



August 13, 2015
RC-15-0117

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Dear Sir / Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION UNIT 1
DOCKET NO. 50-395
OPERATING LICENSE NO. NPF-12
REQUEST FOR SCHEDULE RELAXATION FROM NRC ORDER EA-12-049,
"ISSUANCE OF ORDER TO MODIFY LICENSES WITH REGARD TO
REQUIREMENTS FOR MITIGATION STRATEGIES FOR BEYOND-DESIGN-
BASIS EXTERNAL EVENTS"

- References:
1. NRC Order EA-12-049, "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," dated March 12, 2012 [ML12054A735]
 2. South Carolina Electric & Gas Company letter to USNRC, "South Carolina Electric & Gas Company's Overall Integrated Plan as Required by March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated February 28, 2013 [ML13063A150]

South Carolina Electric & Gas Company (SCE&G), acting for itself and as an agent for South Carolina Public Service Authority is requesting a schedule relaxation of the requirements contained in Nuclear Regulatory Commission (NRC) Order EA-12-049. On March 12, 2012, the NRC issued an Order (Reference 1) to SCE&G. Reference 1 was immediately effective and directs V.C. Summer Nuclear Station Unit 1 (VCSNS) to develop, and implement an overall integrated plan to maintain or restore core cooling, containment and spent fuel pool cooling capabilities in the event of a beyond-design-basis external event. Reference 2 provides the Mitigating Strategies Overall Integrated Plan for the VCSNS.

The Condensate Storage Tank (CST) does not meet the high wind protection from the tornado hazard requirements in NEI 12-06 and is therefore not creditable for "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0. This vulnerability was identified during the April 2015 FLEX Self-Assessment. VCSNS is currently pursuing an alternate emergency feedwater suction strategy to supply water to the Turbine Driven Emergency Feedwater Pump in the event the CST is rendered inoperable. As a result of this late strategy change, VCSNS is requesting a schedule relaxation from full compliance until July 31, 2016. This time is needed to design and implement this new alternate emergency feedwater suction strategy, update FLEX procedures, and complete training associated with this new FLEX Strategy. The July 31, 2016 is also being requested due to the number of procedure changes and station training activities scheduled for the first quarter of 2016 to ensure compliance with the NFPA 805 standard by March 31, 2016.

A151
NRR

The other FLEX equipment, modifications, training and procedures required to implement the mitigating strategies, required by Order EA-12-049, will be completed and available for use in accordance with the implementation schedule requirements specified in the Order and as described in Reference 2.

Section IV of NRC Order EA-12-049 (Reference 1) states that licensees proposing to deviate from requirements contained in NRC Order EA-12-049 may request that the Director, Office of Nuclear Reactor Regulation, relax those requirements. In accordance with Section IV of NRC Order EA-12-049, VCSNS is requesting that the Director, Office of Nuclear Reactor Regulation, relax the schedule requirement for completion of full implementation as prescribed in Section IV.A.2 of NRC Order EA-12-049. Upon approval by the NRC, VCSNS considers the alternative implementation date regarding NRC Order EA-12-049 proposed in the attachment will constitute a condition of the NRC Order EA-12-049 for VCSNS.

This letter contains a regulatory commitment for VCSNS to implement an interim action to change OAP-109.1, *Guidelines for Severe Weather*, so that after a tornado watch has been issued for the VCSNS area, the Emergency Response Unit personnel will be instructed to deploy a Pumper Truck to a location where Beyond Design Basis Mitigating Guideline (BDMG)-5, *Manually Depressurize SGS and Use Low Pressure Water Sources (Turbine Driven Emergency Feedwater Pump Not Available)*, can be performed. This will enable restoration per BDMG-5 as quickly as possible. The interim action will be implemented after Refueling Outage 22 until the alternate EFW modification, procedure changes and associated training can be completed.

If you have any questions concerning this matter, please contact Mr. Bruce Thompson at 803-931-5042.

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

8/13/15
Executed on

Thomas D. Gatlin
Thomas D. Gatlin

MM/TDG/pr

Attachment 1: Request for Schedule Relaxation of NRC Order EA-12-049 Requirement IV.A.2 for Virgil C. Summer Nuclear Station

Attachment 2: List of Regulatory Commitments

c:	Without Attachment unless noted	W. M. Dean (w/attachment)
	K. B. Marsh	S. A. Williams (w/attachment)
	S. A. Byrne	M. A. Brown (w/attachment)
	J. B. Archie	NRC Resident Inspector
	N. S. Carns	K. M. Sutton
	J. H. Hamilton	NSRC
	J. W. Williams	RTS (CR-12-01078, CR-14-05730)
	W. M. Cherry	File (815.07)
	V. M. McCree (w/attachment)	PRSF (RC-15-0117)

Document Control Desk
Attachment 1
RC-15-0117
CR-12-01078, CR-14-05730
Page 1 of 3

**VIRGIL C. SUMMER NUCLEAR STATION UNIT 1
DOCKET NO. 50-395
OPERATING LICENSE NO. NPF-12**

ATTACHMENT 1

**REQUEST FOR SCHEDULE RELAXATION OF NRC ORDER EA-12-049 REQUIREMENT
IV.A.2 FOR VIRGIL C. SUMMER NUCLEAR STATION UNIT 1**

Summary

Pursuant to the procedure specified in Section IV of Nuclear Regulatory Commission (NRC) Order EA-12-049 (Reference 1), South Carolina Electric & Gas Company (SCE&G), hereby submits a request for a schedule relaxation for V.C. Summer Nuclear Station Unit 1 (VCSNS) from Order Condition A.2, which requires completion of implementation no later than two (2) refueling cycles after submittal of the overall integrated plan, or December 31, 2016, whichever occurs first. VCSNS is requesting a schedule relaxation to design and implement the new alternate Emergency Feedwater (EFW) suction strategy. VCSNS will be in full compliance of the Order by July 31, 2016. The other FLEX equipment, modifications, and procedures required to implement the mitigating strategies, required by Order EA-12-049, will be completed and available for use in accordance with the implementation schedule requirements specified in the Order.

Order Requirement from Which Relaxation is Requested

NRC Order EA-12-049, Section IV.A.2 requires completion of full implementation of the Order requirements either no later than two (2) refueling cycles after submittal of the Overall Integrated Plan (OIP), as required by Condition C.1.a, or December 31, 2016, whichever comes first. In accordance with the requirements of the Order, VCSNS submitted the OIP (Reference 2) on February 28, 2013. The OIP milestone schedule identified the completion dates for full implementation of NRC Order EA-12-049 as completion of the Fall 2015 refueling outage for VCSNS.

The VCSNS mitigation strategies for core cooling are dependent upon a protected water source for Emergency Feedwater. Prior to the 2015 FLEX Self-Assessment the protected water source was considered to be the Condensate Storage Tank (CST). However, a recent engineering evaluation has revealed that the CST does not meet high wind from a tornado hazard protection requirements in NEI 12-06 "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0, and therefore is not creditable for FLEX. A physical modification to the tank itself and/or surrounding plant structure would be required to credit the CST. VCSNS is pursuing a new strategy to ensure a protected water source exists to meet Beyond Design Basis External Event requirements.

Justification for Relaxation Request

Based on the time required to design and implement this new alternate EFW suction modification, update FLEX procedures, and complete operations training, full implementation of the core cooling mitigation strategy, in accordance with NRC Order EA-12-049, will not be completed by the date required in the Order. The current requirement is to be in full compliance by the end of Refueling Outage 22 (RF-22), which begins October 3, 2015. An extension to July 31, 2016, is still within the maximum allowed timeframe of December 31, 2016.

The alternate EFW strategy is a significant part of the station's overall FLEX strategies and is required to fully comply with NRC Order EA-12-049. This modification will serve as a backup to the CST and eliminate the Single Point Vulnerability, to ensure adequate core cooling is

maintained after a Beyond Design Basis External Event and subsequent Extended Loss of AC Power.

During this relaxation period, VCSNS will also be actively working to meet the NFPA 805 compliance due date of March 31, 2016. To meet the NFPA 805 compliance due date, several plant modifications will also be made during RF-22. NFPA 805 compliance efforts will continue after RF-22 up until March 31, 2016. Also during that time, VCSNS will be updating numerous station procedures, which will coincide with training for Operations and other plant staff to complete the NFPA 805 implementation.

If the CST is unavailable during this relaxation period, the station has the capacity to take suction from the Demineralization Water Storage Tank (DWST) and Filtered Water Storage Tank (FWST) for EFW. Although the DWST and FWST are not protected, these two sources would be preferred over the Monticello Reservoir or Service Water Pond due to the improved water quality. As a last resort, the station can also deploy a Pumper Truck or the Ultimate Heat Sink System to provide water from the Monticello Reservoir or Service Water Pond.

In addition to maintaining the non-protected water sources described above, VCSNS will implement the following interim action after RF-22 until the alternate EFW modification, procedure changes and associate training can be completed:

OAP-109.1, Guidelines for Severe Weather, will be changed so that after a tornado watch has been issued for the VCSNS area, the Emergency Response Unit personnel will be instructed to deploy a Pumper Truck to a location where Beyond Design Basis Mitigating Guideline (BDMG)-5, *Manually Depressurize SGS and Use Low Pressure Water Sources (Turbine Driven Emergency Feedwater Pump Not Available)*, can be performed. This will enable restoration per BDMG-5, as quickly as possible.

Conclusion

As described above, compliance with NRC Order EA-12-049 schedule requirement for full completion of implementation of mitigation strategies will not be completed due to a late change in the core cooling strategy. Therefore, in accordance with the provisions of Section IV of the Order, we request schedule relaxation of the requirement described in Section IV.A.2 until July 31, 2016. This schedule relaxation is considered acceptable based on the diverse capabilities of providing water to EFW suction and the capacity to quickly deploy a Pumper Truck to provide EFW, if needed.

References

1. Letter from E. J. Leeds and M. R. Johnson, USNRC, to T. D. Gatlin, SCE&G, "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," March 12, 2012 [ML12054A735]
2. South Carolina Electric & Gas Company letter to USNRC, "South Carolina Electric & Gas Company's Overall Integrated Plan as Required by March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated February 28, 2013 [ML13063A150]

VIRGIL C. SUMMER NUCLEAR STATION (VCSNS) UNIT 1
DOCKET NO. 50-395
OPERATING LICENSE NO. NPF-12

ATTACHMENT 2

LIST OF REGULATORY COMMITMENTS

The following table identifies the action committed to by the Virgil C. Summer Nuclear Station (VCSNS) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments. Please direct questions regarding these commitments to Mr. Bruce L. Thompson at (803) 931-5042.

COMMITMENT	DUE DATE/EVENT
VCSNS is to implement the following interim action: OAP-109.1, Guidelines for Severe Weather, will be changed so that after a tornado watch has been issued for the VCSNS area, the Emergency Response Unit personnel will be instructed to deploy a Pumper Truck to a location where Beyond Design Basis Mitigating Guideline (BDMG)-5, <i>Manually Depressurize SGS and Use Low Pressure Water Sources (Turbine Driven Emergency Feedwater Pump Not Available)</i> , can be performed. This will enable restoration per BDMG-5, as quickly as possible.	After Refueling Outage 22 until the alternate EFW modification, procedure changes and associated training can be complete.