Don E. Grissette
Vice President

Southern Nuclear Operating Company, Inc.
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35201

Tel 205.992.6474
Fax 205.992.0341

SOUTHERN COMPANY
Energy to Serve Your World℠

July 31, 2006

Docket Nos.: 50-424
50-425

NL-06-1707

Mr. Victor M. McCree, Director
Division of Reactor Safety
U. S. Nuclear Regulatory Commission
Sam Nunn Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303-8931

Vogtle Electric Generating Plant
NRC Regulatory Conference July 26, 2006 Supplemental Information

Dear Mr. McCree:

On July 26, 2006, a Regulatory Conference between NRC and Southern Nuclear Operating Company (SNC) was held related to NRC Inspection Report No. 500424/2006009 and 500425/2006009, dated June 20, 2006. At the conclusion of the Regulatory Conference, SNC offered to provide NRC additional written information relative to the 2006 NRC Biennial Evaluated Exercise conducted on March 22, 2006. Please find enclosed a narrative summary of information shared during SNC's presentation at the Regulatory Conference.

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

Sincerely,

Don E. Grissette

DEG/WHL/daj

Enclosure: Vogtle Exercise Position Paper - NRC Inspection Report 5000424/2006009 and 5000425/2006009

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. T. E. Tynan, General Manager – Plant Vogtle
Ms. B. C. Terry, General Counsel
Ms. A. F. Thornhill, Managing Attorney
RType: CVC7000

U. S. Nuclear Regulatory Commission
Dr. W. D. Travers, Regional Administrator
Mr. C. Gratton, NRR Project Manager – Vogtle
Mr. G. J. McCoy, Senior Resident Inspector – Vogtle
Ms. Carolyn F. Evans, Regional Counsel/Enforcement Officer
Mr. B. Bonser, Chief, Plant Support, Branch II

Enclosure

Vogtle Electric Generating Plant
Vogtle Exercise Position Paper -
NRC Inspection Report 5000424/2006009 and 5000425/2006009

Enclosure
Vogtle Electric Generating Plant
Vogtle Exercise Position Paper
NRC Inspection Report 5000424/2009009 and 5000425/2006009

Issue History

The Plant Vogtle Biennial Evaluated Emergency Exercise was conducted on March 22, 2006. During the NRC Exit Meeting on March 24, 2006, the NRC inspector indicated that a potential finding regarding the initial Site Area Emergency (SAE) classification had been identified and requested additional exercise data. Requested data was provided to NRC on April 14, 2006. A teleconference between NRC and site staff was conducted on April 18, 2006 to obtain data clarification. On May 8, 2006, the NRC contacted SNC to inform EP that the event had been categorized as an unresolved item and was being reviewed using the Significance Determination Process (SDP). The NRC conducted a second teleconference with SNC on June 2, 2006 to further discuss the sequence of events and Emergency Operating Procedure (EOP) usage. On June 5, 2006, NRC informed SNC Management, via teleconference, that the classification event had preliminarily been determined to be of low-to-moderate safety significance (White). Written notification of the preliminary white finding was received by SNC on June 20, 2006. SNC responded to this notification by requesting a Regulatory Conference with NRC to discuss the preliminary finding.

Sequence of Events

The March 22, 2006 Biennial Evaluated Emergency Exercise scenario was designed to convey a loss of reactor coolant pump with loose parts in the reactor coolant system (RCS) resulting in fuel damage. At approximately 5 minutes into the scenario (T5), reactor coolant pump number four experienced a shaft shear resulting in loss of forced RCS flow on loop 4 and a reactor high power-to-flow condition. The loss of flow in a single loop at power generated an automatic reactor trip signal, but the automatic reactor trip did not occur.

Following recognition by the crew of the Anticipated Transient Without Trip (ATWT), the crew initiated a successful manual reactor trip, completed the first four steps of the EOP 19000-C (E-0 Reactor Trip or Safety Injection) and transitioned to EOP 19001-C (ES-0.1 Reactor Trip Response) to stabilize the plant.

While the crew performed steps of EOP 19001-C, the Shift Manager entered Emergency Plan Implementing Procedure (EPIP) 91001-C (Emergency Classification and Implementing Instructions) to classify the emergency event. At approximately T9 minutes into the scenario, the Shift Manager declared an Alert emergency and initiated actions based on EPIP 91001-C, to include activation of the recall system, public announcement of the Alert declaration, accountability, and issuance of an emergency notification message to State, County, and Federal agencies. (Once EPIP 91001-C is entered and any emergency declaration is made,

procedure usage requires all subsequent events to be evaluated with regard to the need for upgrade.)

At approximately T18 minutes, indications of loose parts in the RCS were identified by alarms from the Digital Metal Impact Monitoring System (DMIMS). Per the annunciator response procedure, the crew entered Abnormal Operating Procedure (AOP) 18039-C (Confirmed Loose Part in the RCS or Steam Generator Secondary Side), concurrently with performance of EOP 19001-C steps. At approximately T27 minutes into the scenario, the remaining three reactor coolant pumps were tripped in accordance with AOP 18039-C, resulting in a complete loss of forced RCS flow. Due to the loss of forced flow, conditions for the establishment of RCS natural circulation (NC) began to develop.

Approximately 3 minutes later (T30), NC developed quickly under these accident conditions resulting in rapid decrease in pressurizer level. The operating crew recognized the lowering pressurizer level and inability to maintain pressurizer level above the EOP 19001-C fold-out page criteria of 9% pressurizer level. The Shift Manager directed manual safety injection (SI) actuation, when pressurizer level reached 6% as it continued to decline rapidly. The manual SI occurred, per design, resulting in high head, medium head, and low head SI pump actuation and automatic isolation of all required components. The crew correctly re-entered EOP 19000-C and began taking required procedural actions for a SI manually initiated, due to inability to maintain pressurizer level above 9%.

While the crew continued in EOP 19000-C, the Shift Manager referred to EPIP 91001-C, Figure 2 (RCS Integrity), to determine if classification upgrade criteria had been met, based on the required initiation of SI. Also during this time-frame, the Plant General Manager arrived in the Control Room/Simulator and began preparations to assume Emergency Director (ED) duties. Upon entry to the Control Room/Simulator, the Plant General Manager observed Main Control Board annunciators and indicators to assess plant status. Based on his extensive experience and training, the Plant General Manager observed indications possibly indicative of a potential loss of RCS barrier.

At approximately T35 minutes into the scenario, the Plant General Manager assumed the role as ED, following a detailed turnover from the Shift Manager. Both the Shift Manager and the ED determined that the need to manually safety inject due to inability to maintain pressurizer level greater than 9%, and indication of high radiation in containment, were indicative that the RCS barrier was potentially lost. The ED evaluated the condition, referencing EPIP 91001-C, and determined that a potential loss of either the fuel clad or RCS barrier is an Alert Emergency, and that no upgrade classification was required given the site already had declared an Alert Emergency due to the ATWT.

At approximately T37 minutes into the scenario, a report was received in the Simulator/Control Room confirming that RCS activity was greater than 300 μCi/gm dose equivalent iodine (DEI). The ED referred to EPIP 91001-C, Figure 1 (Fuel Clad Integrity), to determine if the emergency declaration should be upgraded. The ED verified that a reactor coolant activity greater than 300 μCi/gm DEI is indication of an actual loss of Clad barrier. The ED again referenced EPIP 91001-C, Figure 2 (RCS Integrity), and re-confirmed the potential loss of RCS barrier.

At approximately T46 minutes into the scenario, after receiving a peer check from the Shift Manager and after confirming no indication of isolable leakage within containment, no secondary faults, no open PORVs or safety valves, and expected actuation of all SI equipment, the ED directed the declaration of a SAE, due to actual loss of the clad barrier with potential loss of the RCS barrier. According to procedure, an actual loss of one barrier and potential loss of another required declaration of a SAE.

Both the primary and secondary indicators available to, and considered by, the crew for a determination that the RCS barrier was potentially lost are consistent with NUMARC/NESP-007 REV 2 criteria. Per the NUMARC guidance, an elevated reading on the Containment High Area Radiation Monitors (CHARM) is indicative of an RCS leak, and could be a loss of fuel.

- NUMARC/NESP-007 REV 2 (page 5-30)
    - "The "Potential Loss" EAL is based on the **inability to maintain normal liquid inventory** within the Reactor Coolant System (RCS) by normal operation of the Chemical and Volume Control System which is considered as one centrifugal charging pump discharging to the charging header. In conjunction with the SG tube rupture "Potential Loss" EAL this assures that **any event that results in significant RCS inventory shrinkage or loss** (e.g. events leading to reactor scram and ECCS actuation) will result in no lower than an "Alert" emergency classification."
- NUMARC/NESP-007 REV 2, "Methodology for Development of Emergency Action Levels – Questions and Answers dated June 1993," Question #5 (page 7)
    - Q. "Since the radiation monitor used in the Fission Product Barrier Matrix are not direct indicators of the barriers, why include them when the declaration is based primarily on other plant indications, e.g., CSF status, temperatures, subcooling, etc.?"
    - A. "As the text of the question states, the CHARM is not the primary indicator of the barrier failure. The CHARM EALs were included as indicators of fuel damage or RCS leakage in the interest of providing multiple indicators of a barrier failure. **An elevated reading on the CHARM is indicative of an RCS leak at a minimum**, and could be

an indicator of fuel damage as well. **These indicators provide useful means of confirmation to one or more of the direct indicators. Even if the numeric threshold on these indicators are not exceeded**, their inclusion in the matrix helps insure that these potentially significant indicators are considered in Emergency Director judgment decisions."

It is noteworthy that approximately six minutes (T52) after the ED determined that a SAE declaration was warranted, the operating crew also independently determined that the RCS was Not Intact. The crew made its determination, when the crew reached Step 32 of EOP 19000-C. Step 32 specifically diagnosed the RCS Not Intact, based on valid SI with containment radiation not normal. At this time, the crew transitioned to procedure EOP 19010-C (E-1 Loss of Reactor Secondary Coolant), in accordance with the Westinghouse Owners Group (WOG) generic EOP guidance.

- WOG E-0 Background (page 45)
  - "Abnormal containment radiation, pressure, or recirculation sump level is indicative of a high energy line break in containment. Since the SG's have been determined to be non-faulted in an earlier step, then the break must be in the reactor coolant system. For smaller sized breaks **containment pressure and recirculation sump level may not increase for a period of time; however, containment radiation would be apparent**. Guideline E-1, Loss of Reactor or Secondary Coolant, is used for breaks in the RCS."

In summary, the ED followed procedures, properly evaluated plant conditions and based on the symptoms and indications presented, classified the event properly. Significantly, approximately six minutes after the EDs classification, the operating crew, using the EOPs and consistent with the EOP basis, independently reached the same conclusion of RCS Not Intact in Containment.

Deviation from the Nominal Scenario

Separate and apart from the actions of the ED and the operating crew, the Simulator Controller recognized the potential for early upgrade to an SAE, due to the drill deviation that occurred when NC developed. The Simulator Controller conferred with the TSC Controller to determine what action should be taken when the SAE was declared earlier than planned. The Controller staff jointly decided that the early SAE declaration should not be allowed to impact the timeline for the exercise scenario, and elected to make a drill interjection.

When the SAE was declared at approximately T46 minutes, the Simulator Controller informed the ED that "the manual SI that was initiated should not be considered as a challenged barrier for the exercise." Based on this interjection,

the ED did not complete the emergency notification communications, thus leaving the exercise at the Alert level.

The drill deviation from the validated exercise scenario was a result of the rate at which the operating crew progressed through the EOPs. The validation crew, used to determine appropriate timing for scenario actions, was further in the procedure at NC onset and was in manual pressurizer level control. By being further in the EOP, the ability to maintain manual pressurizer level control prevented the need for manual SI by preventing pressurizer level from decreasing below 9%. Crew progression rate through the EOPs during the March 22nd exercise was slower, resulting in the crew not being allowed to manually control pressurizer level during the accident conditions. That is, the crew had not reached the manual pressurizer level control step at NC onset. When NC occurred, the cooler water in the steam generators due to loop backflow resulted in RCS shrinkage. Without manual pressurizer level control, the SI was procedurally required when pressurizer level dropped below 9%. Timing differences between the validation crew and the exercise crew was minimal, but was of sufficient duration to cause a "fork" from the nominal scenario. This presented valid indications of an SAE to the ED.

The potential for scenario deviation from the timeline is recognized by NEI 99-02 REV 3 (Regulatory Assessment Performance Indicator Guideline).

- NEI 99-02 REV 3 (page 82)
    - "During drill performance, the ERO may not always classify an event exactly the way that the scenario specifies. This could be due to conservative decision making. Emergency Director judgment call, or a simulator driven scenario that has the potential for multiple 'forks.' Situations can arise in which assessment of classification opportunities is subjective due to deviation from the expected scenario path. In such cases, evaluators should document the rationale supporting their decision for eventual NRC inspection. Evaluators must determine if the classification was appropriate to the event as presented to the participants and in accordance with the approved emergency plan and implementing procedures."

In summary, the Simulator Controller contemporaneously recognized that the criterion for an SAE upgrade had been met. In order to maintain the exercise timeline, the Simulator Controller interjected to keep the emergency response organization (ERO) at the Alert level. This interjection was necessary to keep all controllers, including State, County and Federal agencies, on the agreed upon timeline.

Inspection Report Clarification

SNC observes that there may be some confusion as to the foregoing sequence of events, based on some statements contained in the NRC Inspection Report (IR), No. 500424/2006009 and 500425/2006009, dated June 20, 2006. In an effort to correct any such confusion, SNC provides the following clarifying information.

1. At page 3, the IR states, "The post exercise critique conducted on March 24, 2006, to evaluate the licensee's self assessment of its ERO performance during the exercise and to ensure compliance with Section IV.F.2.g of Appendix E to 10 CFR Part 50."

   Contrary to the above, the post-exercise critique was conducted at 1400 local on March 22, 2006, per the scenario exercise schedule. NRC inspectors did not attend the March 22, 2006 controller critique of the exercise. The SAE classification in question was identified and critiqued during this March 22 critique session. Due to the drill deviation from the exercise scenario, site EP also conducted a conference call at the end of the critique with Corporate EP and Farley EP staff to obtain an independent review of the SAE classification. This independent review confirmed that the classification was appropriate, and verified in particular that NEI 99-02 required the classification be included as a performance indicator (PI) opportunity.

   The next day -- prior to the March 24, 2006 Management Debrief and subsequent NRC Exit meetings, Condition Reports (CR) were written to document the need for controller interjection. (Ref. CRs 2006103523 and 2006103525, both dated March 23, 2006.) These CRs document that plant conditions diverged from the nominal scenario, due to the rate that the crew proceeded through procedures; document the required controller interjection; document that the SAE classification was appropriate and timely for plant conditions presented; and recommend actions to prevent this type of drill deviation from re-occurring in the future. The SAE classification and drill deviation were briefed at a high level during the Management Debrief on March 24, 2006.

   Corrective actions taken include: verifying Simulator Modeling as accurate; revising scenario generation and validation guidance to minimize the potential for alternate scenario paths and forks; adding to the 2006 Operator Training schedule specific curriculum related to NC, including non-normal NC conditions during accidents; and initiating AOP 18039-C revision to ensure maintenance of RCS forced flow during loose-part events.

2. At page 5, the IR states, "The licensee stated that the SM used EOP 19000-C, E-0 Reactor trip or Safety Injection, step 32, to transition to EOP 19010-C, E-1 Loss of Reactor or Secondary Coolant, and declare the SAE."

   Contrary to the above, the ED declared the SAE, based on plant conditions, symptoms and indications presented, using the EPIPs. The operating crew had not reached step 32, at the time of the ED's classification. As previously discussed, when the crew did reach step 32, they diagnosed the RCS as Not Intact in containment. It is significant to note that the crew using the EOPs reached the same conclusion that the ED had six minutes earlier, in accordance with the EPIPs concerning the RCS barrier. Thus, procedure step 32 did not compel the ED to make the classification, because the ED was not in EOP 19000-C.

3. At page 5, the IR states, "There was no direction in EOP 19000-C, step 32, to go to EOP 91001-C, Emergency Classification and Implementing Instructions, and declare a SAE."

   SNC agrees that Vogtle specific EOP steps are not intended to direct specific declarations and that step 32 provides no direction to the EPIPs. EPIP 91001-C procedure was implemented beginning with the ATWT early in the scenario. As procedurally directed, the ED continued to review the plant conditions, symptoms and indications for upgrade needs, per procedure 91001-C step 6.2, "The ED shall periodically review current or projected plant conditions to determine if the emergency should be upgraded." Vogtle has added EOP steps to remind the ED that, if not already in progress, the emergency classification and implementing instructions of EPIP 91001-C should be initiated.

4. At page 5, the IR states, "The licensee stated that the SM and the crew had not taken actions to verify that a non-isolable RCS leak had occurred."

   Contrary to the above, although not all actions in the EOPs for leak identification had occurred, many had been taken. The EOPs have multiple actions at different times for leak identification and isolation of LOCAs. Not all of these actions are required in all situations. For example, checks for a LOCA outside containment, 19000-C step 37 is not required, if the RCS is determined to be not intact inside containment. As previously indicated, the ED evaluated whether indications were present for an isolable leak inside containment. This

evaluation included verification of inability to maintain pressurizer level with normal operation of the Chemical and Volume Control System (CVCS), valid high radiation in containment, Phase A actuation complete, no secondary faults, and pressurizer PORV and safety valves closed. No indications that a leak was isolable were present in the Control Room/Simulator and none were identified by the ED or the operating crew.

5. At page 6, the IR states, "The licensee stated that approximately half of the 15 minutes had passed from the time that the first condition, RCS activity greater than 300 uCi/gram I-131 equivalent (Loss of the Fuel Clad Barrier), was met and that most of the remaining time had elapsed in determining whether the second condition (potential loss of the RCS barrier) was met for SAE."

   Contrary to the above, evaluation of the potential loss of the RCS barrier began with the required SI. Additional information was provided to the Simulator Control Room concerning the clad barrier seven minutes into the evaluation. An additional nine minutes of evaluation of both barriers resulted in classification of the SAE, based on a potential loss of the RCS barrier and a actual loss of the clad barrier. A total of sixteen minutes from the SI to the SAE declaration was taken to verify EAL criteria for the RCS barrier being potentially lost. This demonstrates that the ED took sufficient time to evaluate conditions and correctly classify the event on valid indications that met the EALs. The ED correctly classified the event in accordance with the 15-minute goal.

   As previously stated above, this drill deviation from the exercise scenario was caused by a timing difference between the validation crew performance and the actual crew performance. Upon manual actuation of the required SI, the Simulator Controller recognized the conditions were met for an SAE upgrade classification, and interjected to maintain the exercise timeline, prior to the SAE upgrade. The drill deviation from the exercise scenario was self-identified, extensively critiqued, documented, briefed, and corrective actions were taken.

6. At page 6, the IR states, "The 15-minute classification time does not start until all indications are available (i.e. both conditions for the SAE are met)."

   SNC agrees that the 15 minutes runs from the time the second condition is met. However, the 15 minutes is a goal. As such, it is not intended as a minimum or cut-off. Both NRC and industry guidance

clearly articulate an expectation that the licensee act promptly, if not immediately, once available indications reach EAL thresholds. SNC observes that NEI 99-02 Rev. 3, FAQ's, and EPPOS2 state:

- NEI 99-02 REV 3 (page 80)
  - "Classifications are made consistent with the goal of 15 minutes once available plant parameters reach an Emergency Action Level."
- NEI 99-02 REV 3 (page 82)
  - "Classification is expected to be made promptly following indication that the conditions have reached an emergency threshold in accordance with the licensee's EAL scheme."
- NEI 99-02 FAQ #125
  - "The licensee should classify an emergency once the data is available. The licensee should take a prudent approach and not delay classification due to uncertainty. Once the data is available the licensee should classify the event within 15 minutes. If you are done in 5 you should not wait the remaining 10 minutes."
- NRR EP Position Paper (EPPOS2) – Subject: EPPOS on Timeliness of Classification of Emergency Conditions dated August 1, 1995.
  - ". . . in consideration of the human factors in the classification process, licensees' classification schemes attempt to minimize the necessity for subjective evaluation of emergency conditions by utilizing objective, unambiguous EALs. That is, EALs are developed with clearly defined thresholds that can be readily identified by Operators. Thus, when those thresholds are reached or exceeded, Operators are expected to immediately classify and declare the emergency."

(Emphasis added.) The ED evaluated plant conditions, symptoms and indications presented, and promptly classified the emergency in accordance with well-established NRC and industry guidance.

Regulatory Considerations

The facts and circumstances outlined above demonstrate that the ED's classification of a SAE during the Vogtle full-scale exercise was appropriate and timely. There was no failure or weakness, as defined in Inspection Manual Chapter (IMC) 0609, in the ED's decision to make the SAE classification. Accordingly, there was no failure to critique a weakness.

SNC observes that the IR's assertion of a failure determination is inconsistent with recent industry experience, endorsed industry guidance and NRC's own Inspection Manual Chapter (IMC) guidance.

Industry experience, based on actual events at both LaSalle and Millstone, is that licensees following their approved Emergency Plan EALs have not been cited for declaring emergencies in accordance with Emergency Plan implementing procedures. The proposed preliminary White finding against Plant Vogtle for declaring an event in accordance with its approved Emergency Plan EALs is contrary to established NRC precedent and industry experience.

- NRC Special Inspection Report 50-373/2006009, dated March 23, 2006.
    - During the LaSalle Event of February 20, 2006, Unit 1 experienced an automatic reactor trip with three rods indicating not fully inserted and declared a SAE. The EAL read "Failure of BOTH Automatic AND Manual Scrams to establish shut down criteria." Even though the reactor power, pressure and water level indicated a shut down reactor the EAL did not define the term "shut-down criteria" or provide any additional guidance.
    - The NRC concluded that the lack of any amplifying or clarifying guidance left senior control room operators with no options regarding their actions in emergency plan space, even though subsequent review determined that the reactor was indeed shut down. No findings of significance were identified.

- NRC Inspection Report 50-423/2005012, dated July 5, 2005
    - During the Millstone Event of April 17, 2005, Unit 3 experienced an inadvertent SI actuation and reactor trip with a stuck open main steam safety valve (MSSV) on a steam generator and declared an Alert. In actuality this condition did not exist.
    - NRC concluded that the Operating crew diagnosis and communication was a performance deficiency, but did NOT result in actual safety consequence.
    - The finding was determined to be NOT suitable for an NRC SDP evaluation, and was determined to be of very low safety significance (Green). The NRC did not identify the misdiagnosis as a failure.

Industry experience from actual events at Seabrook, Point Beach and Perry indicate that licensees who exceed the 15 minute goal for classification of emergencies once EALs have been exceeded have been cited for exceeding the time limit goal.

- NRC Inspection Report 50-443/2003006, dated January 23, 2004
    - During an event at Seabrook the crew took 38 minutes to declare an NOUE for a generator gas leak on November 10, 2003.
    - NRC sited the licensee for not making a classification in a timely manner.

- NRC Inspection Report 50-266/2003007, dated February 4, 2004
  - During an event at Point Beach the crew took 31 minutes to declare an NOUE for a propane gas leak on March 4, 2002.
  - NRC sited the licensee for not making a classification in a timely manner.

- NRC Inspection Report 50-440/2003006, dated October 30, 2003
  - During an event at Perry the crew took 20 minutes an Alert in response to a spent fuel pool release on April 24, 2003.
  - NRC sited the licensee for not making a classification in a timely manner.

Contrary to the above, NRC has proposed in the white finding against Plant Vogtle that the ED should have taken additional time to verify and validate that the EAL criteria had been met. From the time that the Vogtle ED had indication that the EALs had been exceeded, the classification was made with **6 minutes** remaining before the 15-minute goal would have been exceeded. Taking additional time to wait and assess more indications is not consistent with the guidance of NEI 99-02, FAQ's, and EPPOS2 and could result in an untimely classification and potential violation. As quoted above, in EPPOS2, the NRC clearly indicates that EAL's are unambiguous so as to minimize the need for subjective evaluation of conditions and that once EAL criteria are met, the classification should be made immediately.

As discussed above, SNC acknowledges that the Vogtle full-scale exercise SAE classification deviated from the nominal scenario. In accordance with industry guidance NEI 99-02 Rev 3, the rationale for the Vogtle exercise SAE classification was critiqued and determined to be appropriate as presented to the participants, and in accordance with the Emergency Plan and EPIPs.

- NEI 99-02 REV 3 (page 82)
  - "During drill performance, the ERO may not always classify an event exactly the way that the scenario specifies. This could be due to conservative decision making. Emergency Director judgment call, or a simulator driven scenario that has the potential for multiple 'forks.' Situations can arise in which assessment of classification opportunities is subjective due to deviation from the expected scenario path. In such cases, evaluators should document the rationale supporting their decision for eventual NRC inspection. Evaluators must determine if the classification was appropriate to the event as presented to the participants and in accordance with the approved emergency plan and implementing procedures."

The declaration of a SAE during the Vogtle full-scale exercise does not rise to the level of a finding because it is not a DEP PI opportunity failure. Even if the NRC were to conclude that the SAE classification was a failure, the SAE classification did not constitute a weakness. NRC IMC 0609, Appendix B, defines a weakness, in part, as a level of performance during a drill or exercise that could have precluded effective implementation of the Emergency Plan during an actual event or emergency. The SAE event classification and subsequent controller interjection was subjected to a detailed critique and found to be based on conservative decision making consistent with EAL entry criteria. Therefore the SAE classification would not have precluded effective implementation of the Emergency Plan.

In summary, the ED followed procedures and used symptoms presented to evaluate the condition of the plant. The plant was controlled based on these symptoms and the ED classified the event as SAE in accordance with the Emergency Plan and implementing procedures. The Emergency Plan was effectively implemented and the safety and health of the public was protected.

SNC Conclusions

This proposed violation should not be allowed to stand for the several reasons articulated previously in this paper. In brief, the ED made a correct call to classify and declare a SAE, based on the applicable symptom-based procedures and emergency plans. The ED made this call within a reasonable time after evaluating the conditions, symptoms and indications presented. Independent of the ED's evaluation, the operating crew arrived at the same conclusion using a separate procedure.

Further, simulator controllers also recognized that the criteria for a SAE upgrade classification had been met, and interjected to maintain the exercise timeline. The controllers thoroughly critiqued the SAE classification, concluded it was a correct call, and independently verified their conclusion with other EP staff. The controllers also critiqued the drill deviation from the nominal scenario. CRs were initiated and corrective actions taken to prevent recurrence. SNC critiqued the SAE classification and drill deviation and issued CRs, on its own initiative, prior to the Management Debrief and NRC Exit meeting(s) referenced in the IR.

In summary, it appears the fundamental issue driving the proposed violation is the judgment and decision of the ED to classify the event as a SAE. That decision has been called into question and characterized as improper in the IR. This is particularly troubling when in this exercise the ED used the symptoms and indications presented and prescribed by the procedure to classify the event. The ED's decision was in accordance with the Emergency Plan Implementing Procedures and is specifically supported by the basis of the Emergency Plan.

The NRC's summary of the proposed violation states that the emergency declaration was made "without verifying and validating that the subject criteria had been met." In discussions with the NRC subsequent to the exercise, SNC heard statements along the lines of the SM "could have" and "should have" used other indications to verify and validate the loss or potential loss of the RCS. The implication of these statements is that the ED should have *diagnosed* the event through verification and validation methods using indications other than that prescribed by the procedure, contrary to NRC guidance contained in EPPOS2.

Rather, the EOP basis is written with a clear recognition that other indications may not be present for a period of time for smaller break sizes. Given that, the EOPs clearly define the required symptoms of a failed or potentially failed RCS barrier. Certainly there are other indications which could indicate a potentially failed barrier; however, these indications are not considered "decision making" indications and are not prescribed by the procedure to be used.

Had the ED taken the approach implied by the proposed violation to utilize indications not specified by the procedures and then once the criteria for classification was met, not immediately classify, but rather stop and validate through other means, he would have been in violation of his training, the procedures, the expectations of the station, the industry, and potentially in violation of SNC's operating license. Furthermore, the ED's decision to call the barrier potentially failed was confirmed by the operating crew through independent means and by the drill controllers at instant of the actuation of the SI. It should not go unnoticed that three independent paths led to the same conclusion.

The industry cannot have our control room leaders going beyond the symptom-based procedures and emergency plans and using their own judgment to diagnose and classify an event. The industry learned many years ago from TMI that we cannot tolerate subjective diagnosis, but rather we must respond to objective symptoms to ensure that the reactor core is protected.

In summary, SNC submits that there was no weakness in the performance of the ED in making the decision to classify a SAE. The ED followed his training, used the symptoms and indications presented and prescribed by the procedure to control the plant and to classify the event in accordance with the Emergency Plan and its implementing procedures. The ED's decision to upgrade the emergency classification to a SAE is not a safety significant issue. The plant was safely controlled and the safety and health of the public was protected.