **This exemption is authorized by law**

   The NRC has authority under 10 CFR 50.12, §52.7, and §52.63 to grant exemptions from the requirements of NRC regulations. Specifically, 10 CFR §50.12 and §52.7 state that the NRC may grant exemptions from the requirements of 10 CFR Part 52 upon a proper showing. No law exists that would preclude the changes covered by this exemption request. Additionally, granting of the proposed exemption does not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations.

   Accordingly, this requested exemption is “authorized by law,” as required by 10 CFR 50.12(a)(1).

2. **This exemption will not present an undue risk to the health and safety of the public**

   The proposed exemption from the requirements of 10 CFR 52, Appendix D, Section III.B, allows changes to elements of the plant-specific Tier 1 DCD to depart from the AP1000 certified (Tier 1) design information. The plant-specific Tier 1 DCD continues to reflect the approved licensing basis for the Licensee, and maintains a consistent level of detail with that which is currently provided elsewhere in Tier 1 of the plant-specific DCD. Because the OSC title change in Tier 1 Subsection 3.1 and the List of Acronyms and Abbreviations does not change acceptance criteria, the protection of the health and safety of the public continues to be provided. Therefore, no adverse safety impact which would present any additional risk to the health and safety of the public is present. The affected Design Description in the plant-specific Tier 1 DCD also continues to provide the detail necessary to support the performance of the OSC.

Therefore, the requested exemption from 10 CFR 52, Appendix D, Section III.B, does not present an undue risk to the health and safety of the public.

3. The exemption is consistent with the common defense and security

The exemption from the requirements of 10 CFR 52, Appendix D, Section III.B changes elements of the plant-specific Tier 1 DCD by departing from the AP1000 certified (Tier 1) design information. The exemption does not alter the design, function, or operation of any structures or plant equipment that are necessary to maintain a secure status of the plant. The proposed exemption has no impact on plant security or safeguards procedures.

Therefore, the requested exemption is consistent with the common defense and security.

4. Special circumstances are present

10 CFR 50.12(a)(2) list six “special circumstances” for which an exemption may be granted. Pursuant to the regulation, it is necessary for one of these special circumstances to be present in order for the NRC to consider granting an exemption request. The requested exemption meets the special circumstances of 10 CFR 50.12(a)(2)(ii). That subsection defines special circumstances as when “Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.”

The rule under consideration in this request for exemption is 10 CFR 52, Appendix D, Section III.B, which requires that a licensee referencing the AP1000 Design Certification Rule (10 CFR Part 52, Appendix D) shall incorporate by reference and comply with the requirements of Appendix D, including Tier 1 information. The licensing basis documents reference the AP1000 Design Certification Rule and incorporate by reference the requirements of 10 CFR Part 52, Appendix D, including Tier 1 information. The underlying purpose of Appendix D, Section III.B is to describe and define the scope and contents of the AP1000 design certification, and to require compliance with the design certification information in Appendix D to maintain the level of safety in the design.

The proposed change to the title of the OSC maintains the emergency response capability of the facility. This change does not impact the ability of any structures, systems, or components to perform their functions or negatively impact safety. Accordingly, this exemption from the certification information enables the licensee to safely construct and operate the AP1000 facility consistent with the purpose of the design certified by the NRC in 10 CFR 52, Appendix D.

Therefore, special circumstances are present, because application of the current generic certified design information in Tier 1 as required by 10 CFR Part 52, Appendix D, Section III.B, in the particular circumstances discussed in this request is not necessary to achieve the underlying purpose of the rule.

5. The special circumstances outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption

Special circumstances outweigh any decrease in safety from the reduction in standardization because the key design function of the OSC associated with this request continues to be maintained. This exemption request demonstrates that the facility function continues to be maintained following implementation of the change from the generic AP1000 DCD Tier 1 information, thereby minimizing the safety impact resulting from any reduction in standardization.

Therefore, the special circumstances associated with the requested exemption outweigh any decrease in safety that may result from the reduction in standardization caused by the exemption.

6. The design change will not result in a significant decrease in the level of safety.

The requested exemption revises the plant-specific DCD Tier 1 information by changing the title of the OSC while maintaining the capability of the facility to perform its emergency response requirements. Because this change does not impact the ability of any structures, systems, or components to perform their functions, the change does not result in a significant decrease in the level of safety.

5.0 Risk Assessment

A risk assessment was determined to be not applicable to address the acceptability of this request.

6.0 Precedent

None

7.0 Environmental Consideration

The Tier 1 information for which a plant-specific departure and exemption is being requested includes the title for the combined operational support center (OSC) for V.C. Summer Nuclear Station (VCSNS) Units 2 & 3. Standardizing on operational support center for the OSC title is being proposed to eliminate alternate references to an operations support center found in Tier 1 and throughout VCSNS Units 2 & 3 Updated Final Safety Analysis Report (UFSAR) Tier 2 and Combined License (COL) Appendix C licensing bases documents. This proposed exemption does not involve (i) a significant hazards consideration, (ii) a significant change in the types or a significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Specific justification for the OSC title change is provided in Section 5 of the corresponding License Amendment Request in Enclosure 1. Accordingly, the proposed exemption meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed exemption.

8.0 Conclusion

The proposed changes to Tier 1 are necessary to revise the OSC design description in the plant-specific DCD Tier 1. The exemption request meets the requirements of 10 CFR 52.63, *"Finality of design certifications,"* 10 CFR 52.7, *"Specific exemptions,"* 10 CFR 50.12, *"Specific exemptions,"* 10 CFR 51.22, *"Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review,"* and 10 CFR 52 Appendix D, *"Design Certification Rule for the AP1000 Design."* Specifically, the exemption request meets the criteria of 10 CFR 50.12(a)(1) in that the request is authorized by law, presents no undue risk to public health and safety, and is consistent with the common defense and security. Furthermore, approval of this request does not result in a significant decrease in the level of safety, presents special circumstances, does not present a significant decrease in safety as a result of a reduction in standardization, and meets the eligibility requirements for categorical exclusion.

South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station Units 2 & 3

NND-17-0118

Enclosure 3

Proposed Changes to UFSAR Tier 1 Text

(LAR 17-06)

Additions identified by blue underlined text.
~~Deletions identified by red strikethrough of text.~~
* * * * Indicates omitted existing text that is not shown.

(This enclosure contains 3 pages including this cover page.)

Proposed revision to Units 2 & 3 UFSAR Tier 1, Page 1.4-3, is shown below.

List of Acronyms and Abbreviations (cont.)

I/O	Input/Output
I&C	Instrumentation and Control
IRC	Inside Reactor Containment
IRWST	In-containment Refueling Water Storage Tank
ISI	Inservice Inspection
IST	Inservice Testing
ITA	Inspections, Tests, Analyses
ITAAC	Inspections, Tests, Analyses, and Acceptance Criteria
LBB	Leak Before Break
LTOP	Low Temperature Overpressure Protection
MBtu	Million British Thermal Units
MCC	Motor Control Center
MCR	Main Control Room
MHS	Mechanical Handling System
MMIS	Man-machine Interface System
MOV	Motor-operated Valve
MSIV	Main Steam Isolation Valve
MSLB	Main Steam Line Break
MSS	Main Steam System
MTS	Main Turbine System
MW	Megawatt
MWe	Megawatt Electric
MWt	Megawatt Thermal
N/A	Not Applicable
NDE	Nondestructive Examination
NI	Nuclear Island
NSSS	Nuclear Steam Supply System
OCS	Operation and Control Centers System
ORC	Outside Reactor Containment
ORE	Occupational Radiation Exposure
OSA	Operational Sequence Analyses
OSC	~~Operations~~ Operational Support Center
PAR	Passive Autocatalytic Recombiner
PCCAWST	Passive Containment Cooling Ancillary Water Storage Tank

Proposed revision to Units 2 & 3 UFSAR Tier 1, Page 3.1-1, is shown below.

3.1 Emergency Response Facilities

Design Description

The technical support center (TSC) is a facility from which management and technical support is provided to main control room (MCR) personnel during emergency conditions. The ~~operations~~ operational support center (OSC) provides an assembly area where operations support personnel report in an emergency. The control support area (CSA) is an area nearby the main control room from which support can be provided to the main control room.

1. The TSC has floor space of at least 75 ft^2 per person for a minimum of 25 persons.

2. The TSC has voice communication equipment for communication with the MCR, emergency operations facility, OSC, and the U.S. Nuclear Regulatory Commission (NRC).

3. The plant parameters listed in Table 2.5.4-1, minimum inventory table, in subsection 2.5.4, Data Display and Processing System (DDS), with a “Yes” in the “Display” column, can be retrieved in the TSC.

4. The OSC has voice communication equipment for communication with the MCR and TSC.

5. The TSC and OSC are in different locations.

6. The CSA provides a habitable workspace environment.

Inspections, Tests, Analyses, and Acceptance Criteria

Table 3.1-1 specifies the inspections, tests, analyses, and associated acceptance criteria for the emergency response facilities.

South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station Units 2 & 3

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Enclosure 4

Proposed Changes to COL Appendix C Text and Tables

(LAR 17-06)

Additions identified by blue underlined text.
~~Deletions identified by red strikethrough of text.~~
* * * * Indicates omitted existing text that is not shown.

(This enclosure contains 5 pages including this cover page.)

Proposed revision to Units 2 & 3 COL Appendix C, Page C-42, is shown below.

List of Acronyms and Abbreviations (cont.)

ITAAC	Inspections, Tests, Analyses, and Acceptance Criteria
lb/hr	Pounds per Hour
JIC	Joint Information Center
kW	Kilowatt
LBB	Leak Before Break
LOCA	Loss of Coolant Accident
LTOP	Low Temperature Overpressure Protection
MBtu	Million British Thermal Units
MCC	Motor Control Center
MCR	Main Control Room
MHS	Mechanical Handling System
MOV	Motor-operated Valve
MSIV	Main Steam Isolation Valve
MSS	Main Steam System
MTS	Main Turbine System
MW	Megawatt
MWe	Megawatt Electric
MWt	Megawatt Thermal
NI	Nuclear Island
NRC	U.S. Nuclear Regulatory Commission
OCS	Operation and Control Centers System
ODCM	Offsite Dose Calculation Manual
ORC	Outside Reactor Containment
OSC	~~Operations~~ Operational Support Center
PAG	Protection Action Guide
PAR	Protective Action Recommendation
PCCAWST	Passive Containment Cooling Ancillary Water Storage Tank
PCCWST	Passive Containment Cooling Water Storage Tank
PCS	Passive Containment Cooling System
PGS	Plant Gas System
pH	Potential of Hydrogen
PLS	Plant Control System
PMS	Protection and Safety Monitoring System
PNS	Prompt Notification System
PORV	Power-operated Relief Valve
PRHR	Passive Residual Heat Removal
psia	Pounds per Square Inch Absolute
psig	Pounds per Square Inch Gauge
PSS	Primary Sampling System
pu	Per Unit
PWS	Potable Water System
PXS	Passive Core Cooling System

Proposed revision to Units 2 & 3 COL Appendix C, Page C-399, is shown below.

* * * *

3.0 Non-System Based Design Descriptions and ITAAC

3.1 Emergency Response Facilities

Design Description

The technical support center (TSC) is a facility from which management and technical support is provided to main control room (MCR) personnel during emergency conditions. The ~~operations~~ operational support center (OSC) provides an assembly area where operations support personnel report in an emergency. The control support area (CSA) is an area nearby the main control room from which support can be provided to the main control room.

1. The TSC has floor space of at least 75 ft^2 per person for a minimum of 25 persons.
2. The TSC has voice communication equipment for communication with the MCR, emergency operations facility, OSC, and the U.S. Nuclear Regulatory Commission (NRC).
3. The plant parameters listed in Table 2.5.4-1, minimum inventory table, in subsection 2.5.4, Data Display and Processing System (DDS), with a “Yes” in the “Display” column, can be retrieved in the TSC.
4. The OSC has voice communication equipment for communication with the MCR and TSC.
5. The TSC and OSC are in different locations.
6. The CSA provides a habitable workspace environment.

* * * *

Proposed revision to Units 2 & 3 COL Appendix C, Page C-456, is shown below.

Emergency Planning ITAAC C.3.8.01.02.01 (843)

Table C.3.8-1 (continued)
Inspections, Tests, Analyses, and Acceptance Criteria

No.	ITAAC No.	Program Commitment	Inspections, Tests, Analyses	Acceptance Criteria
843	C.3.8.01.02.01	2.1 The means exists to notify responsible State and local organizations within 15 minutes after the licensee declares an emergency. [E.1]	2.1. A test of the ~~ESSX line~~offsite notification system will be performed to demonstrate the capabilities for providing initial notification to the offsite authorities after a simulated emergency classification.	2.1 Using the ~~ESSX line~~offsite notification system the State of South Carolina and the counties of Fairfield, Lexington, Newberry and Richland received notification within 15 minutes after the declaration of an emergency from the Control Room and the EOF. A test of each facility ~~ESSX line~~offsite notification system was successful using the standard South Carolina notification form.
844	C.3.8.01.02.02	2.2 The means exists to notify emergency response personnel. [E.2]	2.2 A test of the primary and back-up ERO notification systems will be performed.	2.2 Emergency response personnel received the notification message and mobilization communication was validated by personnel response to the notification system and by telephone during off-hours. Also demonstrated work hours electronic notification and plant page system during working hours.
845	C.3.8.01.02.03	2.3 The means exists to notify and provide instructions to the populace within the plume exposure EPZ. [E.6]	2.3 The full test of the ANS capabilities will be conducted.	2.3 The ANS was demonstrated to notify and provide instructions to the public and was demonstrated to meet the design objectives, as stated in the emergency plan.

Proposed revision to Units 2 & 3 COL Appendix C, Page C-459, is shown below.

Emergency Planning ITAAC C.3.8.01.05.01.06 (854)

Table C.3.8-1 (continued)
Inspections, Tests, Analyses, and Acceptance Criteria

No.	ITAAC No.	Program Commitment	Inspections, Tests, Analyses	Acceptance Criteria
852	C.3.8.01.05.01.04	5.1 The licensee has established a TSC and onsite OSC. [H.1, H.9]	5.1.1 An inspection of the TSC and OSC will be performed, including a test of the capabilities. These facilities will meet the criteria of NUREG-0696 with exceptions.	5.1.4 TSC communications equipment is installed per specifications and is operable. Communications have been initiated and found to be acceptable in giving and receiving voice communications with the Control Room, the OSC and the EOF.
853	C.3.8.01.05.01.05	5.1 The licensee has established a TSC and onsite OSC. [H.1, H.9]	5.1.1 An inspection of the TSC and OSC will be performed, including a test of the capabilities. These facilities will meet the criteria of NUREG-0696 with exceptions.	5.1.5 The TSC has the means to receive, store, process, and display plant and environmental information as listed in UFSAR Table 7.5-1, and to initiate emergency measures and conduct emergency assessment.
854	C.3.8.01.05.01.06	5.1 The licensee has established a TSC and onsite OSC. [H.1, H.9]	5.1.1 An inspection of the TSC and OSC will be performed, including a test of the capabilities. These facilities will meet the criteria of NUREG-0696 with exceptions.	5.1.6 ~~There is an OSC located inside the Unit. It~~An OSC has been established within the Protected Area and is separate from the Control Room and TSC ~~within the Protected Area~~.
855	C.3.8.01.05.01.07	5.1 The licensee has established a TSC and onsite OSC. [H.1, H.9]	5.1.1 An inspection of the TSC and OSC will be performed, including a test of the capabilities. These facilities will meet the criteria of NUREG-0696 with exceptions.	5.1.7 OSC communications equipment is installed, and voice transmission and reception have been demonstrated between the OSC, OSC Teams, the TSC, and Control Room.
856	C.3.8.01.05.01.08	5.1 The licensee has established a TSC and onsite OSC. [H.1, H.9]	5.1.1 An inspection of the TSC and OSC will be performed, including a test of the capabilities. These facilities will meet the criteria of NUREG-0696 with exceptions.	5.1.8 A reliable and backup electrical supply is available for the TSC.
857	C.3.8.01.05.02.01	5.2 The licensee has established an EOF. [H.2]	5.2 An inspection of the EOF will be performed, including a test of the capabilities. The EOF is located outside of the 10 mile Emergency Planning Zone.	5.2.1 The EOF working space size is consistent with NUREG-0696 (75 ft^2/ person), and is large enough for required systems, equipment, records and storage.

South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station Units 2 & 3

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Enclosure 5

Proposed Changes to UFSAR Tier 2 Text

(LAR 17-06)

Additions identified by blue underlined text.
~~Deletions identified by red strikethrough of text.~~
* * * * Indicates omitted existing text that is not shown.

(This enclosure contains 6 pages including this cover page.)

Proposed revision to Units 2 & 3 UFSAR Tier 2, Page 1.2-13, is shown below.

* * * *

1.2.3 Plant Arrangement Description

Building Definition

A set of the general arrangement drawings for the AP1000 is provided in Figures 1.2-4 through 1.2-30.

Figure 1.2-201 replaces Figure 1.2-18 to reflect the relocation of the ~~Operations~~ Operational Support Center.

The AP1000 consists of the following five principal structures. Each of these buildings is constructed on an individual basemat:

- Nuclear island
- Turbine building
- Annex building
- Diesel generator building
- Radwaste building

The structures that make up the nuclear island are:

- Containment building
- Shield building
- Auxiliary building

These nuclear island buildings are depicted on the site plan. The safety-related equipment designed to perform accident mitigation functions is located in the nuclear island.

* * * *

Proposed revision to Units 2 & 3 UFSAR Tier 2, Page 9.4-16, is shown below.

* * * *

9.4.2.2.1.1 General Area HVAC Subsystem

The general area HVAC subsystem serves personnel areas in the annex building outside the security area. These areas include the men's and women's change and toilet rooms, the ALARA briefing room, ~~and operational support center,~~ offices, corridors, men's and women's rest rooms, conference rooms, and office areas. The general area HVAC subsystem consists of two 50-percent capacity supply air handling units of about 5,100 scfm each and two 50-percent capacity supply air handling units of about 10,500 scfm each, humidifiers, a ducted supply and return air system, diffusers and registers, exhaust fan, automatic controls, and accessories. The air handling units are located on the low roof of the annex building at elevation 117′-6″. The units discharge into ducted supply distribution

Proposed revision to Units 2 & 3 UFSAR Tier 2, Page 9.5-26, is shown below.

* * * *

9.5.2.5.2 Emergency Offsite Communications

The primary system used for communication with state and county officials during an emergency is the ~~Electric Switch System Exchange (ESSX)~~offsite notification system. VCSNS employs additional backup communication systems to the ~~ESSX~~ offsite notification system including the use of the Private Branch Exchange (PBX) telephone system, local commercial telephone system, satellite telephones, and an 800 MHz radio system. In the event of the failure of one of the primary systems, the communicator manually initiates communications using one of the backup systems as described in the Emergency Implementing Procedures. The Implementing Procedures provide the details for the communications transfer should the primary equipment fail or otherwise be determined to be unacceptable. The 800 MHz system serves as the crisis management radio system between VCSNS onsite teams and state and county officials. Details of the primary and secondary communication systems are provided in Section F of the VCSNS Emergency Plan.

* * * *

Proposed revision to Units 2 & 3 UFSAR Tier 2, Page 9A-1, is shown below.

* * * *

9A.2 Fire Protection Analysis Methodology

9A.2.1 Fire Area Description

The plant is divided into fire areas and fire zones as described in Section 9.5.1.2.1.1. These fire areas/zones and their boundaries are illustrated on Figures 9A-1 through 9A-5. Figure 9.A-201 replaces Figure 9A-3 (Sheet 1), to reflect the relocation of the ~~Operations~~ Operational Support Center.

The analysis for each fire area briefly describes the fire area and associated fire zones, and identifies the principal systems and safety-related components in the fire area. Fire detection and suppression features are listed and the means of smoke control is discussed. The term “smoke” is used throughout this document to imply “smoke and products of combustion.”

This document also uses terminology defined in NFPA 13, such as “light hazard,” “ordinary hazard,” and “extra hazard.” Normally, these terms apply to sprinkler installations and their water supplies only. However, as used herein, the terms apply to the quantity and combustibility of the contents of a given fire area or fire zone irrespective of whether or not sprinklers are present.

Proposed revision to Units 2 & 3 UFSAR Tier 2, Page 12.3-7, is shown below.

* * * *

12.3.1.2 Radiation Zoning and Access Control

Access to areas inside the plant structures and plant yard area is regulated and controlled by posting of radiation signs, control of personnel, and use of alarms and locks (Section 12.5). During plant operation, access to radiologically restricted areas is through the access control area in the annex building.

Plant areas are categorized into radiation zones according to design basis radiation levels and anticipated personnel occupancy with consideration given toward maintaining personnel exposures ALARA and within the standards of 10 CFR 20. Rooms, corridors, and pipeways are evaluated for potential radiation sources during normal, shutdown, spent resin transfer, and emergency operations; for maintenance occupancy requirements; for general access requirements; and for material exposure limits to determine appropriate zoning. Each radiation zone defines the radiation level range expected in the zone. The radiation zone categories employed and zoning for each plant area under normal conditions is shown in Figure 12.3-1. The zoning for each plant area under accident conditions is shown in Figure 12.3-2. Radiation zones shown in the figures are based upon conservative design data. Actual in-plant zones and control of personnel access are based upon surveys conducted by the Combined License holder. Access control provisions for each plant area under normal expected conditions are shown in Figure 12.3-3. These provisions implement the requirements of 10 CFR 20 and utilize the alternative access control methods outlined in Regulatory Guide 8.38.

Figure 12.3-201, Figure 12.3-202, and Figure 12.3-203 replace Figure 12.3-1 (Sheet 11), Figure 12.3-2 (Sheet 11), and Figure 12.3-3 (Sheet 11), respectively, to reflect the relocation of the ~~Operations~~ Operational Support Center.

Proposed revision to Units 2 & 3 UFSAR Tier 2, Page 13.3-1, is shown below.

13.3 Emergency Planning

See Subsection 1.2.5 for the locations of ~~the technical support center,~~ the ~~operations support center~~control support area and the decontamination facilities. See Section 9.4 for a description of the HVAC systems for the main control room/control support area and the annex building. See Section 18.8 for the high level requirements for the technical support center and the ~~operations~~ operational support center. See Section 7.5 for identification of plant variables that are provided for interface to the emergency planning areas.

* * * *

Proposed revision to Units 2 & 3 UFSAR Tier 2, Page 18-ii, is shown below.

TABLE OF CONTENTS (CONTINUED)

Proposed revision to Units 2 & 3 UFSAR Tier 2, Page 18.8-15, is shown below.

* * * *

18.8.3.6 ~~Operations~~ Operational Support Center Mission and Major Tasks

The ~~operations~~ operational support center (OSC) is not within the scope of the human factors engineering program, but it is an emergency response facility. The mission of the ~~operations support center~~OSC is to provide a habitable area for operations support personnel and the resources to coordinate the assignment of duties and tasks to personnel outside of the main control room and the technical support center in support of plant emergency operation. The ~~operations support center~~OSC and the TSC are in different locations. The ~~Operations Support Center (OSC)~~OSC location is described in the Emergency Plan.

The major task of the ~~operations support center~~OSC is to provide a centralized area and the necessary supporting resources for the assembly of predesignated operations support personnel during emergency conditions. The ~~operations support center~~OSC provides the resources for communicating with the main control room and the technical support center. This permits personnel reporting to the ~~operations support center~~OSC to be assigned to duties in support of emergency operations.

* * * *

South Carolina Electric & Gas Company

Virgil C. Summer Nuclear Station Units 2 and 3

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Enclosure 6

Proposed Radiation Emergency Plan Changes (Public Version)

(LAR 17-06)

Additions identified by blue underlined text.
~~Deletions identified by red strikethrough of text.~~
* * * * Indicates omitted existing text that is not shown.

(This enclosure contains 6 pages including this cover page.)

Proposed VCSNS Units 2 & 3 Radiation Emergency Plan Changes
Part 2 Section B.5.a.13 *Operational Support Center Supervisors*

8) Emergency Notification System (ENS) Communicator TSC/CR
The Emergency Notification System Communicators report to the ED. The Communicator provides updates and responds to inquiries from the NRC for plant status, emergency classifications, and mitigation assessments, strategies, and actions.

9) Technical Support Staff TSC
Core Thermal (Reactor), Electrical, Mechanical, and I&C (Units 2 & 3 only) Engineers make up the Technical Support Staff. These Engineers evaluate damage assessment reports and support the development of mitigation recommendations, strategies, and procedures to recover the plant and return it to a safe and operational state. Each discipline will provide personnel to support each Protected Area/Technology.

10) Security Manager TSC
The Security Manager reports to the ED and supervises the activities and defensive strategy of the Security Force, the site access control, and the Protected Area and Vital Area access controls. The Manager also provides updates and information to the Security Advisor in the EOF.

11) Chemistry Supervisor TSC
The Supervisor reports to the ED and supervises the activities of the chemistry sampling and analyses. The supervisor directs the staff in determining the extent and nature of radiological and chemistry problems onsite.

12) Maintenance Supervisor TSC
The Supervisor reports to the ED and supervises the activities of the Maintenance organization and assist with mitigation evaluations and repairs. The supervisor directs the staff in determining the extent and nature of mechanical, electrical, and I&C problems. Supervisors are assigned from each Protected Area/Technology (Unit 1 and Units 2 & 3). The Supervisor from affected Unit(s) assumes the position of lead Supervisor for the ERO.

13) Operational Support Center Supervisors OSC
The OSC Supervisors reports to the ED and supervises the activities of OSC personnel while implementing the mitigation strategies and procedures. Each OSC (Unit~~s~~ 1~~, 2, and 3~~ and Units 2 & 3) will have separate Supervisors.

14) Operational Support Center Damage Control Teams OSC
Specialists and Operators make-up the OSC Damage Control Teams. These teams perform emergency mitigation tasks throughout the station. Individuals from Health Physics, Mechanical, Electrical, and I&C Maintenance, Chemistry, and Operations are always available as part of the OSC Damage Control Teams. Individuals from other plant organizations may also be called to assist in emergency mitigation efforts. Each OSC will have separate teams.

* * * *

Proposed VCSNS Units 2 & 3 Radiation Emergency Plan Changes
Part 2 Section H.1 *Control Rooms, Technical Support Center, and Operational Support Centers*

Section H: Emergency Facilities and Equipment

Security-Related Information, Withhold Under 10 CFR 2.390d

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Proposed VCSNS Units 2 & 3 Radiation Emergency Plan Changes
Annex 2: Unit 2 Section 4.1.B *Operations Support Center*

* * * *

Section 4: Emergency Facilities and Equipment

4.1 Unit-Specific Emergency Facilities

Security-Related Information, Withhold Under 10 CFR 2.390d

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Proposed VCSNS Units 2 & 3 Radiation Emergency Plan Changes
Annex 3: Unit 3 Section 4.1.A *Operations Support Center*

* * * *

Section 4: Emergency Facilities and Equipment

4.1 Unit-Specific Emergency Facilities

Security-Related Information, Withhold Under 10 CFR 2.390d

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Proposed VCSNS Units 2 & 3 Radiation Emergency Plan Changes
Part 2 Table B-1a Staffing Requirements for the VCSNS ERO

Functional Area	Major Tasks	Emergency Positions (Facility)		Staffing - Shift/ERO (75 Minute Response Time*) Unit Shift Staffing	ERO Facility Activation Staffing**	ERO Facility Essential Staffing
		* * * *				
4. Radiological Assessment and Support of Operational Accident Assessment	Offsite Dose Assessment	Health Physics Specialist	(OSC)	~~---------~~(h)	1	
		Offsite Rad Monitoring Coordinator	(EOF)	----------	----------	1
		Dose Assessor/Health Physics	(EOF)	~~---------~~(h)	----------	1
	Offsite Radiological Monitoring	Field Monitoring Teams	(EOF)			
		Health Physics Specialist (or qualified personnel)		----------	1	1
		Drivers		----------	1	1
	Onsite Radiological Monitoring	Damage Control	(OSC)			
		Health Physics Specialist (or qualified personnel)		----------	1	1
		Radiological Assessment Supervisor	(TSC)	----------	----------	1
	In-plant Surveys	Health Physics Specialist	(OSC)	(h)	----------	1
	Chemistry	Chemistry Specialist	(OSC)	(h)	----------	1
		Chemistry Supervisor	(TSC)	----------	----------	1
	HP Supervisory	Health Physics	(OSC)	----------	----------	1
		* * * *				