



June 30, 2016  
RC-16-0108

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

Dear Sir/ Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION (VCSNS), UNIT 1  
DOCKET NO. 50-395  
OPERATING LICENSE NO. NPF-12  
REQUEST FOR AN ADDITIONAL SIXTY DAYS TO COMPLY WITH 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 letter to South Carolina Electric & Gas Company, "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)," dated October 4, 2015 [ML15243A450]
  2. 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]
  3. 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]
  4. South Carolina Electric & Gas Company letter to USNRC, "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 Event,'" dated August 13, 2015 [ML15231A025]

South Carolina Electric & Gas Company (SCE&G), acting for itself and as an agent for South Carolina Public Service Authority is requesting an extension of 60 days beyond the July 31, 2016 date provided in the approved schedule relaxation letter dated October 4, 2015 (Reference 1). The additional 60 days is requested to accommodate the expanded project scope required to implement the Alternate Emergency Feedwater FLEX Strategy.

On March 12, 2012, the NRC issued an Order (Reference 2) to SCE&G. Reference 2 was immediately effective and directed V.C. Summer Nuclear Station Unit 1 (VCSNS) to develop, and implement an overall integrated plan to maintain or restore core cooling, containment and

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spent fuel pool cooling capabilities in the event of a beyond-design-basis external event. Reference 3 provides the Mitigating Strategies Overall Integrated Plan for the VCSNS.

During the NRC FLEX Audit, it was determined that the VCSNS Condensate Storage Tank (CST) would not meet the tornado hazard requirements in NEI 12-06 and therefore was not creditable for "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0. Therefore, VCSNS developed an alternate emergency feedwater suction strategy to supply water to any one of the three Emergency Feedwater Pumps in the event the CST is rendered inoperable. As a result of this late strategy change, VCSNS requested a schedule relaxation from full compliance until July 31, 2016 (Reference 4). The NRC granted the requested schedule relaxation in Reference 1.

Once the station completed the 2015 fall outage, Design Engineering began working on the initial Alternate Emergency Feedwater design Engineering Change Request (ECR). This design proposed an installation of two 80 kW diesels to power two independent pumps located in the Service Water Pump House bay. The design provides water to the suction of the Emergency Feedwater Pumps, to maintain a source of feed to the steam generators if the Condensate Storage Tank is lost. The two diesels were initially recommended to be installed inside the safety related Service Water Pump House. However, during the 30 percent design review meeting, several concerns were raised, including habitability and the amount of space maintenance personnel would be left with to perform maintenance on the Service Water Pumps inside the Service Water Pump House.

On March 18, 2016, the revised ECR was approved to locate the two 80 kW diesels outside of the protected area. A location outside the protected area was chosen, instead of placing the diesels adjacent to the Service Water Pump House, to alleviate security concerns. A new structure for the two 80 kW diesels has been designed and constructed to meet VCSNS tornado missile protection specifications. Currently, approximately 1500 feet of underground cable is being installed to provide power from the two 80 kW diesels to the Alternate Emergency Feedwater pumps located in the Service Water Pump House. The underground conduit was vacuum excavated to a minimum of three feet in depth. During the excavation process, the project experienced challenges due to the uncovering of unmarked underground systems and concrete thickness that exceeded the as-built drawings of the Service Water Pump House. These additional challenges extended the excavation schedule.

This project is currently on schedule, but with only two days of schedule margin. The additional 60 days will allow adequate time to complete the required testing and safely resolve any issues identified during testing without undo time pressure. The additional time will also allow Operations to perform a more thorough training for Operations personnel required to implement this strategy in a short timeframe. To address the remaining project schedule activities, VCSNS upper management and construction management have agreed to change the current workforce schedule from five 10-hour days to six 10-hour days to meet the current due date of July 31, 2016.


VCSNS is committed to implementing this project safely and with a high degree of quality to ensure the strategy performs as designed when called upon. An additional 60 days, beyond the current July 31, 2016 due date, is justified by the expanded scope and complexity of implementing this FLEX modification.

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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.

6/30/16  
Executed on

 For  
George A. Lippard

TS/GAL/wm

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