

RS-09-147

October 29, 2009

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Dresden Nuclear Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-237 and 50-249

Subject: Response to Request for Additional Information Regarding Generic Letter
2008-01

- References:
1. NRC Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," dated January 11, 2008
 2. Letter from K. R. Jury (Exelon Generation Company, LLC/AmerGen Energy Company, LLC) to U.S. NRC, "Three Month Response to Generic Letter 2008-01," dated April 11, 2008
 3. Letter from K. R. Jury (Exelon Generation Company, LLC/AmerGen Energy Company, LLC) to U.S. NRC, "Nine-Month Response to Generic Letter 2008-01," dated October 14, 2008
 4. Letter from P. R. Simpson (Exelon Generation Company, LLC) to U.S. NRC, "Supplemental Response to Generic Letter 2008-01," dated January 20, 2009
 5. Letter from C. Gratton (U.S. NRC) to C. G. Pardee (Exelon Nuclear), "Dresden Nuclear Power Station, Units 2 and 3 – Request for Additional Information Related to Generic Letter 2008-01, 'Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems' (TAC Nos. MD7822 and MD7823)," dated September 14, 2009

The NRC issued Generic Letter (GL) 2008-01 (i.e., Reference 1) to request that each licensee evaluate the licensing basis, design, testing, and corrective action programs for the Emergency Core Cooling, Decay Heat Removal, and Containment Spray systems, to ensure that gas

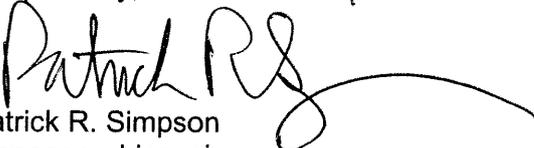
accumulation is maintained less than the amount that challenges operability of these systems, and that appropriate action is taken when conditions adverse to quality are identified.

References 2, 3, and 4 provided the Exelon Generation Company, LLC (EGC) responses to NRC GL 2008-01 for Dresden Nuclear Power Station. In Reference 5, the NRC requested additional information that is required to complete the review. In response to this request, EGC is providing the attached information.

There are no regulatory commitments contained in this letter. Should you have any questions concerning this letter, please contact Mr. Kenneth M. Nicely at (630) 657-2803.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 29th day of October 2009.

Respectfully,


Patrick R. Simpson
Manager – Licensing

Attachment: Response to Request for Additional Information

cc: NRC Regional Administrator – Region III
Senior Resident Inspector – Dresden Nuclear Power Station

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Response to Request for Additional Information

NRC Request 1

DNPS determined that the following systems are within the scope of GL 2008-01:

- High Pressure Coolant Injection (HPCI),
- Low Pressure Coolant Injection (LPCI), including Containment Spray,
- Core Spray (CS) and Emergency Core Cooling System (ECCS) Keepfill, and
- Shutdown Cooling (SDC).

The licensee stated in Ref. 3 that the SDC system is designed to cool and maintain the reactor water temperature following a normal reactor cooldown using the main condenser, and that it is not required for mitigation of any event or accident evaluated in the Updated Final Safety Analysis Report (UFSAR), and is not an ECCS. It was further stated that the SDC system is procedurally filled and vented prior to being put into service, and that the SDC system is only required to be free of gas accumulation prior to being put into service. Therefore, the system is vented prior to use, and there are no current licensing basis (CLB) requirements for periodic venting of the system. The licensee's review concluded that no changes to the CLB for the SDC system are needed to address the potential for gas accumulation.

The NRC staff, however, reiterates that the information request in the GL was intended for all modes and all operating conditions, and it is not limited to events and accidents evaluated in the UFSAR. The staff, therefore, believes that since SDC has been specifically identified as being within the scope of the GL, it needs to be addressed as part of your response. The staff believes that following the principles of defense-in-depth, SDC would be relied upon as a backup for long-term operations in certain events. Please clarify whether SDC is relied upon for any potential reactor vessel drain down event during shutdown cooling. If SDC is relied upon, please address whether operators would be able, or have sufficient time, to vent the piping during such events.

Response

The SDC system is manually initiated following reactor shutdown to cool down reactor water from 350 °F to the desired temperature. SDC typically draws suction from the Reactor Recirculation system, and returns water through the LPCI system, with no normal make-up water capabilities. Prior to placing the system in service, it is filled and vented. The SDC system also maintains reactor water at the desired temperature during refuel outages. If a vessel drain down event were to occur from the SDC system during SDC system operation, the SDC system would be automatically isolated from the reactor coolant system to isolate the leak. The only areas requiring access when filling and venting the SDC system are the SDC heat exchanger rooms and SDC pump rooms. The safe shutdown procedures do include connecting makeup water from the Condensate Transfer system to the SDC system pump suction using a hose. Other means of providing input to the reactor vessel exist such as CS and LPCI. SDC is not specifically relied upon for reactor vessel drain down events in the current station procedures. This was verified by review of the UFSAR, abnormal operating procedures, and emergency operating procedures.

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NRC Request 2

Ingestion of gas from the Condensate Storage Tank and/or Suppression Pool into the ECCS pumps is a potential concern that should be addressed as part of the GL 2008-01 response. Please provide a summary description of operating and surveillance procedures that includes specific criteria, not just a statement that it has been accomplished.

Response

The LPCI and CS pumps suction are normally aligned to the Suppression Pool (i.e., Torus). Their suction from the Condensate Storage Tanks (CSTs) are normally isolated by means of manual valves that are locked closed. The Torus is located above the pump suction. Water level in the Torus is controlled within the levels specified in the TS and provides adequate suction head for the pumps. The CSTs are located outdoors and above the suction of the ECCS pumps. The supply lines from the CSTs are routed underground into each Dresden Nuclear Power Station (DNPS) Unit. They enter the Reactor Building above the pump suction. Each Unit CST supply line has an inverted loop that includes a vent connection.

The HPCI pump suction is normally aligned to the CSTs. Their suction transfers to the Torus when CST level drops to a specified setpoint or when Torus level rises above a specified setpoint. The CSTs are located outdoors and above the suction of the pumps. The water level in the CSTs provides adequate suction head for the pumps. The common supply line from the CSTs is routed underground into the building where it splits to each Unit. The line enters the building above the pump suction. The buried CST supply line has an inverted loop that includes a vent connection. The Torus is also located above the pump suction. The supply lines are routed from the ECCS ring header attached to the Torus into the pump rooms and to the pump suction. Water level in the Torus at the time of transfer provides adequate suction head for the pumps.

The SDC system does not take suction from either the CSTs or the Torus.

Operating procedures for draining and filling the pump suction piping include venting of high points prior to placing the systems in service. The HPCI, LPCI, and CS systems are filled using the CST water. First the CST suction line is filled and vented. The pumps are vented including a portion of the horizontal HPCI pump discharge piping. If the pump suction were drained, the pump suction lines from the Torus are vented after aligning the systems to the Torus. Each vent valve is opened for at least 30 seconds and venting is performed until an air free stream of water is observed. These procedures ensure air is removed prior to placing the systems in service. Prior to declaring the systems operable, the pumps are typically run in full flow recirculation to verify operability.

The ECCS Keepfill system normally maintains the LPCI and CS pumps discharge piping pressurized, and when HPCI is aligned to the Torus, the ECCS Keepfill system is also aligned to the HPCI system to maintain the pump discharge piping pressurized.

The LPCI, CS, and HPCI pumps are full flow tested quarterly. The LPCI and CS pump take suction from the Torus and return to the Torus through full flow test recirculation lines. The HPCI pumps are tested quarterly taking suction from the CSTs and returning to the CSTs

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through a full flow test line. Every refuel outage both CS pumps are aligned to the CSTs and a full flow surveillance injection test to the vessel is performed.

Operation of the LPCI and CS systems in response (either automatic or manual initiation) to a transient starts the pumps with suction from the Torus. The pumps continue to take suction from the Torus throughout the event. The suction from the CST can be manually aligned if water from the CSTs is required. Operation of the HPCI system in response (either automatic or manual initiation) to a transient starts the HPCI pump with suction from the CST delivering water to the reactor via the Feedwater system. When CST level drops to a specified setpoint, or when the Torus level rises to a specified setpoint, the suction transfers to the Torus. The CST level setpoints established for suction transfer ensure gas from the CST does not enter the pump suction. The minimum level maintained in the Torus, as controlled by and specified in the TS, also provides adequate suction head to ensure gas entrainment does not occur.

In accordance with Technical Specifications (TS) requirements, the discharge lines of the LPCI, CS, and HPCI pumps are vented every 31 days. Prior to venting, Ultrasonic Testing (UT) is performed on select high points to determine if gas has accumulated and to gather data for trending. No gas has been identified to date during the periodic UTs. Based on the information above, air ingestion from the CST and Torus is precluded.

NRC Request 3

The licensee stated that DNPS technical specifications (TSs) require verification that ECCS piping (i.e., HPCI, LPCI, and CS) is filled with water from the pump discharge valve to the injection valve every 31 days. The TS Bases state that maintaining the pump discharge lines of the HPCI system, CS system, and LPCI subsystems full of water ensures that the ECCS will perform properly, injecting its full capacity into the Reactor Coolant System upon demand.

Define the meaning of the phrase "full of water." The licensee did not address the pump suction lines in its submittal, as it should have according to Ref. 1. Has DNPS considered potential gas accumulation possibilities in the suction piping and concluded that it will not exist? If DNPS has concluded that gas will not accumulate, what is the basis for that conclusion?

Response

The phrase "full of water" is defined as absent of any gas voids that would adversely affect the systems from meeting their design requirements. During the evaluation phase, it was identified that small ribbons of gas may exist at several locations in some of the high point piping due to variations in pipe levelness to the high point vents. These locations were evaluated and it was confirmed they would not inhibit the systems from performing their design functions. In accordance with TS requirements, the discharge lines of the LPCI, CS, and HPCI pumps are vented every 31 days. Prior to venting, UT is performed on select high points to determine if gas has accumulated and to gather data for trending.

The possibility that gas could accumulate in the suction piping of the HPCI, LPCI, and CS pumps has been considered. The Generic Letter (GL) 2008-01 evaluations that were performed addressed this piping. Due to the vertical location of the pump suction piping in relation to the

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suction sources (i.e., Torus and CST), coupled with the evaluation of minimum suction source level to ensure pump suction head and absence of potential vortex formation, it was concluded that there were no gas intrusion sources to introduce gas into this piping. The only potential source would be gas introduced during draining and filling operations. The operating and surveillance procedures employed to ensure gas is removed following draining and filling are discussed in the response to NRC Request 2 above.

NRC Request 4

The licensee stated that the 31-day frequency is based on the gradual nature of void buildup in the ECCS piping, the procedural controls governing system operation, and operating experience. It is not clear how surveillance frequencies are revisited when voids are found and how they are addressed in the corrective action program (CAP). Describe how DNPS CAP identifies, trends, and corrects identified void problems and how the findings are used to adjust the surveillance intervals.

Response

Procedural controls require Issue Reports (IRs) to be initiated in the CAP if voids are discovered during the UT examinations or periodic venting evolutions. The IR is then evaluated and dispositioned to determine the cause and identify appropriate corrective actions. If the cause is understood and can be corrected to ensure no further gas intrusions occur, adjustment of the surveillance interval may not be required. However, the need to adjust the UT and venting frequencies is considered if the cause is not confirmed or it is determined to be necessary to confirm operability of the systems. Additionally, IRs and UT results are reviewed and trended by Engineering personnel.

NRC Request 5

The NRC staff has noted that level instrumentation error, valve leakage, and in-leakage from valve mechanisms were not addressed as potential gas intrusion mechanisms. How is DNPS addressing level instrumentation error, valve leakage, and in-leakage from valve mechanisms?

Response

For the CS and LPCI systems, normally aligned to the Torus, Torus level is maintained within the limits of TS 3.6.2.2, "Suppression Pool Water Level." A Torus low water level alarm provides annunciation above the minimum required level to ensure entry into the TS does not occur. Operations personnel monitor Torus level during routine Operator rounds. If manual alignment to the CST were required for the LPCI or CS systems, Operations would have to verify adequate level and volume prior to realigning the pumps. For the HPCI system, normally aligned to the CSTs, pump transfer to the Torus occurs when CST level drops to the low level setpoint or Torus level rises above a specified setpoint. The instrument loop setpoints associated with these levels were established considering uncertainties to ensure the allowable values specified in TS 3.3.5.1, "Emergency Core Cooling System (ECCS) Instrumentation," are not exceeded. For both the Torus and CSTs, the level setpoints have been established

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considering the potential for air entrainment due to vortex. Level instrument error does not apply to the SDC system since the system does not take suction from the Torus or CSTs.

For valve leakage, there are no gas intrusion sources connected to the HPCI, LPCI, or CS systems, such as nitrogen charged accumulators, which could cause gas intrusion if the isolation valve were to leak. The isolation valves between these systems and the primary or Feedwater systems could leak. If the leakage were high enough, steam bubble formation could occur. Prior to reaching this condition temperature instrumentation in the HPCI discharge lines and pressure instrumentation in the CS/LPCI discharge lines would provide indication of the leak so that corrective actions could be taken. If the isolation valves in the SDC system were to leak, the closed loop system would become pressurized and it is unlikely a steam bubble would be maintained. Additionally, pressure instrumentation would provide indication the system is pressurizing.

The LPCI and CS systems are maintained at a positive pressure by the ECCS Keepfill system. The HPCI system is maintained at a positive pressure by the CST level, or by the ECCS Keepfill system when suction is aligned to the Torus. Air in-leakage through valve packing for these systems cannot occur. Additionally, there are no pressurized gas sources directly connected to the valve bodies such that gas intrusion can occur. Since the SDC system is vented prior to being placed into service, air in-leakage is not a concern.

NRC Request 6

Confirm if all high points are equipped with vents; and if not, justify why each high point location does not need a vent.

Response

Except as noted, all piping high points are equipped with vents. High points in piping connected to the Torus (i.e., LPCI/CS test recirculation and HPCI/LPCI/CS minimum flow) and drywell atmosphere (i.e., drywell sprays) were evaluated as not requiring vents since gas accumulation in these lines would flow to containment and not prevent the systems from performing their design function. It was identified that at several locations in the high point piping runs, small ribbons of gas may exist due to variations in pipe levelness to the high point vents. Each of these was characterized and evaluated. The acceptance criteria established for the systems envelopes these potential small ribbons of gas.

There is one CS high point with no vent. It is located in the Unit 3 "A" injection line downstream of the tee of the test recirculation line to the Torus. A UT was performed on this line during the evaluation phase and it was verified to be full of water. A decision was made to schedule the vent addition during the next maintenance window when the piping will be drained, since the new vent is only required to support online maintenance activities. This decision was made based on the following considerations.

- This piping undergoes a full flow surveillance test to the reactor vessel during refuel outages. This would sweep air introduced during the outage to the reactor vessel.
- There are no gas intrusion sources associated with this location.

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- The procedure for filling and venting of the system includes a UT to verify the high point is full of water.
- UTs are performed periodically to verify the high point is full of water.

It is noted that the inaccessible walkdowns for Unit 2 have not yet been completed. When these walkdowns are completed during the next refuel outage, the results will be evaluated and submitted to the NRC as previously committed.

NRC Request 7

Void acceptance criteria, such as "sufficiently full," or "acceptable void volumes," as used for DNPS, are not specific and should be clarified. The licensee should describe the method used to determine void volumes, and provide void acceptance criteria consistent with Sections 3.4.3 and 3.4.4 of Ref. 1.

Response

As discussed in the response to NRC Request 3, the phrase "full of water" is defined as absent of any gas voids that would adversely affect the systems from meeting their design requirements. Exelon Generation Company, LLC (EGC) also uses this definition to define the phrases "sufficiently full" and "acceptable void volumes." Consistent with the NRC position documented in Reference 1, when voids are discovered in piping, EGC determines through an operability determination whether there is a reasonable expectation that the system in question will perform its specified safety function. Therefore, upon discovery of voids in piping, when there is a reasonable expectation that the system in question will perform its specified safety function, EGC considers the piping "full of water" or "sufficiently full" and in compliance with the associated Technical Specifications Surveillance Requirements. Actual void volumes in piping systems are typically determined via UT techniques.

EGC has actively participated in the NEI Gas Accumulation Team, and the respective pressurized water reactor and boiling water reactor owners' groups, activities focused on developing suitable guidance for licensees in the evaluation of voids in the piping systems. These groups have engaged recognized industry experts, and Nuclear Steam Supply System vendors to determine the most appropriate criteria applicable to current reactor designs. The assessment of voids on the suction side, through the pump, on the discharge, and the effects on downstream piping and the reactor has been considered. The criteria are documented in eight separate reports generated to support this effort, all of which have been made available to the NRC.

Reference 2 was submitted to the NRC to summarize and focus these separate industry efforts. The enclosure to this letter references these industry documents and provides insight on their application to evaluation of operability. This industry guidance is being used by EGC until such time that the NRC criteria can be formally issued and evaluated.

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NRC Request 8

On page 4 of the submittal (Ref. 3), the licensee stated regarding ultrasonic testing (UT) examinations, "UT examinations were not performed on areas where an assessment concluded they were not necessary (e.g., a determination was made that voiding in the piping location would not impact the system's ability to perform its specified safety function, a determination was made that system flow rates during periodic testing would be adequate to remove voids)." Confirm whether the pump test flow rates are adequate to move any voids. If not, would the maximum flow rate achieved during actual events move any potential remaining voids? Did DNPS consider the difference? Provide Froude numbers associated with the test and maximum flow rates.

Response

Consideration was given to the difference between test flow rates and actual event flow rates in relation to movement of voids. Flow rate and corresponding Froude number data are provided below. As can be seen from the data, the quarterly inservice test (IST) flow rates are equal to or greater than the design flow rates. The testing is accomplished via the full flow test return lines. Except for the 24-inch LPCI and 24-inch HPCI pump suction piping discussed below, the test flow rates achieve a Froude number of greater than one and are adequate to sweep potential voids that may exist. The SDC system does not have a test mode.

System	IST Flow Rates	Design Flow Rates
HPCI	≥ 5000 gallons per minute (gpm)	5000 gpm
LPCI	5000-5050 gpm/pump and ≥ 9000 gpm/train	9000 gpm/train
CS	4600-4650 gpm	4500 gpm
SDC	N/A	6750 gpm

The minimum test mode Froude numbers for each system are shown below. These represent the location of the largest pipe diameter. At locations in the systems where the pipe diameters are smaller (e.g., at individual pump suctions and discharges), larger Froude numbers are present. Also included are the Froude numbers for the design flow rates specified above.

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Piping Segment	IST Froude Number	Design Flow Froude Number
HPCI Suction	0.48	0.48
HPCI Discharge	2.60	2.60
LPCI Suction	0.48	0.48
LPCI Discharge	1.03	1.03
Core Spray Torus Suction	1.26	1.24
Core Spray Discharge	2.30	2.25
Shutdown Cooling	N/A	1.24

Based on the Froude numbers for the 24-inch HPCI pump suction piping (i.e., < 1.0), an air or gas pocket could remain in the suction piping if it were present. The only high point in the suction piping from the CST is buried underground. When this piping is drained and filled, it is vented per procedure to ensure all gas is removed from the high point. There are no gas intrusion sources and the CSTs maintain the piping full of water. This piping high point is not accessible for UT examination. As stated above, the system undergoes quarterly testing at flow rates consistent with the flow rates expected during a design basis event. If a pocket of gas were present in this piping, and it was not being swept during quarterly testing, it would be expected that it would not impact the system's ability to perform its specified safety function in the event of an accident.

Based on the Froude numbers for the 24-inch LPCI pump suction piping (i.e., < 1.0), an air or gas pocket could remain in the suction piping if it were present. When this piping is drained and filled, it is vented per procedure to ensure all gas is removed from the high point. There are no gas intrusion sources and the Torus and CST maintain the piping full of water. As stated above, the system undergoes quarterly testing from the Torus at flow rates consistent with the flow rates expected during a design basis event. If there were pockets of gas present in this piping, and it was not being swept during quarterly testing, it would be expected that it would not impact the system's ability to perform its specified safety function in the event of an accident.

NRC Request 9

DNPS procedures do not specify gas volume acceptance criteria that must be met to satisfy the surveillance. Rather, the current procedure requires vent valves to be opened, and a solid stream of water must be observed while venting. Justify how the current procedure is adequate to meet acceptance criteria for system operability and to ensure that all voids, including trapped voids, are sufficiently vented.

Response

During the GL 2008-01 evaluation phase, it was identified that the periodic venting procedure needed to be enhanced. The procedure was revised to add a prerequisite that prior to venting, UT measurements are taken. A new procedure was developed and implemented to perform the

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periodic UT measurements. This procedure provides the specific points for UT and includes the acceptance criteria for each point. The periodic UT locations were chosen based on the most vulnerable high points considering the quarterly flow testing that occurs. Subsequent venting of the systems' high points confirms the systems are operable.

NRC Request 10

DNPS plans to implement a graded approach for performing periodic UT examinations as part of venting verifications of accessible high points. Describe the "graded approach" for performing the UTs.

Response

EGC is actively supporting the industry TSTF and NEI Gas Accumulation Management Team activities regarding resolution of generic TS issues. Until such time that these issues are resolved, EGC has implemented supplemental UT inspections to ensure systems remain free of any voids that could challenge the intended safety function. This approach is described in procedure OP-AA-108-106, "Equipment Return to Service," which directs the use of UT examinations following fill and vent activities during system restoration to ensure voids have been removed.

Based on trending of the actual, recorded UT results, the monitoring frequency may be adjusted. Unexpected or unexplained gas accumulation in a system is entered into CAP for evaluation of operability and whether an increased frequency of monitoring is required. Similarly, sustained gas accumulation free performance in a system is an indication that a relaxed frequency may be appropriate, after a certain confidence level has been established. Monitoring begins at a frequency based on other TS surveillances, and relaxation should proceed incrementally, and is currently limited to not greater than six months. In addition, new procedure ER-DR-200-101, "Periodic Monitoring for Gas Accumulation in ECCS Systems," was created to implement this activity at DNPS.

NRC Request 11

On page 2 of the submittal (Ref. 3), the licensee stated, "EGC is actively supporting the industry TSTF [Technical Specification Task Force] and NEI Gas Accumulation Management Team activities regarding resolution of generic TS issues. EGC will evaluate resolution of TS issues with respect to the elements contained in the TSTF, and submit a license amendment request, if deemed necessary based on this evaluation, within 180 days following NRC approval of the TSTF."

Identify what supplementary actions to address control of voids in the subject systems (that are not covered by the current DNPS TS requirements; such as, the use of procedures and other processes) will be used until the resolution of the TS issues related to GL 2008-01 are complete.

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Response

As detailed in the response to NRC Request 10, until such time that the industry has determined the appropriate changes to TS, and these issues are resolved, EGC has implemented supplemental UT inspections where determined to be needed to ensure systems remain free of voids that could challenge the intended design function.

This approach is described in procedure OP-AA-108-106, which directs the use of UT examinations following fill and vent activities during system restoration to ensure voids have been removed. Site procedures were revised to add UT requirements following fill and vent at select vulnerable locations. Periodic UT examination is governed by procedure ER-DR-200-101, which describes a graded approach to monitoring.

NRC Request 12

Consistent with Section 3.7 of Ref. 1, briefly discuss the training that is "considered to be a necessary part of applying procedures and other activities when addressing the issues identified in the GL."

Response

GL 2008-01 did not require discussion of training to satisfy the 10 CFR 50.54(f) request; therefore, none was provided in the GL response for DNPS. The referenced guidance was issued after the GL 2008-01 response for DNPS was submitted to the NRC. However, when any station procedure is modified, an assessment for training needs and change management is required in accordance with procedure AD-AA-101, "Processing of Procedures and T&RMs." The determination is typically a function of the nature of the change and the perceived impact on the organization. If the assessment concludes training is required, the training is generally accomplished prior to, or in parallel with, issuance of the procedure. For fill and vent procedure revisions, the changes have generally been minor, and have been considered enhancements. The new site procedure, which directs the periodic examination of selected piping for the presence of air, was created to draw upon pre-existing non-destructive examination (NDE) procedures, which provide guidance for the UT inspection of piping to verify that it is full of water. Close coordination with the NDE group and individuals performing the inspections was made during the procedure development. The NDE group assisted in development of the new procedure.

EGC is an active participant in the NEI Gas Accumulation Team, which is currently directing the Institute of Nuclear Power Operations (INPO) in the development of generic training modules for gas accumulation and management. These training modules target the Engineering, Operations, and Maintenance disciplines. Based on this active participation, EGC plans to evaluate these training modules following completion for applicability to EGC, and may conduct training based upon modules tailored to meet EGC's needs.

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References

1. Memorandum from L. D. Wert, Jr. (U.S. NRC) to T. B. Blount (U.S. NRC), "Task Interface Agreement – Emergency Core Cooling System (ECCS) Voiding Relative to Compliance with Surveillance Requirements (SR) 3.5.1.1, 3.5.2.3, and 3.5.3.1 (TIA 2008-03)," dated October 21, 2008
2. Letter from J. H. Riley (Nuclear Energy Institute) to W. H. Ruland (U.S. NRC), "Industry Guidance – Evaluation of Unexpected Voids or Gas Identified in Plant ECCS and Other Systems," dated June 18, 2009