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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Vogtle Electric Generating Plant, Unit 2
Request for Enforcement Discretion from
Technical Specification 3.6.6, "Containment Spray and Cooling Systems"

Ladies and Gentlemen:

On August 21, 2014, Southern Nuclear Operating Company (SNC) requested that a Notice of Enforcement Discretion (NOED) be granted for Vogtle Electric Generating Plant (VEGP) Unit 2. The need for the NOED occurred due to the mechanical failure of the 2B Containment Spray (CS) pump. The duration of the repair is expected to take longer than the Technical Specification (TS) 3.6.6 Limiting Condition for Operation (LCO) not met Condition A completion time of 72 hours.

The pump was removed from service on August 19, 2014, at 02:00 EDT hours, to perform routine preventive maintenance and testing activities. During post-maintenance testing, it was noted that the pump inboard seal was overheating and damaged. Disassembly and repair of the pump involves a number of major steps; including several hours for system draining that forced the maintenance schedule to exceed 72-hour allotted time.

To prevent unit shutdown and the associated unnecessary transient, a one-time enforcement discretion was requested for a duration of 60 hours for non-compliance with TS 3.6.6 due to the time required for maintenance activities. The extended VEGP Unit 2 Completion Time will expire upon returning the Unit 2 Containment Spray Pump B to operable status or on August 24, 2014 at 14:00 EDT hours.

During a teleconference at 18:00 EDT on August 21, 2014, the NRC granted VEGP's verbal request for enforcement discretion and agreed that a follow-up license amendment was unnecessary. During that teleconference, SNC committed to provide a written NOED request within two working days of the NRC verbally granted NOED. The enclosure of this letter satisfies that commitment.

This letter contains no new NRC commitments. If you have any questions, please advise.

Respectfully submitted,

Dennis R. Madison
Vice President – Vogtle

DRM/JMC/cbg

Enclosure: Request for Enforcement Discretion

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Vogtle Electric Generating Plant, Unit 2
Request for Enforcement Discretion from Technical Specification
3.6.6, "Containment Spray and Cooling Systems"

Enclosure

Request for Enforcement Discretion

ENCLOSURE
REQUEST FOR ENFORCEMENT DISCRETION

Introduction

Vogtle Electric Generating Plant (VEGP) Unit 1 & 2 Technical Specifications (TS) 3.6.6, "Containment Spray and Cooling Systems," Limiting Condition for Operation (LCO) states that "Two containment spray trains and two containment cooling trains shall be OPERABLE." This Technical Specification is applicable in MODES 1, 2, 3, and 4. TS 3.6.6 Condition A, "One containment spray train inoperable" requires that the inoperable train be restored to OPERABLE status with a Completion Time of 72 hours.

The Containment Cooling System and Containment Spray System are Engineered Safety Feature (ESF) systems. They are designed to ensure that the heat removal capability required during the post-accident period can be attained. They provide containment atmosphere cooling to limit post accident pressure and temperature in containment to less than the design values. In the event of a Design Basis Accident (DBA), containment spray reduces containment pressure and facilitates iodine removal.

The Containment Spray System consists of two separate trains of equal capacity, each capable of meeting the design bases. Each train includes a containment spray pump, spray headers, nozzles, valves, and piping. Each train is powered from a separate ESF bus. The refueling water storage tank (RWST) supplies borated water to the Containment Spray system during the injection phase of operation. In the recirculation mode of operation, containment spray pump suction is transferred from the RWST to the containment sump(s).

During a DBA, a minimum of one containment cooling train and one containment spray train are required to maintain the containment peak pressure and temperature below the design limits. Additionally, one containment spray train is also required to remove iodine from the containment atmosphere and maintain concentrations below those assumed in the safety analysis. To ensure that these requirements are met, two containment spray trains and two containment cooling trains must be OPERABLE. Therefore, in the event of an accident, at least one train in each system operates, assuming the worst case single active failure occurs.

Each Containment Spray System typically includes a spray pump, spray headers, nozzles, valves, piping, instruments, and controls to ensure an OPERABLE flow path capable of taking suction from the RWST upon an ESF actuation signal and manually transferring suction to the containment sump.

On August 20, 2014, with Unit 2 in MODE 1 operating at full power, the 2B Containment Spray (CS) pump experienced damage to the inboard (drive side) mechanical seal. The likely cause is a decrease or loss of seal injection flow, which caused the mechanical seal to overheat. A repair plan was developed and initiated, but the remaining portion of the TS 3.6.6 Condition A Completion Time remaining was not sufficient to implement the plan, complete post maintenance testing, and return the 2B CS pump to service.

TS 3.6.6 Condition A was entered for the 2B Containment Spray pump at 02:00 EDT August 19, 2014, when the pump was removed from service to perform routine preventive maintenance and testing activities. During the post-maintenance test, at 03:14 EDT on August 20, 2014, it was noted that the inboard seal was overheating and damaged. Disassembly and repair of the pump involves a number of activities that will result in exceeding the 72 hour TS 3.6.6 Condition A Completion Time, which was set to expire on August 22, 2014 at 02:00 EDT. TS 3.6.6, Condition C requires that Unit 2 be placed in

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Mode 3 within 6 hours and Mode 5 within 84 hours if the 2B Containment Spray pump cannot be returned to OPERABLE status within 72 hours.

The required major steps to return the 2B Containment Spray pump to OPERABLE are listed below. The times represent those associated with the 2B Containment Spray pump repair fragnet. Unanticipated events or uncertainties, such as shift changes, pre-job briefs, issues with parts fit-up and alignments, etc., may cause actual durations to vary from scheduled durations below. Therefore, an additional 60 hours to complete maintenance of the 2B Containment Spray pump is requested.

Scheduled maintenance activity durations:

- Establish isolation, tag out & drain system - complete
- Uncouple & disassemble pump - complete
- Inspect cooling water flowpath - complete
- Inspect & investigate cause - complete
- Replacement of rotating element – 4 hours
- Installation of bearings, couplings, and seals – 13 hours
- Setting and alignment of rotating element – 13 hours
- Reconnect piping and recouple the motor – 4 hours
- Release tagout and system fill and vent – 4 hours
- Post maintenance testing – 12 hours

a. Specifically address what type of NOED is being requested (regular or natural event), which of the NOED criteria for appropriate plant conditions specified in subsection 03.03 of this guidance is satisfied, and how the licensee satisfied those criteria. (IMC 0410, Attachment 1, 07a)

A regular NOED is being requested in order to avoid an unnecessary shutdown of the Vogtle Electric Generating Plant (VEGP) Unit 2 reactor as a result of compliance with Technical Specifications (TS) 3.6.6, "Containment Spray and Cooling Systems," Condition A. With one train inoperable in Modes 1, 2, 3 and 4, Condition A requires that the inoperable train must be restored to operable status within 72 hours. If the Required Action and associated Completion Time cannot be met, Condition C requires that the reactor be in MODE 3 within 6 hours and in MODE 5 within 84 hours.

In this case, compliance with TS 3.6.6 would involve:
a) an otherwise unnecessary plant transient in moving from MODE 1 to MODE 5, and
b) an otherwise unnecessary down-power or shutdown of a reactor without a corresponding health and safety benefit. The corresponding health and safety benefit is described in section 'o.' of this NOED.

b. Provide a description of the TS or other license conditions that will be violated, and, if applicable, state that adhering to the license would cause an unnecessary transient. This description shall include the time remaining before the TS or license condition will be violated. When a "regular" NOED is requested, the licensee must show that granting the NOED request would avoid an unnecessary transient. (IMC 0410, Attachment 1, 07b)

TS 3.6.6, Condition A Required Action Statement (RAS) was entered at 02:00 Eastern Daylight Time (EDT) on August 19, 2014, to support planned maintenance activities for the 2B Containment Spray pump. Condition A requires restoring the inoperable containment spray train to OPERABLE status within 72 hours.

Granting the requested completion time extension will allow restoration of the 2B containment spray train to operable status while avoiding the otherwise unnecessary transient required by the TS 3.6.6 Condition C RAS. Condition C requires entry into MODE 3 (Hot Standby) in 6 hours and MODE 5 (Cold Shutdown) in 84 hours if the required action and associated completion time of Condition A cannot be met prior to 02:00 on August 22, 2014 (72 hours).

c. Provide a description of the circumstances, including as a minimum: likely causes; the need for prompt action; the action taken to avoid the need for a NOED; and any relevant historical events. The historical events must include, as a minimum, any other similar events at the plant, the last maintenance performed on the equipment or similar equipment, any outstanding amendment or TS change requests related to the NOED, and the last NOED request from the plant. (IMC 0410, Attachment 1, 07c)

Description of Circumstances:

On August 19, 2014, at 02:00 EDT, TS 3.6.6 Condition A RAS was voluntarily entered as the 2B Containment Spray pump was removed from service to perform routine preventive maintenance and testing activities. During the post-maintenance test, at 03:14 EDT on August 20, 2014, it was noted that the inboard seal was overheating and damaged. As a result of maintenance activities necessary to diagnose and correct the issues and already being approximately 25 hours into the 72 hour TS when the issue was discovered, the remaining TS completion time does not provide adequate time to perform a repair of the 2B Containment Spray pump.

The cause of the pump failure was determined to be overheating of the 2B mechanical inboard seal. The likely cause of the 2B Containment Spray pump inoperability is a decrease or loss of seal injection flow across the seal face, causing the mechanical seal to overheat. This is the cause determined based on extensive investigation. This is not the corrective action Root Cause, which has not been performed for this event at this time.

An Issue Response Team (IRT) was formed, the Outage Control Center (OCC) was manned around the clock, and additional Engineering, Maintenance, and Management resources were engaged to facilitate an expeditious return of the Containment Spray pump to service.

Previous Maintenance:

A review of the work history from 2008 to present was completed for the 2B Containment Spray pump in addition to the remaining containment spray pumps for Units 1 & 2. Other than work performed to address the Historical Event discussed below, there were five work orders due to high particulate in the lube oil and two work

orders for minor boron leaks. None of the lube oil or boron leak work orders have affected the mechanical seals.

A review of the inservice test (IST) vibration data was completed for the 2B Containment Spray pump in addition to the remaining containment spray pumps for Units 1 & 2. The quarterly and comprehensive testing is being performed per the OM Code 2001 w/03 addenda. Going back to the previous 10 years, there are no values in the alert range for vibration and none of the data is trending in a negative direction.

Historical Events:

On June 23, 2008, during similar surveillance testing on the 2B Containment Spray pump, the inboard mechanical seal overheated and began smoking. An Emergency Technical Specification was submitted to the NRC to revise TS 3.6.6, Condition A completion time from 72 hours to 132 hours on a one-time basis. The emergency amendment was approved on June 25, 2008.

All corrective actions are completed in regards to the 2008 event.

The failure mode for the 2008 failure was improper pump shaft alignment. Initial field measurements indicated alignment was NOT the failure mode for this event. As found alignment measurements were SAT and matched as left alignment measurements.

Outstanding amendment or TS change requests related to the NOED:

10 CFR 50.69 - risk informed categorization and treatment of structures, systems, and components for nuclear power plants. License Amendment Request submitted to NRC in SNC letter NL-12-0932 dated August 31, 2012.

TSTF-505 (4b) provides for the use of an alternate methodology to establish limiting condition for operating times (NEI 06-09 "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines.") License Amendment Request submitted to NRC in SNC letter NL-12-1344 dated September 13, 2012.

Last NOED Request from plant:

On November 3, 2003 (with follow-up letter dated November 5, 2003), enforcement discretion was granted to extend the 31-day surveillance interval for performance of Unit 2 Solid State Protection System (SSPS) actuation logic testing per TS Surveillance Requirements 3.3.1.5 and 3.3.2.2.

d. Provide information that shows the licensee fully understands the cause of the situation that has led to the NOED request. The licensee must understand and detail all safety and security concerns when operating outside of its TS or license conditions. (IMC 0410, Attachment 1, 07d)

Three issues are addressed below. The first is the probable cause of failure for this event, the second issue is the similarity of this event with a failure of the 2B pump in 2008, and the third is a discussion on common cause.

The cause of the failure was determined to be overheating of the 2B mechanical seal, resulting in blistering and chipping of the seal surfaces. The overheating caused the shaft to contact the disaster bushing, leading to failure. The overheating occurred because of a decrease or loss of lubrication (seal injection flow) across the seal faces, causing the mechanical seal to overheat. The decrease or loss of lubrication can be caused by either an internal seal failure, causing the seal faces to contact one another, or by blockage in the seal cooling injection line. The seal cooling lines were inspected and flushed and visual inspection did not identify debris or blockage in this ¾-inch cooling line and its associated orifice. Therefore, SNC engineering judgment, with seal vendor input, has determined that the most probable cause was internal seal failure.

It should be noted that this is the cause determined based on extensive investigation. This is not the corrective action Root Cause, which has not been performed for this event at this time.

During disassembly, field measurements verified the rotor (pump impeller) was aligned with the pump casing satisfactorily. This condition is different than the 2008 event, where the failure mechanism was improper alignment. This information verifies the cause of this failure is different from the pump failure that occurred in 2008.

As discussed under section 'c', the 2B Containment Spray pump has met all ASME IST vibration criteria. However, a detailed review of maintenance vibrational data showed the inboard horizontal vibrational signature is somewhat different between the 2B pump as compared to the 2A, 1A, and 1B pumps. Based on this, and the information on previous maintenance history, SNC has determined this is not a common cause failure.

e. Detail the proposed course of action to resolve the situation so that enforcement discretion is no longer required. (IMC 0410, Attachment 1, 07e)

Disassembly and repair of the pump involves a number of major steps that force the maintenance schedule to exceed 72 hours.

The required major steps to return the 2B Containment Spray pump to OPERABLE are listed below. The times represent those associated with the 2B Containment Spray pump repair fragnet. Unanticipated events or uncertainties, such as shift changes, pre-job briefs, issues with parts fit-up and alignments, etc., may cause actual durations to vary from scheduled durations below. Therefore, an additional 60 hours to complete maintenance of the 2B Containment Spray pump is requested.

Scheduled maintenance activity durations:

- Establish isolation, tag out & drain system - complete
- Uncouple & disassemble pump - complete
- Inspect cooling water flowpath - complete
- Inspect & investigate cause – complete
- Replacement of rotating element – 4 hours
- Installation of bearings, couplings, and seals – 13 hours
- Setting and alignment of rotating element – 13 hours
- Reconnect piping and recouple the motor – 4 hours

- Release tagout and system fill and vent – 4 hours
- Post maintenance testing – 12 hours

The requested 60 hours will extend the Completion Time for Condition A from 02:00 EDT on August 22, 2014 to 14:00 EDT on August 24, 2014.

f. Explain that the proposed resolution itself will not result in a different, unnecessary transient. (IMC 0410, Attachment 1, 07f)

During the requested extension period, maintenance activities that pose a risk to an unintended or unnecessary plant transient will be deferred. The work activities to restore the 2B Containment Spray pump to OPERABLE status have been evaluated as not posing a risk of an unintended transient because the 2A Containment Spray train is being protected and one train of containment spray is adequate to perform 100% of the containment cooling and iodine removal functions.

g. Explain that the licensee did not have time to process an emergency license amendment or that a license amendment is not needed. (IMC 0410, Attachment 1, 07g)

On August 19, 2014, at 02:00 EDT, TS 3.6.6 Condition A RAS was voluntarily entered as the 2B Containment Spray pump was removed from service to perform routine preventive maintenance and testing activities. During post-maintenance testing on August 20, 2014 at 03:14 EDT, personnel noted abnormal bearing indications on the 2B Containment Spray pump. As a result of maintenance activities necessary to diagnose and correct the issues and already being approximately 25 hours into the 72 hour completion time when the issue was discovered, the remaining completion time does not provide adequate time to prepare and submit an emergency license amendment request. The requested completion time extension is within the 72 hour guideline established by IMC 0410, hence a request for enforcement discretion is appropriate.

h. Describe the condition and operational status of the plant, including safety-related equipment out of service or otherwise inoperable, and non-safety-related equipment that is degraded or out of service that may have risk significance and that may increase the probability of a plant transient or may complicate the recovery from a transient or may be used to mitigate the condition. (IMC 0410, Attachment 1, 07h)

Unit 2 is in MODE 1 (Power Operation), operating at 100% rated thermal power with no other safety-related or non-safety-related risk significant systems out of service. The PRA model was also used to model any out of service components. In addition, on-line risk management is being utilized to monitor risk thresholds to ensure margin maintained.

i. Request a specific time period for the NOED, including a justification for the duration of the noncompliance. The licensee shall include information that shows its proposed course of action has a high likelihood of being completed within the

proposed NOED period. SNC must show the requested time for the NOED is directly related to the time to resolve the situation. (IMC 0410, Attachment 1, 07i)

The required major steps to return the 2B Containment Spray pump to OPERABLE are listed below. The times represent those associated with the 2B Containment Spray pump repair fragnet. Unanticipated events or uncertainties, such as shift changes, pre-job briefs, issues with parts fit-up and alignments, etc., may cause actual durations to vary from scheduled durations below. Therefore, an additional 60 hours to complete maintenance of the 2B Containment Spray pump is requested.

Scheduled maintenance activity durations:

- Establish isolation, tag out & drain system - complete
- Uncouple & disassemble pump - complete
- Inspect cooling water flowpath - complete
- Inspect & investigate cause - complete
- Replacement of rotating element – 4 hours
- Installation of bearings, couplings, and seals – 13 hours
- Setting and alignment of rotating element – 13 hours
- Reconnect piping and recouple the motor – 4 hours
- Release tagout and system fill and vent – 4 hours
- Post maintenance testing – 12 hours

The requested 60 hours will extend the Completion Time for Condition A from 02:00 EDT on August 22, 2014 to 14:00 EDT on August 24, 2014.

j. **Detail and explain compensatory actions the plant has both taken and will take to reduce the risk associated with the specified configuration. All compensatory actions must be completed before the NOED CT begins. Compensatory measures used to reduce plant vulnerabilities shall focus on both event mitigation and the likelihood of an initiating event. The objectives of the compensatory actions are to achieve the following: (IMC 0410, Attachment 1, 07j)**

1. **reduce the likelihood of initiating events;**
2. **reduce the likelihood of the unavailability of trains redundant to equipment that is out-of-service during the period of enforcement discretion; and**
3. **increase the likelihood of successful operator recovery actions in response to initiating events.**

Both trains of the emergency core cooling system (ECCS), both trains of the containment cooling system (CCS), the remaining train of the containment spray (CS) system, and attendant equipment will remain OPERABLE during the proposed 60-hour extended Completion Time. Protected equipment procedures have been used to address and protect this equipment during the duration of the enforcement discretion period. Also, work schedules have been reviewed and some work rescheduled to ensure plant vulnerabilities are reduced.

If the remaining train of CS becomes inoperable or requires maintenance during the proposed 60-hour extended Completion Time, TS 3.0.3 will be entered.

k. Discuss the status and potential challenges to offsite and onsite power sources, including any current or planned maintenance in the distribution system and any current or planned maintenance to the emergency diesel generators. The licensee must identify any specific transmission line configurations that must be maintained to ensure the availability of the grid for safe operation of the plant. (IMC 0410, Attachment 1, 07k)

Switchyard work will be stopped during the enforcement discretion period for VEGP. There is no current or planned maintenance to the emergency diesel generators.

l. Include the safety basis for the request and an evaluation of the safety significance. Both the quantitative and qualitative aspects should be addressed as noted below. The numerical guidance for acceptance of a request for NOED was established in order to augment qualitative arguments that continued operation of the plant during the period of enforcement discretion will not cause risk to exceed the level determined acceptable during normal work controls, and, therefore, there is no net increase in radiological risk to the public. For quantitative risk analysis, the licensee shall provide the effects on risk metrics. The following information should be provided to support this evaluation: (IMC 0410, Attachment 1, 07l)

1. Use the zero maintenance PRA model to establish the plant's baseline risk and the estimated risk increase associated with the period of enforcement discretion. For the plant-specific configuration the plant intends to operate in during the period of enforcement discretion, the ICCDP and ICLERP should be quantified and compared with guidance thresholds of less than or equal to an ICCDP of 5E-7 and an ICLERP of 5E-8. These numerical guidance values are not pass-fail criteria. For the degraded case with the subject equipment out of service, the model should reflect, as realistically as possible, current equipment unavailability states (i.e., if other equipment is unavailable because of testing or maintenance, this should also be reflected in the analysis). This risk calculation should not be limited to the specific TS relief in question, but rather, the total risk of continued operation for the specific configuration of the plant.

The Vogtle Configuration Risk Management (CRM) tool used for this assessment is a zero maintenance single-top EOOS model containing internal events (including internal flooding) and fire PRA models.

Core Damage

The CS system does not perform a core damage mitigation function; therefore the CS system is not included in the PRA logic model and unavailability of CS in the CRM tool causes no change in CDF. In fact, CS operation negatively impacts core damage prevention because the CS operation depletes the refueling water storage tank faster in the case of a loss of coolant accident, which allows operators less time to switch to emergency core cooling system (ECCS) recirculation. As a result, CS operation increases the human error probability for

operator action to switch to ECCS recirculation, which increases core damage frequency.

Considering the current Unit 2 equipment alignments, current equipment unavailability states, and unavailability of the 2B containment spray (CS) pump, ICCDP for the period of enforcement discretion is assessed to be zero.

Large Early Release

As part of the Vogtle PRA model development, a systematic assessment was performed to identify components and systems that may impact frequency of a large early release event. Based on the results of this assessment and assessments performed during model updates, unavailability of the containment spray system will have a negligible negative impact on the large early release frequency (LERF). Based on industry benchmarking, this engineering determination is consistent with determinations made by other units with large dry containments. Furthermore, this determination was reviewed as part of the peer review process and has been found to be justifiable. Therefore, the CS system is not included in the PRA logic models for the function to reduce temperature and pressure. Also, the radionuclide removal function of CS does not affect LERF. CS system components are included in the PRA logic models only as a potential pathway (through the spray heads, associated piping, and valves) for loss of containment isolation. If CS starts to operate and then later the CS pumps fail to run, it will create potential LERF pathways if isolation of the CS penetrations fails. If CS does not start, the CS penetrations will remain isolated. Unavailability of a CS pump is programmed in the CRM tool to cause no change in LERF.

Considering the current Unit 2 equipment alignments, current equipment unavailability states, and unavailability of the 2B CS pump, ICLERP for the period of enforcement discretion is assessed to be zero.

	Baseline Case (events/yr)	Degraded Case (events/yr)	Delta (events/yr)
CDF	6.19E-05	6.19E-05	0
LERF	2.24E-06	2.24E-06	0

$ICCDP_{(internal\ events\ w/\ flooding\ and\ internal\ fire)} = 0$

$ICLERP_{(internal\ events\ w/\ flooding\ and\ internal\ fire)} = 0$

2. Discuss the dominant risk contributors (cut sets, sequences, or both) and summarize the risk insights for the plant-specific configuration the plant intends to operate in during the period of enforcement discretion. This discussion should focus primarily on risk contributors that have changed (increased or decreased) from the baseline model because of the degraded condition and resultant compensatory measures, if any.

The unavailability of the 2B CS pump does not impact any components included in the dominant risk cutsets, nor does it impact any of the initiating events that are included in these cutsets. There are no risk contributors that have changed from the baseline model because of the degraded condition.

3. **Discuss how the compensatory measures are accounted for in the PRA. These modeled compensatory measures should be correlated, as applicable, to the dominant PRA sequences identified in items a. and b. above. In addition, other measures not directly related to the out-of-service equipment may also be implemented to reduce overall plant risk and, if so applied, should be explained. Compensatory measures that cannot be modeled in the PRA shall be assessed qualitatively.**

   No compensatory measures for the configuration are accounted for by a change in the CRM tool. Though the unavailability of the 2B CS pump during the period of enforcement discretion has a negligible impact on plant risk, the following additional compensatory measures will be implemented to ensure risk-significant plant configurations are minimized:

   - Ensure availability of the CS Train A system:
     - Availability of the CS Train A will be verified.
     - No work will be performed on CS Train A components and supporting components.
   - Ensure availability of the A and B train containment cooler units (CCU)
     - Availability of the A and B train CCUs will be verified
     - No work will be performed on CCUs and supporting components

4. **Discuss the "extent of condition" of the failed or unavailable component(s) to other trains or divisions of equipment and the adjustments, if any, which were made to the related PRA common cause factors to account for potential increases in their failure probabilities. The method used to determine the extent of condition shall be discussed. It is recognized that a formal root cause or apparent cause is not required because of the limited time available in determining the acceptability of a requested ED. However, a discussion of the likely cause shall be provided with an associated discussion of the potential for common cause failure.**

   The likely cause of the 2B Containment Spray pump inoperability is a decrease or loss of seal injection flow across the seal face, causing the mechanical seal to overheat. The root cause of the issue is not available at the time of this risk evaluation.

   As a bounding assessment, the zero maintenance single-top PRA model containing internal events (including internal flooding) and fire PRA models is used to evaluate coinciding 2A and 2B CS pump unavailability. The associated ICCDP and ICLERP are unchanged from the degraded case; therefore, assuming the potential for common cause exists, the resulting risk increase remains negligible.

5. **Discuss "external event risk" for the specified plant configuration. An example of external event risk is a situation in which a reactor core isolation cooling (RCIC) pump has failed and a review of the licensee's Individual Plant Examination of External Events or full-scope PRA model identifies that the RCIC pump is used to mitigate certain fire scenarios. Action may be taken to reduce fire ignition frequency in the affected areas, to reduce human error associated with time-critical operator actions in response to**

such scenarios, and to ensure fire protective and corrective measures have been taken.

The CRM Tool is a fully integrated single-top model that includes internal events (including internal flooding) and fire PRA models. By assessment with the Vogtle CRM tool, the ICCDP and ICLERP for the period of enforcement discretion are assessed to be zero.

Risk increases associated with seismic events and other external events are judged to be very small. Initiating event frequencies of seismic and other external events are low as compared to internal and fire initiating event frequencies, risks associated with seismic and other external events are expected to be significantly smaller than risks associated with internal events and fire events.

m. Demonstrate that the NOED condition, along with any compensatory measures, will not result in more than a minimal increase in radiological risk, either in a quantitative assessment that risk will be within the normal work control levels (ICCDP less than or equal to 5E-7 and/or ICLERP less than or equal to 5E-8) and in a defensible qualitative manner. (IMC 0410, Attachment 1, 07m)

By assessment with the zero maintenance single-top PRA model containing internal events (including internal flooding) and fire PRA models, the ICCDP is assessed to be zero and ICLERP is assessed to be zero during the period of enforcement discretion. Any plant configuration change will be evaluated using the Vogtle CRM tool to ensure ICCDP is less than or equal to 5E-7 and ICLERP is less than or equal to 5E-8 during the enforcement discretion period. Therefore, the plant configuration(s) during the period of enforcement discretion will not result in more than a minimal increase in radiological risk to the public.

n. Discuss forecasted weather and pandemic conditions for the requested ED period and any plant vulnerabilities related to such weather or pandemic conditions. (IMC 0410, Attachment 1, 07n)

There is no severe weather forecasted throughout the duration of the enforcement discretion. However, a disturbance in the South Atlantic Ocean was noted with a position about 215 miles east of the Lesser Antilles. The disturbance may weaken to a tropical storm or depression by Friday, August 22, 2014, and the current movement is west-northwest at 12 mph. By Tuesday, August 26, 2014, depending on the position of the ridge over the southeast, the system could be steered into Florida or move north and miss Florida. In the Tuesday to Wednesday time frame, the system could be near the Carolinas or heading out to sea.

Overall weather for the duration of activities to restore the CSP by 14:00 EDT on August 24, 2014 is projected to have low temperature averages of 73 degrees Fahrenheit and high temperature averages around 98 degrees Fahrenheit. The pump should be restored prior to any impending weather disturbance that could occur as stated above.

o. Include the basis for the licensee's conclusion that the noncompliance will not create undue risk to public health and safety. (IMC 0410, Attachment 1, 07o)

VEGP has evaluated whether or not a significant hazards consideration is involved with the requested enforcement discretion by focusing on the three standards set forth in 10 CFR 50.92(c) as discussed below:

a. The proposed enforcement discretion does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed enforcement discretion does not alter any plant equipment or operating practices in such a manner that the probability of an accident is increased. The Containment Spray system is intended for the mitigation of accidents; it is not a system designed for the prevention of accidents. Specifically, the Containment Spray system limits the temperature and pressure that develops in the containment following a design basis event, such as Loss of Cooling Accident (LOCA) or Steam Line Break. The system also removes iodine from the post-accident containment atmosphere to limit the radioactivity from fission products which may ultimately be released to the environment. Consequently, extending its Completion Time to repair the system will not increase the probability of a previously evaluated event. Furthermore, the repairs that will ensue on the 2B Containment Spray system will not affect any other structure, system, or component (SSC) designed for the prevention of previously analyzed events.

For the above reasons, the enforcement discretion to extend the 2B Containment Spray system Completion Time will not increase the probability of occurrence of a previously evaluated event.

The 2A train of Containment Spray is OPERABLE and is expected to remain operable throughout the 2B train repair. One train of the Spray system is adequate to perform 100% of the containment cooling and iodine removal functions. Therefore, should a previously evaluated event occur for which the Containment Spray system is assumed, the 2A train will function to adequately mitigate the consequences. If the 2A CS train should become inoperable during the repair of the 2B train, VEGP Unit 2 enter TS 3.0.3.

Finally, as discussed in the response to section 'm' of this letter, there is not a significant increase in core damage (ICCDP) or early release (ICLERP) probability resulting from the proposed Enforcement Discretion.

Therefore, the proposed enforcement discretion does not involve a significant increase in the probability or consequences of an accident previously evaluated.

b. The proposed enforcement discretion does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed enforcement discretion does not involve any physical alteration of the plant or a change in the methods governing normal plant operation. In other words, no new modes of operation are introduced and therefore no new failure modes are created. Furthermore, as discussed in the response to Question a) above, the Containment Spray system is designed to mitigate the consequences of a previously

evaluated event, the system is not designed for the prevention of any type accident or transient. Also, no SSC which is designed for the prevention of accidents, such as an SSC acting as a barrier to one of the fission product boundaries, will be affected by this enforcement discretion.

For the above listed reasons, the proposed enforcement discretion cannot create the possibility of a new or different type of accident from any previously evaluated.

c. The proposed enforcement discretion does not involve a significant reduction in a margin of safety.

Based on the Operability of the remaining 2A Containment Spray train, the accident analysis assumptions continue to be met with the enactment of the proposed enforcement discretion. This is because one train of Containment Spray is adequate to perform 100% of the containment cooling and iodine removal functions for which the system is designed. The design and operation of the operable 2A containment spray train are not affected by this enforcement discretion. Consequently, the safety analysis acceptance criteria, which are not altered by the proposed enforcement discretion, remain capable of being met.

Again, should the 2A containment spray train become inoperable during the time the 2B train is still inoperable, VEGP Unit 2 will enter TS 3.0.3.

Furthermore, no severe weather conditions are expected during the time of the proposed enforcement discretion. Therefore, plant vulnerability arising from natural external events will not be increased during this time period. Also, compensatory actions will be put in place during the proposed extended Completion Time which will allow no work on systems designed to mitigate the consequences of events which take credit for the containment spray system, such as LOCA and steam line break. And, no work will begin on switchyard components, thus decreasing the possibility of a loss of power event.

For these reasons, the margin of safety is not significantly reduced.

Based on the above, SNC concludes that the proposed enforcement discretion will not be of potential detriment to the public health and safety.

p. Include the basis for the licensee's conclusion that the noncompliance will not involve adverse consequences to the environment. (IMC 0410, Attachment 1, 07p)

This request for the Enforcement Discretion does not result in any significant changes of the types or significant increase in the amounts of any effluents that may be released offsite. In addition, no significant increase in individual or cumulative occupational radiation exposures is involved as a result of this request. Therefore, it can be concluded that the NRC's granting of this request for Enforcement Discretion does not involve any adverse consequences to the environment.

q. Include a statement that the PRB has approved the request. (IMC 0410, Attachment 1, 07q)

This request has been approved by the VEGP Plant Review Board.

r. Make a verbal commitment that the licensee will submit the written NOED request within two working days and a follow-up license amendment request within four working days following the staff's verbal granting of the NOED. NRC's granting of a NOED means that exigent circumstances exist. However, the licensee's amendment request must describe and justify any exigent circumstances (see 10 CFR 50.91(a)(6)). If the staff agrees during the conference call that a follow-up amendment request is not required, the licensee shall state this in the written NOED request. If the licensee intends to propose a temporary amendment, the licensee's amendment request shall include justification for the temporary nature of the request. (IMC 0410, Attachment 1, 07r)

This submittal is the written NOED request following the verbal approval granted on August 21, 2014.

This request for enforcement discretion is a one-time only extension of the Completion Time to complete restoration activities on the 2B Containment Spray pump. As such, a follow-up license amendment is not required. This was agreed to during the August 21, 2014 Teleconference.

s. In addition to items above, the licensee must provide additional information for a natural event NOED: (IMC 0410, Attachment 1, 07s)

This proposed enforcement discretion is not in regard to severe weather or natural phenomena-related emergencies.