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U.S. Nuclear Regulatory Commission Attn: Document Control Desk Mail Station OP1-17 Washington, DC 20555

SUSQUEHANNA STEAM ELECTRIC STATION PROPOSED AMENDMENT NO. 249 TO LICENSE NFP-14 AND PROPOSED AMENDMENT NO. 214 TO LICENSE NFP-22: ADOPTION OF NRC APPROVED GENERIC CHANGES TO IMPROVED TECHNICAL SPECIFICATIONS (RHR SUPPRESSION POOL COOLING) Do PLA-5522 Do

Docket No. 50-387 and 50-388

Pursuant to 10 CFR 50.90, PPL Susquehanna, LLC, (PPL) proposes to amend the Susquehanna Steam Electric Station Units 1 and 2 (SSES) Technical Specifications (TS). The proposed change adopts generic change TSTF-230, Rev. 1 to NUREG 1433, "Standard Technical Specifications for General Electric Plants (BWR/4)," Revision 1 (STS). This generic change revises LCO 3.6.2.3 to add a new Condition B, which permits both RHR suppression pool cooling subsystems to be inoperable for 8 hours, rather than immediately initiating a unit shutdown.

The improved STS were implemented at SSES in 1998 through Amendments 178 (Unit 1) and 151 (Unit 2), using NUREG 1433, Rev. 1 as the model. The industry and the NRC staff have been working to improve the STS NUREGs, and as a result, generic changes have been developed. This proposed amendment adopts NRC approved generic change TSTF-230, Rev. 1 for use at Susquehanna.

The proposed change to LCO 3.6.2.3 provides a significant benefit to the operation of SSES, in that it avoids an immediate plant shutdown which has the potential for resulting in a unit scram and discharge of steam to the suppression pool when both suppression pool cooling subsystems are inoperable and incapable of removing the generated heat. The proposed change also serves to provide consistency between the requirements for RHR suppression pool cooling and LCO 3.6.2.4, "RHR Suppression Pool Spray," which currently allows two RHR suppression pool spray subsystems to be inoperable for 8 hours.

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Attachments to this letter include:

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Attachment 1 -	The "Safety Assessment" supporting this change;
Attachment 2 -	The "No Significant Hazards Considerations Evaluation" performed in
	accordance with the criteria of 10 CFR 50.92 and the categorical
	exclusion for an Environmental Assessment as specified in 10 CFR 51.22;
Attachment 3 -	Markups of the Unit 1 and Unit 2 TS showing the proposed changes;
Attachment 4 -	The "camera-ready" version of the revised Unit 1 and Unit 2 TS pages;
Attachment 5 -	Markups of the associated TS Bases.

The Susquehanna SES Plant Operations Review Committee and the Susquehanna Review Committee have reviewed the proposed changes. In accordance with 10 CFR 50.91(b)(1), PPL is sending a copy of this letter to the Pennsylvania Department of Environmental Protection.

PPL requests approval of this change by January 31, 2003, and that it be made effective within 60 days of issuance to allow orderly implementation of any new or revised plant procedures or training.

If you have any questions, please contact Mr. Duane L. Filchner at (610) 774-7819.

Sincerely,

B. L. Shriver

Attachments: Affidavits Attachment 1 – Safety Assessment Attachment 2 – No Significant Hazards Consideration Evaluation and Environmental Assessment Attachment 3 – Technical Specification Markups (Units 1 & 2) Attachment 4 – Camera-Ready Version of Technical Specification Revisions (Units 1 & 2)

copy: NRC Region I Mr. S. Hansell, NRC Sr. Resident Inspector Mr. R. Janati, DEP/BRP Mr. E. M. Thomas, NRC Project Manager

BEFORE THE UNITED STATES NUCLEAR REGULATORY COMMISSION

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In the Matter of

PPL Susquehanna, LLC:

Docket No. 50-387

PROPOSED AMENDMENT NO. 249 TO LICENSE NPF-14: ADOPTION OF NRC APPROVED GENERIC CHANGES TO IMPROVED TECHNICAL SPECIFICATIONS (RHR SUPPRESSION POOL COOLING) UNIT NO. 1

Licensee, PPL Susquehanna, LLC, hereby files Proposed Amendment No. 249 in support of a revision to its Facility Operating License No. NPF-14 dated July 17, 1982.

This amendment involves a revision to the Susquehanna SES Unit 1 Technical Specifications.



PPL Susquehanna, LLC By:

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B. L. Shriver Sr. Vice-President and Chief Nuclear Officer

Sworn to and subscribed before me this 23^{ra} day of September, 2002.

Notary Public

Notarial Seal Laurie Minto, Notary Public Salem Twp., Luzerne County My Commission Expires July 24, 2006

Member, Pennsylvania Association of Notaries

BEFORE THE UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of

PPL Susquehanna, LLC

Docket No. 50-388

PROPOSED AMENDMENT NO. 214 TO LICENSE NPF-22: ADOPTION OF NRC APPROVED GENERIC CHANGES TO IMPROVED TECHNICAL SPECIFICATIONS (RHR SUPPRESSION POOL COOLING) UNIT NO. 2

Licensee, PPL Susquehanna, LLC, hereby files Proposed Amendment No. 214 in support of a revision to its Facility Operating License No. NPF-22 dated March 23, 1984.

This amendment involves a revision to the Susquehanna SES Unit 2 Technical Specifications.



PPL Susquehanna, LLC By:

B. L. Shriver Sr. Vice-President and Chief Nuclear Officer

Sworn to and subscribed before me this 23^{M} day of September, 2002.

Notary Public

Notarial Seal Laurie Minto, Notary Public Salem Twp., Luzerne County My Commission Expires July 24, 2006

Member, Pennsylvania Association of Notaries

Attachment 1 to PLA-5522

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Safety Assessment

SAFETY ASSESSMENT

SECTION 1

SUMMARY OF PROPOSED CHANGE

In accordance with 10 CFR 50.90, PPL Susquehanna, LLC (PPL) proposes to revise the Susquehanna Steam Electric Station Units 1 and 2 (SSES) Technical Specifications (TS) to incorporate generic change TSTF-230, Revision 1 to NUREG 1433, "Standard Technical Specifications for General Electric Plants (BWR/4)," Revision 1, which has been approved by the NRC for adoption by licensees.

Limiting Condition for Operation (LCO) 3.6.2.3, "RHR Suppression Pool Cooling," is revised to add a new ACTION (ACTION B) to allow two RHR suppression pool cooling subsystems to be inoperable for 8 hours. Due to this change, the second part of existing Condition B is deleted and the entire ACTION B is renumbered as ACTION C.

The applicable TS Bases are also revised, consistent with TSTF-230, Revision 1, to document the proposed changes and to provide supporting information. The TS Bases are revised in accordance with TS 5.5.10, "TS Bases Control Program". TS Bases markups are included in Attachment 5 to this submittal for information.

TSTF-230, Revision 1 is adopted with no variances.

TSTF-230, Revision 1 has previously been approved for incorporation in the TS for Browns Ferry Units 1, 2, and 3 by license amendments dated June 8, 2001. As identified in the TSTF, the Grand Gulf, Hatch, and Peach Bottom Technical Specifications also contain this allowance.

The proposed change provides a significant benefit to the operation of SSES, in that it avoids an immediate plant shutdown which has the potential for resulting in a unit scram and discharge of steam to the suppression pool when both suppression pool cooling subsystems are inoperable and incapable of removing the generated heat. The proposed change also serves to provide consistency between the requirements for RHR suppression pool cooling and LCO 3.6.2.4, "RHR Suppression Pool Spray", which currently allows two RHR suppression pool spray subsystems to be inoperable for 8 hours.

SECTION II

DESCRIPTION AND BASIS (BOTH LICENSING AND DESIGN) OF THE CURRENT REQUIREMENTS

The improved STS (NUREG 1433 for BWR/4s) were developed jointly by the commercial nuclear power industry, through the Nuclear Energy Institute (NEI) sponsored Technical Specification Task Force (TSTF), the reactor vendor Owners' Groups, and the NRC to standardize operational requirements and philosophies throughout the industry. PPL implemented the improved Standard Technical Specifications (STS) at SSES in 1998 through Amendments 178 (Unit 1) and 151 (Unit 2), using NUREG 1433, Rev. 1 as the model.

Following a design basis accident, the RHR Suppression Pool Cooling System removes heat from the suppression pool. The suppression pool is designed to absorb the sudden input of heat from the primary system. In the long term, the pool continues to absorb residual heat generated by fuel in the reactor core. The capability to remove heat from the Suppression Pool must be provided in order to maintain the temperature inside the primary containment within design limits. This function is provided by two redundant RHR suppression pool-cooling subsystems. LCO 3.6.2.3 requires two RHR suppression pool cooling subsystems to be OPERABLE. One RHR suppression pool cooling subsystem is permitted to be inoperable for 7 days. If the inoperable RHR suppression pool cooling subsystem is not returned to OPERABLE status in 7 days, or if both RHR suppression pool cooling subsystems become inoperable, the unit must be in MODE 3 in 12 hours, and in MODE 4 in 36 hours.

SECTION III

EVALUATION OF PROPOSED CHANGE AND BASIS

PPL has reviewed TSTF-230, Revision 1 and has determined that the proposed change and its justification are applicable to SSES. The current TS require a unit shutdown in the event both RHR suppression pool cooling subsystems become inoperable. The proposed change would allow 8 hours to restore one RHR suppression pool cooling subsystem to OPERABLE status before initiating a unit shutdown. The proposed 8 hour time is considered appropriate since an immediate plant shutdown has the potential for resulting in a unit scram and discharge of steam to the suppression pool when both suppression pool cooling subsystems are inoperable and incapable of removing the generated heat. The 8 hours provides time to restore one of the subsystems prior to requiring a unit shutdown, yet is short enough that the probability of an accident occurring during this additional time is not significantly increased.

The proposed change has been evaluated in accordance with 10 CFR 50.92 and found to not involve a significant hazards consideration.

SECTION IV

CONCLUSION

Generic changes to the STS are part of the continuing effort to maintain and improve use of the STS. Such generic changes are proposed to the NRC by the TSTF. They are prepared and reviewed using a process developed by the TSTF and the NRC to correct and improve the STS. After approval by the NRC, generic changes are available for adoption by licensees who have implemented the improved STS.

While the current STS have been implemented at SSES as a significant improvement in TS, there remains a need to continue to improve and correct the STS as generic . requirements change (e.g., due to changes in regulations, industry standards, etc). The proposed change has been approved by the NRC on a generic basis, and is in compliance with applicable regulations. PPL has evaluated the proposed change for applicability to SSES, and has determined that operation of SSES in accordance with the proposed change the health and safety of the public.

Attachment 2 to PLA-5522

No Significant Hazards Consideration Evaluation

and

Environmental Assessment

NO SIGNIFICANT HAZARDS CONSIDERATION EVALUATION

The Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated; (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

PPL Susquehanna, LLC (PPL) proposes to revise the Susquehanna Steam Electric Station, Units 1 and 2 (SSES) Technical Specifications (TS) to adopt TSTF – 230, Revision 1, a generic change to NUREG 1433, Standard Technical Specifications for General Electric Plants (BWR/4), Revision 1, approved by the NRC for adoption by licensees. The proposed changes involve the relaxation of the Required Actions in the current TS.

Upon discovery of failure to meet a Limiting Condition for Operation (LCO), the TS specifies Required Actions to complete for the associated TS Conditions. Required Actions of the associated Conditions are used to establish remedial measures that must be taken in response to the degraded conditions. These measures minimize the risk associated with continued operation while providing time to repair inoperable features. The proposed change provides an 8 hour Completion Time to restore one RHR suppression pool cooling subsystem when both subsystems are found to be inoperable. This change is acceptable because an immediate plant shutdown has the potential for resulting in a unit scram and discharge of steam to the suppression pool when both suppression pool-cooling subsystems are inoperable and incapable of removing the generated heat. The 8 hours provides time to restore one of the subsystems prior to requiring a unit shutdown, yet is short enough that the probability of an accident occurring during this additional time is not significantly increased.

In accordance with the criteria set forth in 10 CFR 50.92, PPL has evaluated the proposed TS change and determined it does not represent a significant hazards consideration. The following is provided in support of this conclusion.

1. Does the proposed change involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated?

The proposed change relaxes the Required Actions of LCO 3.6.2.1 by allowing 8 hours to restore one RHR suppression pool cooling subsystem to OPERABLE status when both subsystems have been determined to be inoperable. Required Actions and their associated Completion Times are not initiating conditions for any accident previously evaluated. The proposed 8 hour Completion Time provides some time to restore required subsystem(s) to OPERABLE status, yet is short enough that operating an additional 8 hours is not a significant risk. Consequently, this change in Required Actions does not significantly increase the probability of occurrence of any accident previously evaluated. The Required Actions in the proposed change have been developed to provide assurance that appropriate remedial actions are taken in response to the degraded condition, considering the operability status of the RHR Suppression Pool Cooling System and the capability of minimizing the risk associated with continued operation. As a result, the consequences of any accident previously evaluated are not significantly increased. Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve a physical modification or alteration of plant equipment (no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. The Required Actions and associated Completion Times in the proposed change have been evaluated to ensure that no new accident initiators are introduced. Thus, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

The relaxed Required Actions do not involve a significant reduction in a margin of safety. The proposed change has been evaluated to minimize the risk of continued operation with both RHR suppression pool cooling subsystems inoperable. The operability status of the RHR Suppression Pool Cooling System, a reasonable time for repair or replacement of required features, and the low probability of a design basis accident occurring during the repair period have been considered in the evaluation. Therefore, this change does not involve a significant reduction in a margin of safety.

ENVIRONMENTAL ASSESSMENT

10 CFR 51.22(c)(9) identifies certain licensing and regulatory actions, which are eligible for categorical exclusion from the requirement to perform an environmental assessment. A proposed amendment to an operating license for a facility does not require an environmental assessment if operation of the facility in accordance with the proposed amendment would not (1) involve a significant hazards consideration; (2) result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite; or (3) result in a significant increase in individual or cumulative occupational radiation exposure. PPL Susquehanna, LLC has evaluated the proposed change and has determined that the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Accordingly, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with issuance of the amendment. The basis for this determination, using the above criteria, follows:

<u>Basis</u>

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As demonstrated in the No Significant Hazards Consideration Evaluation, the proposed amendment does not involve a significant hazards consideration.

There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite. The proposed change does not involve any physical alteration of the plant (no new or different type of equipment will be installed) or change in methods governing normal plant operation.

There is no significant increase in individual or cumulative occupational radiation exposure. The proposed change does not involve any physical alteration of the plant (no new or different type of equipment will be installed) or change in methods governing normal plant operation.

Attachment 3 to PLA-5522

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Technical Specification Markups

(Units 1 & 2)

RHR Suppression Pool Cooling 3.6.2.3

3.6 CONTAINMENT SYSTEMS

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

LCO 3.6.2.3 Two RHR suppression pool cooling subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

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CONDITION		REQUIRED ACTION	COMPLETION TIME
A. One RHR suppression pool cooling subsystem inoperable.	A.1	Restore RHR suppression pool cooling subsystem to OPERABLE status.	7 days
 Required Action and associated Completion Time not met. OR Two RHR suppression 	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Be in MODE 3. Be in MODE 4.	12 hours 36 hours
subsystems inoperable.			-

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TSTF-230, Rev. 1

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в.	Two RHR suppression pool cooling subsystems inoperable.	B.1	Restore one RHR suppression pool cooling subsystem to OPERABLE status.	8 hours
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RHR Suppression Pool Cooling 3.6.2.3

3.6 CONTAINMENT SYSTEMS

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

LCO 3.6.2.3 Two RHR suppression pool cooling subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

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_	CONDITION		REQUIRED ACTION	COMPLETION TIME
	A. One RHR suppression pool cooling subsystem inoperable.	A.1	Restore RHR suppression pool cooling subsystem to OPERABLE status.	7 days
0	C Required Action and associated Completion Time not met.		Be in MODE 3.	12 hours
	OR Two RNR suppression pool cooling subsystems inoperable.	@ .2	Be in MODE 4.	36 hours

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TSTF-230, Rev. 1

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В.	Two RHR suppression pool cooling subsystems inoperable	B.1	Restore one RHR suppression pool cooling subsystem to OPERABLE status.	8 hours
	inoperable.		status.	

Attachment 4 to PLA-5522

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Camera-Ready Version of Technical Specification Revisions

(Units 1 & 2)

RHR Suppression Pool Cooling 3.6.2.3

3.6 CONTAINMENT SYSTEMS

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

LCO 3.6.2.3 Two RHR suppression pool cooling subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

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CONDITION	REQUIRED ACTION	COMPLETION TIME
 A. One RHR suppression pool cooling subsystem inoperable. 	A.1 Restore RHR suppression pool cooling subsystem to OPERABLE status.	7 days
B. Two RHR suppression pool cooling subsystems inoperable.	B.1 Restore one RHR suppression pool cooling subsystem to OPERABLE status.	8 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	12 hours
	C.2 Be in MODE 4.	36 hours

RHR Suppression Pool Cooling 3.6.2.3

3.6 CONTAINMENT SYSTEMS

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

LCO 3.6.2.3 Two RHR suppression pool cooling subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

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CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One RHR suppression pool cooling subsystem inoperable.	A.1 Restore RHR suppression pool cooling subsystem to OPERABLE status.	7 days
B. Two RHR suppression pool cooling subsystems inoperable.	B.1 Restore one RHR suppression pool cooling subsystem to OPERABLE status.	8 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3. <u>AND</u>	12 hours
	C.2 Be in MODE 4.	36 hours

Attachment 5 to PLA-5522

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Technical Specification Bases Markups

(Units 1 & 2)

RHR	Suppression	Pool	Cooling
	••	В	3.6.2.3

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<u>A.1</u> (continued)

pool cooling capabilities afforded by the OPERABLE subsystem and the low probability of a DBA occurring during this period.

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If the Required Action and associated Completion Time of Condition A cannot be met within the required Completion Time of if two RHR suppression gool cooling subsystems are inoperable, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE REQUIREMENTS

SR 3.6.2.3.1

Verifying the correct alignment for manual, power operated, and automatic valves in the RHR suppression pool cooling mode flow path provides assurance that the proper flow path exists for system operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position since these valves were verified to be in the correct position prior to locking, sealing, or securing. A valve is also allowed to be in the nonaccident position provided it can be aligned to the accident position within the time assumed in the accident analysis. This is acceptable since the RHR suppression pool cooling mode is manually initiated. This SR does not require any testing or valve manipulation; rather, it involves verification that those valves capable of being mispositioned are in the correct position. This SR does not apply to valves that cannot be inadvertently misaligned, such as check valves.

(continued)

SUSQUEHANNA - UNIT 1

INSERT 2

<u>B.1</u>

With two RHR suppression pool cooling subsystems inoperable, one subsystem must be restored to OPERABLE status within 8 hours. In this condition, there is a substantial loss of the primary containment pressure and temperature mitigation function. The 8 hour Completion Time is based on this loss of function and is considered acceptable due to the low probability of a DBA and the potential avoidance of a plant shutdown transient that could result in the need for the RHR suppression pool cooling subsystems to operate.

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BASES

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<u>A.1</u> (continued)

pool cooling capabilities afforded by the OPERABLE subsystem and the low probability of a DBA occurring during this period.

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If the Required Action and associated Completion Time of Condition A cannot be met within the required Completion Nime or if two RHR suppression pool cooling subsystems are inoperable, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE REQUIREMENTS

<u>SR_3.6.2.3.1</u>

Verifying the correct alignment for manual, power operated, and automatic valves in the RHR suppression pool cooling mode flow path provides assurance that the proper flow path exists for system operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position since these valves were verified to be in the correct position prior to locking, sealing, or securing. A valve is also allowed to be in the nonaccident position provided it can be aligned to the accident position within the time assumed in the accident analysis. This is acceptable since the RHR suppression pool cooling mode is manually initiated. This SR does not require any testing or valve manipulation: rather, it involves verification that those valves capable of being mispositioned are in the correct position. This SR does not apply to valves that cannot be inadvertently misaligned, such as check valves.

(continued)

SUSQUEHANNA - UNIT 2

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<u>B.1</u>

With two RHR suppression pool cooling subsystems inoperable, one subsystem must be restored to OPERABLE status within 8 hours. In this condition, there is a substantial loss of the primary containment pressure and temperature mitigation function. The 8 hour Completion Time is based on this loss of function and is considered acceptable due to the low probability of a DBA and the potential avoidance of a plant shutdown transient that could result in the need for the RHR suppression pool cooling subsystems to operate.

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