WOLF CREEK
NUCLEAR OPERATING CORPORATION

Jaime H. McCoy
Vice President Engineering

March 18, 2015
ET 15-0008

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

Reference: 1) Letter ET 14-0034, dated November 20, 2014, from J. H. McCoy, WCNOC, to USNRC

2) Letter dated February 10, 2015, from C. F. Lyon, USNRC, to A.C. Heflin, WCNOC, "Wolf Creek Generating Station – Request for Additional Information Re: License Amendment Request to Adopt TSTF-523, Revision 2, "Generic Letter 2008-01, Managing Gas Accumulation" (TAC NO. MF5280)"

Subject: Docket No. 50-482: Response to Request for Additional Information Regarding License Amendment Request to Revise Technical Specifications to Adopt TSTF-523, Revision 2, "Generic Letter 2008-01, Managing Gas Accumulation"

Gentlemen:

Reference 1 provided the Wolf Creek Nuclear Operating Corporation (WCNOC) application to revise the Wolf Creek Generating Station (WCGS) Technical Specifications (TS). The proposed amendment would modify the WCGS TS requirements to address Nuclear Regulatory Commission (NRC) Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," as described in Technical Specification Task Force (TSTF) Traveler TSTF-523, Revision 2, "Generic Letter 2008-01, Managing Gas Accumulation." Reference 2 provided a request for additional information related to the application. The Attachment provides WCNOC's response to the request for additional information.

The additional information does not expand the scope of the application and does not impact the no significant hazards consideration determination presented in Reference 1.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," a copy of this submittal is being provided to the designated Kansas State official.

A134
NRR

This letter contains no commitments. If you have any questions concerning this matter, please contact me at (620) 364-4156, or Mr. Steven R. Koenig at (620) 364-4041.

Sincerely,

Jaime H. McCoy

JHM/rlt

Attachment

cc: T. A. Conley (KDHE), w/a
M. L. Dapas (NRC), w/a
C. F. Lyon (NRC), w/a
N. F. O'Keefe (NRC), w/a
Senior Resident Inspector (NRC), w/a

STATE OF KANSAS)
) SS
COUNTY OF COFFEY)

Jaime H. McCoy, of lawful age, being first duly sworn upon oath says that he is Vice President Engineering of Wolf Creek Nuclear Operating Corporation; that he has read the foregoing document and knows the contents thereof; that he has executed the same for and on behalf of said Corporation with full power and authority to do so; and that the facts therein stated are true and correct to the best of his knowledge, information and belief.

By Jaime McCoy
Jaime H. McCoy
Vice President Engineering

SUBSCRIBED and sworn to before me this 18th day of March, 2015.

GAYLE SHEPHEARD
Notary Public - State of Kansas
My Appt. Expires 7/24/2015

Gayle Shepheard
Notary Public

Expiration Date 7/24/2015

Response to Request for Additional Information

Reference 1 provided the Wolf Creek Nuclear Operating Corporation (WCNOC) application to revise the Wolf Creek Generating Station (WCGS) Technical Specifications (TS). The proposed change revises or adds Surveillance Requirements to verify that the system locations susceptible to gas accumulation are sufficiently filled with water and to provide allowances which permit performance of the verification. The changes are being made to address the concerns discussed in Generic Letter 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems," (Reference 1). Reference 2 provided a request for additional information related to the application. The specific NRC question is provided in italics.

1. *What were the historic void volumes found that are applicable to performance of TS surveillance requirements (SRs) 3.5.2.3 and 3.6.6.9, and how did these compare to the acceptance criteria? How do those void volumes compare to follow-up calculations that were performed if the original criteria were not met?*

Response: The historic void volumes found that are applicable to the performance of Surveillance Requirement (SR) 3.5.2.3 are as follows. Note that the Allowable Volume (Allowable Vol.) is the acceptance criteria at the time the void was discovered.

Cycle 20

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
3/22/2013	EMV0257	Piggy-back line from Centrifugal Charging Pump (CCP) suction to Safety Injection Pump (SIP) A suction	2	0.25	MODE 6 post fill and vent during Refueling Outage 19. Emergency Core Cooling System (ECCS) not required to be OPERABLE in this mode. Void vented to water solid.

Cycle 19

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
12/18/2012	EMV0058	SIP discharge to hot leg (HL) injection	0.011	0.25	MODE 1. Void could not be vented. Location was water solid at next performance of ultrasonic testing (UT) 1 month later.
10/4/2012	EMV0259	Piggy-back line from CCP suction to SIP A suction	0.005	0.25	MODE 1. Void vented to water solid.
8/15/2012	EJV0088	Residual Heat Removal (RHR) discharge to Loop 4	0.003	0.59	MODE 1. Void vented to water solid.
8/8/2012	EJV0088	RHR discharge to Loop 4	0.11	0.59	MODE 1. Gas sample taken. Approx. 50% hydrogen and 50% nitrogen. Void vented to water solid.

Cycle 19

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
7/24/2012	EJV0088	RHR discharge to Loop 4	1.12 (est.)	0.59	MODE 1. Volume estimated using Henry's Law. Void evaluated using GOTHIC. Peak pressure from water hammer less than relief valve setting, and unbalanced load from water hammer 34% of pipe weight. RHR System would have been capable of performing its safety function if required. Void vented to water solid.
7/23/2012	EJV0088	RHR discharge to Loop 4	0.01	0.59	MODE 1. Void vented to water solid.
7/19/2012	EJV0088	RHR discharge to Loop 4	0.41	0.59	MODE 1. Gas sample taken. Sample was contaminated with air during testing, but had high hydrogen content. Void vented to water solid.
3/26/2012	EJV0088	RHR discharge to Loop 4	>0.59	0.59	MODE 3. Formed from accumulator leakage into RHR. Present for no greater than 5.87 hours. Void vented to water solid.

Cycle 18

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
11/22/2010	BGV0496	CCP recirculation discharge to Seal Water Heat Exchanger	0.01	0.25	MODE 1. Void vented to water solid.
11/10/2010	EJV0223	RHR suction vent on check valve EJ8958B	<0.001	0	MODE 1. Void vented to water solid.
10/22/2010	EJV0088	RHR discharge to Loop 4	0.29	0.59	MODE 1. UT performed due to leakage from accumulator. Void vented to water solid.
8/24/2010	EJV0221	RHR suction vent on check valve EJ8958A	Unknown (vented 1/4 turn open for 9 sec)	0	MODE 1. Post vacuum fill and vent of RHR A Heat Exchanger. RHR train A was out of service for vacuum fill and vent. Void vented to water solid.
8/23/2010	EEJ01A	RHR A Heat Exchanger	4.1	No allowable volume calculated	MODE 1. Volume of void in RHR A Heat Exchanger after vacuum fill and vent performed. Bounded by void found on 7/2/10. Was completely removed from RHR A Heat Exchanger during dynamic vent on 10/6/10 during a forced outage.
8/23/2010	EJV0221	RHR suction vent on check valve EJ8958A	~0.001	0	MODE 1. Post vacuum fill and vent of RHR A Heat Exchanger. Void vented to water solid.

Cycle 18

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
8/23/2010	EJV0238	RHR discharge at inlet to RHR A Heat Exchanger	0.01	0.25	MODE 1. Post vacuum fill and vent of RHR A Heat Exchanger. Void vented to volume of <0.001 cubic feet. Location was water solid at next performance of UT 1 day later.
7/4/2010	EJV0059	RHR suction downstream of recirculation sump isolation valve	0.09	0.1	MODE 1. Void is gas from the RHR A Heat Exchanger which has been transported back to the pump suction through the miniflow line and collected at the recirculation sump isolation valve. Void vented to water solid.
7/4/2010	EJV0221	RHR suction vent on check valve EJ8958A	0.03	0	MODE 1. Void is gas from the RHR A Heat Exchanger which has been transported back to the pump suction through the miniflow line and collected at the check valve. Void vented to water solid.
7/3/2010	EJV0059	RHR suction downstream of recirculation sump isolation valve	1.35	0.1	MODE 1. Gas sample taken. Void was determined to be 91.7% nitrogen, 7.3% oxygen, and 0.9% hydrogen. Void is gas from the RHR A Heat Exchanger which has been transported back to the pump suction through the miniflow line and collected at the recirculation sump isolation valve. Void vented but small volume remained.
7/2/2010	EEJ01A	RHR A Heat Exchanger	9.8	No allowable volume calculated	MODE 1. Maximum calculated initial volume in the tube side of RHR A Heat Exchanger of 9.8 ft^3 present since Refueling Outage 17. Detailed evaluation showed that there was reasonable assurance that RHR System, SIPs, and CCPs would have been able to perform safety functions. Void could not be completely flushed from RHR Heat Exchanger since 3500 gpm flow required for dynamic venting. A volume of 6.2 cubic feet of gas remained in the RHR A Heat Exchanger after 7/4/10.
7/2/2010	EJV0059	RHR suction downstream of recirculation sump isolation valve	0.64	0.1	MODE 1. Gas sample taken. Void was determined to be 94% nitrogen. Void is gas from the RHR A Heat Exchanger which has been transported back to the pump suction through the miniflow line and collected at the recirculation sump isolation valve. Void vented but small volume remained.

Cycle 18

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
7/2/2010	EJV0059	RHR suction downstream of recirculation sump isolation valve	0.02	0.1	MODE 1. Void is gas from the RHR A Heat Exchanger which has been transported back to the pump suction through the miniflow line and collected at the recirculation sump isolation valve. Void vented but small volume remained.
7/2/2010	EJV0134	RHR discharge to Loop 2	0.01	0.25	MODE 1. Void is likely a result of running the RHR A pump with a large void in the RHR A Heat Exchanger. Void was located in containment, and was not vented due to high local temperatures. When location was checked again on 7/4/2010, void had dissolved.
4/29/2010	EJV0088	RHR discharge to Loop 4	0.006	0.25	MODE 1. Void vented to water solid.
4/22/2010	EJV0088	RHR discharge to Loop 4	0.008	0.25	MODE 1. Void vented to water solid.
4/14/2010	EJV0088	RHR discharge to Loop 4	0.59	0.25	MODE 1. Gas sample taken. Void was determined to be >98% nitrogen. Void evaluated using GOTHIC. Peak pressure from water hammer less than relief valve setting, and pressure rise due to pressure pulsations from water hammer was determined to be insignificant. RHR system would have been capable of performing its safety function if required. Void vented to water solid.
11/8/2009	EJV0221	RHR suction vent on check valve EJ8958A	~0.001	0	MODE 6 post fill and vent. ECCS not required to be OPERABLE in this mode. Void vented to water solid.
11/8/2009	EJV0241	RHR discharge vent on check valve EJ8969A to CCP suctions	Unknown (20 - 30 sec. vent)	0.25	MODE 6 post fill and vent. ECCS not required to be OPERABLE in this mode. Void vented to water solid.

Cycle 17

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
8/5/2008	EMV0257	Piggy-back line from CCP suction to SIP A suction	Small (<<0.25)	0.25	MODE 1. Gas sample taken and determined to be 0.2% hydrogen, 25.6% oxygen, and 75.2% nitrogen. Source was leftover air from fill and vent during Refueling Outage 16. Void vented to water solid.

Cycle 17

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
6/4/2008	EJV0203	RHR A discharge to CCP Suction	Small (<<0.25)	0.25	MODE 1. Gas sample taken and determined to be 2% helium, 66.1% hydrogen, 5.75% oxygen, and 26.2% nitrogen. Source was degassing after securing from shutdown cooling in Refueling Outage 16. Void vented to water solid.
5/27/2008	EJV0128	RHR discharge to hot leg (HL) Recirculation	Small (<<0.25)	0.25	MODE 1. Source was degassing after securing from shutdown cooling in Refueling Outage 16. Void vented to water solid.
5/23/2008	EJV0128	RHR discharge to HL Recirculation	Small (<<0.25)	0.25	MODE 1. Gas sample taken and determined to be 19.1% hydrogen, 15.3% oxygen, and 65.6% nitrogen. Source was degassing after securing from shutdown cooling in Refueling Outage 16. Void vented to water solid.
5/22/2008	EJV0223	RHR suction vent on check valve EJ8958B	0.13	0	MODE 1. RHR B pump out of service for scheduled maintenance. Gas sample taken and determined to be 45.6% hydrogen, 8% oxygen, and 46.3% nitrogen. Source was degassing after securing from shutdown cooling in Refueling Outage 16. Void vented to water solid.
5/11/2008	EJV0128	RHR discharge to HL Recirculation	Small (<<0.25)	0.25	MODE 4 during Refueling Outage 16. Void vented to water solid.
5/6/2008	EMV0002	SI A discharge check valve to Loop 3 HL	<0.001	0.25	MODE 5 post fill and vent during Refueling Outage 16. ECCS not required to be OPERABLE in this mode. Void was not vented.
5/5/2008	EJV0122	RHR discharge to HL Recirculation	Unknown	0.25	MODE 5 post fill and vent during Refueling Outage 16. ECCS not required to be OPERABLE in this mode. Void vented to water solid.
5/5/2008	EJV0128	RHR discharge to HL Recirculation	<0.1	0.25	MODE 5 post fill and vent during Refueling Outage 16. ECCS not required to be OPERABLE in this mode. Void vented to water solid.
5/5/2008	EJV0198	RHR B Pump casing	Unknown (1 minute vent)	0	MODE 5 post fill and vent during Refueling Outage 16. ECCS not required to be OPERABLE in this mode. Void vented to water solid.
5/5/2008	EJV0223	RHR suction vent on check valve EJ8958B	Unknown (1 minute vent)	0	MODE 5 post fill and vent during Refueling Outage 16. ECCS not required to be OPERABLE in this mode. Void vented to water solid.

Cycle 17

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
5/5/2008	EMV0078	CCP common discharge to cold leg (CL) injection lines	Small (<<0.25)	0.25	MODE 5 post fill and vent during Refueling Outage 16. ECCS not required to be OPERABLE in this mode. Void vented to water solid.
5/5/2008	EMV0156	CCP A discharge to CL injection lines	Small (<<0.25)	0.25	MODE 5 post fill and vent during Refueling Outage 16. ECCS not required to be OPERABLE in this mode. Void vented but small volume remained.
5/5/2008	EMV0185	SI A discharge to Loops 2 and 3 HLs	0.021	0.25	MODE 5 post fill and vent during Refueling Outage 16. ECCS not required to be OPERABLE in this mode. Void vented to water solid.
5/5/2008	EMV0242	CCP B discharge to CL injection lines	Small (<<0.25)	0.25	MODE 5 post fill and vent during Refueling Outage 16. ECCS not required to be OPERABLE in this mode. Void vented to water solid.

The historic void volumes found that are applicable to the performance of proposed SR 3.6.6.9 are as follows. Note that the Allowable Volume (Allowable Vol.) is the acceptance criteria at the time the void was discovered.

Cycle 20

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
3/26/2013	ENV0117	Containment Spray (CS) A suction downstream of recirculation sump isolation valve	0.005	2.75	MODE 6 post fill and vent during Refueling Outage 19. CS System not required to be OPERBLE in this mode. Void vented to water solid.

Cycle 19

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
1/16/2013	ENV0120	CS B suction downstream of recirculation sump isolation valve	0.69	2.47	MODE 1. Gas sample taken and determined to be 0.1% hydrogen, 18.9% oxygen, and 81.1% nitrogen. Void vented to water solid.

Cycle 19

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
12/3/2012	ENV0120	CS B suction downstream of recirculation sump isolation valve	2.75	2.47	MODE 1. Gas sample taken and determined to be 20.3% oxygen, and 84.1% nitrogen. Void was evaluated using GOTHIC. GOTHIC predicted that average void fraction at pump would be 2.25% for 20 seconds, giving a factor of 2.2 below the allowable void fraction from NEI 09-10, Rev. 1a. Conditions on use from draft Final Safety Evaluation were satisfied. CS System would have been able to perform its safety function if required. Void vented to water solid.

Cycle 18

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
8/2/2010	ENV0093	CS additive tank to CS A suction	<0.001	0.25	MODE 1. Void could not be vented. Location water solid on 9/7/2010.
7/6/2010	ENV0093	CS additive tank to CS A suction	0.004	0.25	MODE 1. Gas sample taken and determined to be 22% oxygen and 78% nitrogen. Void vented but small volume remained. Location water solid on 7/10/2010.
7/6/2010	ENV0117	CS A suction downstream of recirculation sump isolation valve	0.9	0.15	MODE 1. Gas sample taken and determined to be 19% oxygen and 81% nitrogen. RELAP model with bounding void size of 4.8 cubic feet used to show that void fraction at pump would be less than 5%; however, this would not satisfy the conditions on use from the Final Safety Evaluation if used today. Void vented to 0.073 cubic feet. Location water solid on 7/7/2010.

Cycle 17

Date	Location	Description	Void Vol. (ft^3)	Allowable Vol. (ft^3)	Notes
7/11/2008	ENV0117	CS A suction downstream of recirculation sump isolation valve	~0.001	0.15	MODE 1. Gas sample taken and determined to be 20.2% oxygen and 79.8% nitrogen. Void vented but small volume remained. Location water solid on 7/17/2008.

2. *Is the WCGS design basis "no gas?" If not, please provide the documentation that established the design basis.*

Response: The Wolf Creek Generating Station (WCGS) design basis for the ECCS and CS System is "no gas," with the exception of a portion of the CS System discharge piping. CS System discharge piping inside containment is qualified for the impulse of a water hammer at the commencement of system flow by validating that the stresses are within allowable limits. CS System discharge piping inside containment is not required to be filled with water during normal plant operation.

3. *Please provide a description of the process used to restore the plant to the design basis condition at the earliest practical time following discovery of a gas volume that exceeds the design basis.*

Response: Locations susceptible to gas accumulation are monitored by UT to verify that the ECCS and CS System are sufficiently filled with water. Locations monitored by UT have a vent valve installed. If a void is identified during performance of the surveillance procedure, the void is characterized (arc length and length) to determine the volume. A Condition Report (CR) is initiated in accordance with procedure AP 28A-100, "Corrective Action Program," to document the void. Control room personnel perform an immediate OPERABILITY determination of the identified condition. If desired by engineering, a sample of the gas can be taken to identify the composition of the gas. After the void is fully characterized, the void is vented using the vent valve. Ultrasonic testing is performed after venting to verify that the void has been fully vented and the system restored to the design basis condition (no gas).

A small number of locations (10 out of 123) are checked by venting, as UT probes are not qualified for these particular locations. For these locations, the vent valve is cracked open. If any gas is emitted from the valve, the void volume is collected in a sample bag such that the volume of the void can be determined. The void is vented until a solid stream of water issues from the vent valve.

4. *Please describe the methodology used to determine gas volumes that do not jeopardize operability that are applicable to SRs 3.5.2.3 and 3.6.6.9.*

Response: The methodology used to determine gas volumes that do not jeopardize OPERABILITY is based on the guidance from Nuclear Energy Institute (NEI) 09-10, Rev. 1a-A, "Guideline for Effective Prevention and Management of System Gas Accumulation," NRC Regulatory Issue Summary 2013-09, "NRC Endorsement of NEI 09-10, Revision 1a-A, "Guidelines for Effective Prevention and Management of System Gas Accumulation"," (Reference 4), and the NRC Final Safety Evaluation (SE) for NEI 09-10 (Reference 5). Calculations were performed to determine the acceptance criteria (i.e., allowable void volume) for each location in the ECCS and CS System monitored by UT. The methodology is a mixture of Simplified Equation calculations (based on WCAP-17276-P, Rev. 1, "Investigation of Simplified Equation for Gas Transport"), Fauske water hammer calculations (based on FAI/08-70, Rev. 1, "Gas-Voids Pressure Pulsations Program"), GOTHIC computer models (incorporating appropriate factors of safety for suction locations as required by the NRC SE), and conservative method for determining acceptable upstream void volumes as approved by the NRC SE. Qualifications from the NRC SE for suction and discharge piping and the use of computer codes were evaluated in a WCNOC Basic Engineering Disposition. In addition, for ECCS locations, the total volume of gas which can be injected into the Reactor Coolant System

(RCS) from Westinghouse LTR-LIS-08-543, "PWROG Position Paper on Non-condensable Gas Voids in ECCS Piping; Qualitative Engineering Judgment of Potential Effects on Reactor Coolant System Transients Including Chapter 15 Events, Task 3 of PA-SEE-450," including the qualifications on the use of this guidance from the NRC SE, was evaluated.

5. *How is potential leakage from the reactor coolant system addressed?*

Response: For potential external reactor coolant system (RCS) leakage, TS 3.4.15, "RCS Leakage Detection Instrumentation," requires instruments of diverse monitoring principles to be OPERABLE to provide a high degree of confidence that extremely small leaks are detected in time to allow actions to place the plant in a safe condition, when RCS LEAKAGE indicates possible reactor coolant pressure boundary (RCPB) degradation. Specifically, Limiting Condition for Operation (LCO) 3.4.15 requires the containment sump level and flow monitoring system, one containment atmosphere particulate radioactivity monitor, and one containment air cooler condensate monitoring system OPERABLE in MODES 1, 2, 3 and 4. Entry conditions specific to leakage into containment include increased containment humidity, pressure, or temperature; increased activity on the containment particulate or gaseous radioactivity monitors and containment area radiation monitors; and an indicated increase of the Nuclear Plant Information System (NPIS) monitored containment total unidentified leak rate. Diverse operational monitoring principles are necessary because one monitored parameter will always lead the others depending on the actual or postulated plant conditions.

TS 3.4.13, "RCS Operational LEAKAGE," specifies leakage limits to limit system operation in the presence of leakage from RCS components to amounts that do not compromise safety. SR 3.4.14.1 requires the performance of a RCS water inventory balance once per 72 hours. Procedure STS BB-006, "RCS Water Inventory Balance Using the NPIS Computer," or STS BB-004, "RCS Water Inventory Balance," is used to satisfy SR 3.4.13.1 and is performed once per 24 hours as an industry best practice. Procedure STS CR-001, "Shift Log for Modes 1, 2, & 3," monitors the NPIS containment total unidentified leak rate point (LFU0769) three times per day. If the containment total unidentified leak rate is greater than one gpm, then a RCS water inventory balance is performed per procedure STS BB-006 or STS BB-004. Within procedures STS BB-006 and STS BB-004, there are actions for a leak of >0.1 gpm (7 day rolling average), >0.15 gpm (two consecutive measurements), and >0.3 gpm (one measurement). The actions include checking for abnormal trends on other leakage detection instrumentation and systems, commence a leakage investigation to identify and quantify the leak, perform a containment inspection for leakage, and isolate/stop the leak. Additionally, procedure OFN BB-007, "RCS Leakage High," is entered when indications of increased RCS leakage exist.

For potential RCS leakage into the ECCS and/or RHR System, leakage would be detectable by an increase in the RHR or High Pressure Coolant Safety Injection System. The pressure in the Boron Injection Tank (part of the High Pressure Coolant Safety Injection System) is recorded once per shift in accordance with procedure CKL ZL-003, "Control Room Daily Readings." If the pressure in the Boron Injection Tank is greater than 1300 psi, then the Control Room Supervisor (CRS) is to be contacted and the system depressurized prior to reaching 1500 psi. The Boron Injection Tank is depressurized utilizing procedure SYS EM-120, "BIT Depressurization," and one of the prerequisites is that System Engineering be notified. In addition, the Safety Injection System discharge header is depressurized utilizing procedure SYS EM-002, "SI System Depressurization," and one of the prerequisites is to direct System Engineering to troubleshoot the source of system pressurization if it is not known.

The RHR discharge pressure is also recorded once per shift in accordance with procedure CKL ZL-001, "Auxiliary Building Reading Sheets." If the pressure in the RHR discharge is greater than 350 psi, then the CRS is to be notified. The RHR System is depressurized utilizing procedure SYS EJ-323, "RHR System Depressurization," and one of the prerequisites is that System Engineering be notified so that they can evaluate the possibility of gas buildup in the RHR System.

System Engineering is notified in the event that RCS leakage into the ECCS and/or RHR System is occurring. System Engineering evaluates the possibility of gas buildup, and determines additional actions as appropriate

References:

1. WCNOC letter ET 14-0034, "Application to Revise Technical Specifications to Adopt TSTF-523, Revision 2, "Generic Letter 2008-01, Managing Gas Accumulation," Using the Consolidated Line Item Improvement Process," November 20, 2014. ADAMS Accession No. ML14330A247.

2. Letter from C. F. Lyon, USNRC, to A. C. Heflin, WCNOC, "Wolf Creek Generating Station – Request for Additional Information Re: License Amendment Request to Adopt TSTF-523, Revision 2, "Generic Letter 2008-01, Managing Gas Accumulation" (TAC NO. MF5280)," February 10, 2015. ADAMS Accession No. ML15040A625.

3. NEI 09-10, Rev 1a-A, "Guideline for Effective Prevention and Management of System Gas Accumulation," April 2013.

4. NRC Regulatory Issue Summary 2013-09, "NRC Endorsement of NEI 09-10, Revision 1a-A, "Guidelines for Effective Prevention and Management of System Gas Accumulation"," August 23, 2013.

5. Letter from S. Bahadur, USNRC, to J. Riley, NEI, "Final Safety Evaluation of Nuclear Energy Institute Topical Report NEI 09-10, Revision 1a, "Guidelines for Effective Prevention and Management of System Gas Accumulation" (TAC NO. ME5291)," March 19, 2013.