



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

October 4, 2015

Mr. Thomas D. Gatlin, Vice President  
Nuclear Operations  
South Carolina Electric and Gas Company  
Virgil C. Summer Nuclear Station  
Post Office Box 88, Mail Code 800  
Jenkinsville, SC 29065

SUBJECT: VIRGIL C. SUMMER NUCLEAR STATION, UNIT 1 – RELAXATION OF THE SCHEDULE REQUIREMENTS OF ORDER EA-12-049, "ISSUANCE OF ORDER TO MODIFY LICENSES WITH REGARD TO REQUIREMENTS FOR MITIGATION STRATEGIES FOR BEYOND-DESIGN-BASIS EXTERNAL EVENTS" (TAC NO. MF2338)

Dear Mr. Gatlin:

By letter dated March 12, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12054A735), the U.S. Nuclear Regulatory Commission (NRC) ordered South Carolina Electric and Gas Company (SCE&G, the licensee) to take certain actions at Virgil C. Summer Nuclear Station, Unit 1 (VCSNS), associated with the Fukushima Near-Term Task Force Recommendations. Order EA-12-049 directed that actions be taken by licensees to develop and implement strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities during beyond-design-basis external events.

Section IV of the order 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 or rescind certain conditions. By letter dated August 13, 2015 (ADAMS Accession No. ML15231A025), SCE&G submitted a request for relaxation of the schedule requirement for full implementation for VCSNS, Unit 1, as prescribed in Section IV A.2 of NRC Order EA-12-049. That requirement states, in part, "All holders of operating licenses issued under Part 50 . . . shall complete full implementation no later than two (2) refueling cycles after submittal of the overall integrated plan, as required in Condition C.1.a, or December 31, 2016, whichever comes first."

The licensee stated in its request that the second refueling outage will commence in October 2015. Therefore, consistent with the schedule requirements of Order EA-12-049, full implementation of the mitigating strategies for VCSNS must be completed prior to startup from the fall 2015 refueling outage (RF-22). The licensee requested that the required date for full implementation for VCSNS be relaxed until July 31, 2016. The requested schedule relaxation would allow the licensee additional time to design and implement a new alternate emergency feedwater suction strategy, update FLEX procedures, and complete training associated with this new FLEX Strategy.

In its August 13, 2015, letter, SCE&G noted that the Condensate Storage Tank (CST) does not

meet the high wind protection from the tornado hazard requirements in Nuclear Energy Institute (NEI) 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0, and therefore cannot be credited for those events. The licensee identified this vulnerability during its April 2015 FLEX Self-Assessment. As such, VCSNS is 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. The July 31, 2016, relaxation date was also requested due to the number of procedure changes and station training activities scheduled for the first quarter of 2016 to ensure compliance with the National Fire Protection Association 805 standard by March 31, 2016.

In its August 13, 2015, letter, SCE&G stated that 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 emergency feedwater (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. Further defense in depth is provided because 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 the fall 2015 refueling outage (RF-22) until the alternate EFW modification, procedure changes and associate training can be completed. The Operations Administrative Policy (OAP) -1 09.1, "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 [steam generator system] 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 licensee also stated that 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.

In light of the facts presented, the NRC staff has determined that the licensee has demonstrated good cause to relax the order implementation date. The NRC staff agrees that, based on the importance of the alternate EFW suction strategy, additional time is warranted to ensure a successful strategy is developed and implemented with procedures and training completed as necessary. The NRC staff also considered that, following the accident at Fukushima Dai-ichi, the NRC concluded that a sequence of events such as the Fukushima Dai-ichi accident is unlikely to occur in the United States, based on the current regulatory requirements and existing plant capabilities. Therefore, the extension of time (approximately eight months) for VCSNS to achieve full implementation of the requirements of the mitigation strategies order is justified. Given the plant-specific circumstances at VCSNS, and that the proposed completion date is prior to the ultimate December 2016 implementation date of the order, the NRC staff approves the relaxation request.

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Accordingly, based upon the authority granted to the Director, Office of Nuclear Reactor Regulation, the requirement of the order for full order implementation for VCSNS is relaxed until July 31, 2016.

If you have any questions, please contact Tony Brown at 301-415-1924.

Sincerely,

A handwritten signature in black ink, appearing to read 'W. M. Dean', followed by a long horizontal line extending to the right.

William M. Dean, Director  
Office of Nuclear Reactor Regulation

Docket No. 50-395

cc: Listserv

T. Gatlin

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Sincerely,

*/RA/*

William M. Dean, Director  
Office of Nuclear Reactor Regulation

Docket No. 50-395  
cc: Listserv

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**\*via email**

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