ATTACHMENT ONE

PROPOSED CHANGES TO

TECHNICAL SPECIFICATIONS

3/4.7.9 RESIDUAL HEAT REMOVAL SYSTEM

NORTH ANNA POWER STATION

UNITS 1 AND 2

VIRGINIA ELECTRIC AND POWER COMPANY

3/4.7.9 RESIDUAL HEAT REMOVAL SYSTEM - (RHR)

OPERATING

LIMITING CONDITIONS FOR OPERATION

3.7.9.1 Two RHR subsystems shall be **OPERABLE**.

APPLICABILITY: **MODES 1, 2 and 3.**

ACTION: With one RHR subsystem inoperable, restore the inoperable subsystem to **OPERABLE** status within 7 days or be in **HOT SHUTDOWN** within the next 24 hours.

SURVEILLANCE REQUIREMENTS

4.7.9.1 Each RHR subsystem shall be demonstrated **OPERABLE** by:

a. Verifying isolation of the RHR system prior to the Reactor Coolant System pressure exceeding 500 psig, by closing, de-energizing both remote operated RHR suction isolation valves and locking the associated breakers.

b. At least once per 18 months, during shutdown,

1. Cycling each, remote or automatically operated valve in the subsystem flowpath through one complete cycle of full travel.

2. Verifying that each RHR pump is **OPERABLE** per Specification 4.0.5.

RESIDUAL HEAT REMOVAL SYSTEM - (RHR)

SHUTDOWN

LIMITING CONDITIONS FOR OPERATION

3.7.9.2 As a minimum, one RHR subsystem shall be **OPERABLE**.

APPLICABILITY: **MODES 4 and 5.**

ACTION: With no RHR subsystems **OPERABLE**, immediately restore at least one RHR subsystem to **OPERABLE** status or maintain the Reactor Coolant System T_{avg} less than 350°F by use of alternate heat removal methods. The provisions of Specification 3.0.3, 3.0.4 and 4.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.9.2 The required RHR subsystem shall be demonstrated **OPERABLE** by:

a. Verifying isolation of the RHR system prior to the Reactor Coolant System pressure exceeding 500 psig, by closing, de-energizing both remote operated RHR suction isolation valves and locking the associated breakers.

b. At least once per 31 days:

1. Cycling each testable, remote or automatically operated valve in the subsystem flowpath through at least one complete cycle, and
2. Verifying the correct position of each manual valve in the subsystem flowpath, not locked, sealed or otherwise secured in position, and
3. Verifying the correct position of each remote or automatically operated valve in the subsystem flowpath.

c. At least once per 18 months:

1. Cycling each, remote or automatically operated valve in the subsystem flowpath through one complete cycle of full travel.
2. Verifying that the RHR pump, in the subsystem flowpath, is **OPERABLE** per Specification 4.0.5.

3/4.7.9 RESIDUAL HEAT REMOVAL SYSTEM - (RHR)

OPERATING

LIMITING CONDITIONS FOR OPERATION

3.7.9.1 Two RHR subsystems shall be **OPERABLE**

APPLICABILITY: **MODES 1, 2 and 3.**

ACTION: With one RHR subsystem inoperable, restore the inoperable subsystem to **OPERABLE** status within 7 days or be in **HOT SHUTDOWN** within the next 24 hours.

SURVEILLANCE REQUIREMENTS

4.7.9.1 Each RHR subsystem shall be demonstrated **OPERABLE** by:

a. Verifying isolation of the RHR system prior to the Reactor Coolant System pressure exceeding 500 psig, by closing, de-energizing both remote operated RHR suction isolation valves and locking the associated breakers.

b. At least once per 18 months, during shutdown,

1. Cycling each, remote or automatically operated valve in the subsystem flowpath through one complete cycle of full travel.

2. Verifying that each RHR pump is **OPERABLE** per Specification 4.0.5.

PLANT SYSTEMS

RESIDUAL HEAT REMOVAL SYSTEM - (RHR)

SHUTDOWN

LIMITING CONDITIONS FOR OPERATION

3.7.9.2 As a minimum, one RHR subsystem shall be **OPERABLE**.

APPLICABILITY: **MODES 4 and 5.**

ACTION: With no RHR subsystems **OPERABLE**, immediately restore at least one RHR subsystem to **OPERABLE** status or maintain the Reactor Coolant System T_{avg} less than 350°F by use of alternate heat removal methods. The provisions of Specification 3.0.3, 3.0.4 and 4.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.9.2 The required RHR subsystem shall be demonstrated **OPERABLE** by:

a. Verifying isolation of the RHR system prior to the Reactor Coolant System pressure exceeding 500 psig, by closing, de-energizing both remote operated RHR suction isolation valves and locking the associated breakers.

b. At least once per 31 days:

1. Cycling each testable, remote or automatically operated valve in the subsystem flowpath through at least one complete cycle, and

2. Verifying the correct position of each manual valve in the subsystem flowpath, not locked, sealed or otherwise secured in position, and

3. Verifying the correct position of each remote or automatically operated valve in the subsystem flowpath.

c. At least once per 18 months:

1. Cycling each, remote or automatically operated valve in the subsystem flowpath through one complete cycle of full travel.

2. Verifying that the RHR pump, in the subsystem flowpath, is **OPERABLE** per Specification 4.0.5.

ATTACHMENT TWO

CHANGES TO PROPOSED

MERITS TECHNICAL SPECIFICATIONS

3.3.9 RESIDUAL HEAT REMOVAL SYSTEM

NORTH ANNA POWER STATION

UNITS 1 AND 2

VIRGINIA ELECTRIC AND POWER COMPANY

3.3 REACTOR COOLANT SYSTEM (RCS)

3.3.16 RCS Pressure Isolation Valve Leakage

LCO 3.3.16 The leakage from each RCS Pressure Isolation Valve (PIV) shall be limited to 0.5 gpm per nominal inch of valve size up to a maximum of 5 gpm, at a RCS pressure ≥ 2215 and ≤ 2255 psig.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more RCS PIVs outside leakage limit.	A.1 Restore RCS PIV leakage to within limit.	-----NOTE----- Completion Time is on a per valve basis ------------- 4 hours
	OR	
	A.2 Isolate the high pressure portion of the affected system from the low pressure portion by use of at least two closed manual or deactivated automatic valves.	4 hours
B. Required Action not met within required Completion Time.	B.1 Be in MODE 3.	6 hours
	AND	
	B.2 Be in MODE 5.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.3.16.1	-----NOTE----- 1. SR 3.0.4 is not applicable for entry into MODE 3 and 4. ---------- Verify leakage of each RCS PIV within limits. 2. In accordance with Section XI of the ASME Code, test pressure between 150 psig and 2235 psig are allowed.	18 months AND Prior to entry into MODE 2, whenever the unit has been in MODE 5 for > 72 hours if testing has not been performed in the previous 9 months AND Within 24 hours following valve actuation due to automatic or manual action, or flow through the valve AND Per SR 3.0.5

(continued)

SURVEILLANCE REQUIREMENTS (continued)

	SURVEILLANCE	FREQUENCY
SR 3.3.16.2	Verify Residual Heat Removal (RHR) System open interlock prevents the inlet valves from being opened with a simulated or actual RCS pressure signal ≥ 418 psig.	18 months
SR 3.3.16.3	~~Verify RHR System auto-closure interlock causes the inlet valves to close automatically with a simulated or actual RCS pressure signal ≥ 582 psig.~~	~~18 months~~
	Verify isolation of the RHR system by closing, ~~and~~ de-energizing both remote operated RHR suction isolation valves and locking the associated breakers.	Prior to exceeding 500 psig RCS pressure.

CROSS-REFERENCES

TITLE	NUMBER
RCS Loops - Mode 4	3.3.6
RCS Operational Leakage	3.3.15
Accumulators	3.4.1
ECCS Trains - T_{avg} > 350°F	3.4.2
Containment Integrity	3.5.1

ATTACHMENT THREE

DISCUSSION AND SAFETY EVALUATION

FOR PROPOSED CHANGES TO

TECHNICAL SPECIFICATIONS

3/7.7.9 RESIDUAL HEAT REMOVAL SYSTEM

NORTH ANNA POWER STATION

UNITS 1 AND 2

VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION UNITS 1 AND 2
PROPOSED TECHNICAL SPECIFICATION CHANGE
RESIDUAL HEAT REMOVAL SYSTEM

PROPOSED CHANGES

1. **CHANGING THE AUTOMATIC ISOLATION OF THE RESIDUAL HEAT REMOVAL SYSTEM FROM THE REACTOR COOLANT SYSTEM TO BE AN ADMINISTRATIVELY CONTROLLED OPERATION.**

T.S. 3/4.7.9.1 RESIDUAL HEAT REMOVAL - OPERATING

Specification 4.7.9.1.a will be modified to require isolation of the RHR system from the Reactor Coolant System when the RCS pressure is above 500 psig by closing and deenergizing the RHR suction isolation valves rather than requiring automatic isolation of the RHR suction isolation valves when the RCS pressure is above 660 psig..

DISCUSSION

The Residual Heat Removal (RHR) System is used to provide core cooling when the Reactor Coolant System (RCS) is operated below approximately 350°F and 450 psig. The system, which is located entirely within the Reactor Containment building, consists of two pumps, two heat exchangers, and appropriate piping and is not part of the Safety Injection System and does not perform any Emergency Core Cooling System functions. The RHR System piping inside the RHR isolation valves is designed for 600 psig at 400°F. RHR is connected to the "A" RCS hot leg by one pipe supplying suction to both RHR subsystems. The suction line has two motor operated valves (MOVs), MOV-700 and MOV-701, in series to isolate the RHR System from the RCS.

The RHR suction line valves, MOV-700 and MOV-701, operate similarly. These valves have no automatic open functions and they may be remotely opened using the control room pushbutton only if the RCS pressure is not greater than the open permissive interlock setpoint, 418 psig. The suction valves may be remotely closed by using the control room pushbuttons or automatically closed whenever the RCS pressure is above the autoclose setpoint, 582 psig.

Two relief valves, RH-RV-721A and RH-RV-721B, provide overpressure protection for the RHR system piping. One valve is located on the suction piping to each RHR pump with lift setpoints of 467 psig. Although each relief valve is capable of relieving the flow from three charging pumps, interlocks permit only two pumps to operate simultaneously and Technical Specification 3.5.3 and station procedures only allow one charging pump to be operable when the RCS cold leg temperature is less than or equal to 324°F on Unit 1 and 340°F on Unit 2. Therefore, the relief valves are fully capable of relieving the maximum mass input to the Reactor Coolant System (RCS).

In addition, RHR overpressure protection may also be provided by the Low Temperature Overpressurization Protection system (LTOP) from the Pressurizer Power Operated Relief Valves (PORVs), RC-PCV-455C and RC-PCV-456 when the RHR system is in service.

BASIS FOR TECHNICAL SPECIFICATION CHANGE

A disadvantage of the autoclosure feature is the possibility of an inadvertent valve closure during RHR operation resulting in the loss of decay heat removal capability. The Westinghouse Owners Group has evaluated the removal of the RHR suction valve autoclosure interlock. The results of this study (WCAP-11736-A) shows an increase in RHR availability and overall improvement in plant safety if the autoclosure interlock is removed. North Anna Unit 1 was used as one of the four lead plants for this project.

The WCAP reviews many references including a 1985 internal NRC memorandum which lists issues to be considered when a utility is requesting removal of the autoclosure interlock. These issues are:

1. The means available to minimize Event V concerns.

Response:

Means are available to minimize Event V concerns. Event V is defined as an intersystem LOCA which bypasses containment. With the entire North Anna RHR System located inside of containment, an Event V accident can not take place with the RHR System. Removing the RHR suction valve autoclosure interlock will not change the probability of an Event V for North Anna. Intersystem LOCAs between RHR and RCS are characterized as small break LOCAs inside of containment for North Anna. The RHR System provides three potential RCS LOCA paths, one through the suction line and one through each of the two discharge lines. The frequency of an intersystem LOCA associated with the RHR suction MOVs was quantified by Westinghouse for the current

North Anna design as 9.28 E-7 events per year. This intersystem LOCA probability does not significantly change after the autoclosure interlock has been removed.

2. The alarms available to alert the operator of an improperly positioned valve.

Response:

Although in the WCAP, the Westinghouse Owners' Group recommends installing an additional annunciation to specifically alert the control room operators to an improperly positioned RHR valve, no such new alarms are needed at North Anna. Existing control room annunciators at North Anna will adequately inform the control room operator of an overpressurization event when RHR is in service.

- Flow through the RHR relief valves, the letdown header relief valve or the Pressurizer PORVs will cause the Pressurizer Relief Tank annunciators to alarm.
- The RHR discharge piping high pressure annunciator will alarm
- The LTOP annunciators will inform the Control Room Operator of overpressurization events.

Leaving both suction valves open will cause the PRT annunciators to alarm when the RHR pressure opens the relief valves at 467 psig which is sufficiently below the RHR design pressure of 600 psig. The RHR discharge piping high pressure annunciator will provide additional warning if pressure reaches 560 psig.

If one suction MOV is left open and the other closed, the RCS could be fully pressurized without causing an annunciator to alarm. Then a single failure of the closed valve would cause an intersystem LOCA within containment. The unit would have to be depressurized until the intact MOV could be closed. Westinghouse is recommending alarms and status lights be installed at power stations considering autoclosure interlock removal. These alarms are intended to reduce the probability of leaving a single suction valve open. Two annunciators, one for each MOV, would decrease the probability of leaving one valve open while the other is closed to approximately the probability of both MOVs failing.

In addition to existing annunciators and existing procedures, the proposed Technical Specification change will protect from RHR overpressurization. When RHR is removed from service, the operator is required to close the suction valve, de-energize the motor by opening the power supply breaker, and lock the breaker in the open position. Independent operator verification is used for these actions.

At North Anna, because of the requirements cited above, the current probability of leaving one valve open and the other failing is likewise reduced to the probability of both valves failing. Additionally, design differences between North Anna and power stations which have RHR outside of containment or which have the Safety Injection System as part of the RHR System result in different consequences. For the latter utilities these consequences necessitate the installation of annunciators which warn of leaving one valve open. Because of existing operating procedures, existing control room alarms and a different RCS, RHR, and SI configuration, no new annunciators or status lights are needed at North Anna.

3. Adequacy of the RHR suction relief valve capacity.

Response:

Each RHR suction relief valve has the capacity to relieve the flow from at least one charging pump. Because electrical interlocks permit only two pumps to be operable at a time, the RHR relief valves are of sufficient capacity to relieve the flow from the available charging pumps. The capacity of the RHR relief valves is sufficient for any pressurization event.

4. Means other than the ACI to ensure both MOVs are closed (e.g., single switch actuating both valves).

Response:

The means to be used to ensure the MOVs are closed is through independent operator verification. When RHR is removed from service the existing procedures require closing the suction valve, de-energizing the motor by opening the power supply breaker, and locking the breaker in the open position. Independent verification will be used to ensure that these actions are properly performed.

5. Assurance that the function of the open permissive circuitry is not affected by the proposed change.

Response:

The open permissive interlock circuitry will be unaffected and the current open permissive setpoint will remain 418 psig. This interlock permissive prohibits the remote opening of the RHR suction valves unless the RCS pressure is less than 418 psig. Testing of the open permissive interlock will be performed after completion of the wiring changes necessary to remove the autoclosure interlock, and at regular testing intervals thereafter.

6. Assurance that MOV position indication will remain available in the control room.

Response:

The current control room position indication for the RHR suction valve MOVs will not be changed. The current control room indication provides valve position lights for full open, full closed and both lights illuminated for intermediate position. These indicators are de-energized when the valve is de-energized. Assurance that the suction and discharge MOVs are closed when the valves are de-energized will be through the use of independent verification of the correct performance of the applicable operating procedures.

7. Assessment of the proposed changes effect on RHR system reliability, as well as the effect on Low Temperature Overpressurization (LTOP) concerns.

Response:

Past experience shows that unnecessary actuation of the autoclosure interlock has caused a significant number of losses for decay heat removal capability when overpressurization transients were not in progress. Inadvertent isolation of the RHR System also increases the probability for overpressurization because the letdown system, which provides RCS pressure control, is connected to the RHR System. Deletion of the autoclosure interlock will therefore, increase the reliability of the RHR.

The performance of the North Anna LTOP will be enhanced with the deletion of the RHR autoclosure interlock. The RHR suction line relief valves will provide relief capability in addition to the existing Pressurizer PORVs. This additional relief capacity could be defeated by to the autoclosure interlock which would isolate the RHR relief valves from the RCS.

ACCIDENT SEQUENCE EVALUATION

All RHR overpressurization accidents may occur in one of four possible situations. The four situations are: 1. placing RHR in service, 2. RHR in service, 3. removing RHR from service, and 4. RHR not in service. The key points of each accident category are discussed as follows:

1. While the RHR System is being placed in service, overpressurization of the RHR System will be avoided by the open interlock of the suction MOVs. Each MOV has independent prevent open interlock circuitry, including separate RCS pressure transmitters. If overpressurization were to occur, then the ,RHR relief valves would provide adequate capacity and redundancy to prevent RHR pipe damage. The operator would be informed of the pressurization event by the Control Room annunciators and indicators. The RHR MOV may then be reclosed or RCS pressure decreased to terminate the transient.

2. When the RHR is in service, RHR and RCS overpressurization is prevented by the low temperature overpressurization protection (LTOP) Technical Specifications. These requirements allow only one Charging Pump to be operable and limit the temperature difference between the Steam Generator primary and secondary liquid temperatures. If an overpressurization event does occur, the Control Room Operator will be informed by the PRT annunciators, LTOP related annunciators and the RHR discharge piping annunciator. Mitigating the effects of the overpressurization will be the RHR relief valves and the Pressurizer PORVs. If the RCS temperature is above the LTOP system applicable RCS temperature, the RHR relief valves have adequate capacity and redundancy to handle the pressure transient until operators correct the cause of the event.

3. When the RHR System is being removed from service, overpressurization of the RHR System will be prevented by the use of operating procedures. These procedures will use independent operator verification to ensure the RHR suction MOVs are fully closed, the power supply breaker to the motor operators opened, and the breakers locked in the open position. Leaving both MOV suction valves open will cause the RHR relief valves to lift preventing further RCS pressurization. The operators will be able to identify that the suction valves are open by the PRT annunciators, PRT indicators and RHR discharge piping annunciator (if pressure is high enough). The operators will then be able to properly remove RHR from service or depressurize the RCS until the relief valves reseat.

4. When the RHR System is not in service, overpressurization of the RHR System is prevented by the suction line isolation valves open permissive interlock and the discharge line isolation valve and check valve on each discharge line. With the RCS at a significantly higher pressure than the RHR System, an overpressurization event due to an intersystem LOCA between these systems is considered to be the worst type of RHR overpressure accident. As previously discussed in the other three accident situations, leaving both suction line MOVs open is prevented by current procedural and proposed Technical Specification controls. Opening an RHR suction isolation valve is functionally prohibited unless the RCS pressure is below 418 psig by the open permissive circuitry.

   The following are the possible accident sequences with the RCS at high pressures:

   - Both suction MOV discs rupturing.
   - One suction MOV left open and the other MOV disc rupturing.
   - One discharge MOV left open and the check valve in the same line rupturing.
   - One discharge line check valve leaking and the MOV in the same line rupturing or leaking.

   The resulting intersystem LOCA and rapid depressurization of the RCS will be identified and responded to according to guidance in the applicable Emergency Operating Procedures.

Because of the currently existing overpressure protection features, it has been concluded that the automatic closure of the RHR suction isolation valves can be replaced by a Technical Specification requirement to manually isolate the RHR from the RCS whenever the RCS pressure is above 500 psig, without adding new annunciators or status lights. This change will not significantly increase the probability of an RHR overpressure event and will increase the reliability and availability of the RHR system during cold shutdown conditions.

CONCLUSIONS

The conclusion of this safety evaluation is that the overall safety of North Anna Power Station Unit 1 and Unit 2 will be improved. The Technical Specification surveillance requirement for the RHR autoclosure interlock should be modified as stated. The open interlock associated with RHR suction valves will be retained. Additional station modifications, such as adding annunciators or status lights warning of open valves, are not necessary. An increase in RHR availability will result from removing the automatic closure feature of the suction MOVs.

BASIS FOR NO SIGNIFICANT HAZARDS DETERMINATION

The proposed change does not involve a significant hazards consideration as defined in 10 CFR 50.92 because operation of North Anna Units 1 and 2 in accordance with this change would not:

1. result in a significant increase in the probability or consequence of an accident previously evaluated. Replacing the Residual Heat Removal System suction valve automatic closure interlock requirement with a requirement for manual isolation will not result in a significant change in the probability or consequences of an intersystem LOCA. This change will however decrease the probability for a loss of decay heat removal accident. The interlock has initiated past events where the suction valves have inadvertently closed. This accident sequence could lead to core damage if not corrected in a timely manner. Removing the autoclosure interlock significantly decreases, but does not eliminate, the possibility for this accident sequence.

   The two RHR discharge lines do not have autoclosure interlock protection. The probability of leaving an RHR suction valve open and rupture of the remaining suction valve is approximately the same as leaving an RHR discharge valve open and rupture of the single discharge check valve. An intersystem LOCA between the high pressure RCS and the low pressure RHR System can occur through the suction line or either of the two RHR discharge lines. Removing the suction valve autoclosure interlock will not have a significant effect on the intersystem LOCA probability associated with the suction line or discharge lines.

   The consequences of all UFSAR accidents remains the same because the RHR System is located entirely within containment and there are no changes to the radiological barriers within containment. With or without the autoclosure interlock, the worst case accident associated with a rupture of the RHR isolation valves is an intersystem LOCA. The consequences of this LOCA are similar to the consequences of LOCAs already analyzed in the UFSAR. The consequences for a loss of decay heat removal event remain the same after the autoclosure interlock is removed.

2. create the possibility of a new or different kind of accident from any accident previously identified. Administrative control utilizing independent verification to close and de-energize the RHR suction valves is not significantly different from using an autoclosure interlock to ensure both suction valves are closed when the RCS is pressurized above the RHR design pressure. Because there are no significant changes to the RHR System, the possibility for a different type of accident or malfunction are not created. The possible accident sequences have been previously evaluated.

3. result in a significant reduction in a margin of safety. This change does not alter the conditions or assumptions of the accident analysis or the basis of the current Technical Specification.

   RHR suction valve autoclosure interlock is not specifically addressed in any Technical Specification basis. Removing the RHR suction valve autoclosure interlock will increase the availability of the RHR System to remove decay heat during shutdown conditions.

   When the RHR System is in service, the RCS low temperature overpressurization protection (LTOP) system will provide an adequate margin of safety to protect the RCS and the RHR Systems. In addition to the LTOP system, the two RHR relief valves are each sized to provide protection against RHR overpressurization.

Therefore, pursuant to 10 CFR 50.92, based on the above considerations, it has been determined that this change does not involve a significant hazards consideration.

2. MODIFICATION OF RHR PUMP SURVEILLANCE REQUIREMENTS

T.S. 3/4.7.9.1 RESIDUAL HEAT REMOVAL - OPERATING
T.S. 3/4.7.9.2 RESIDUAL HEAT REMOVAL - SHUTDOWN

The RHR pump testing change replaces the requirement to demonstrate that each pump can develop greater than or equal to 123 psi differential pressure with a requirement that the pumps be tested in accordance with Specification 4.0.5 which refers to Section XI of the 1980 ASME Boiler and Pressure Vessel Code.

DISCUSSION

The current test requires the pump discharge valve to be throttled, with the system discharge motor operated valves open, to obtain at least 123 psi differential pressure which in effect places the pump in a mini-flow recirculation condition. NRC Bulletin 88-04, "Potential Safety Related Pump Loss", identified concerns with minimum flow designs of safety related pumps and requested licensees to investigate these concerns and correct them where applicable. Virginia Electric and Power Company responded to these concerns in a letter to the NRC on August 8, 1988 (Serial No. 88-275B) and subsequently determined that full flow testing in accordance with Specification 4.0.5, which refers to Section XI of the 1980 ASME Boiler and Pressure Vessel code, to be prudent and to provide the most reliable data on pump performance while reducing pump operation under mini-flow conditions.

The minimum differential pressure requirement of Technical Specification 3.7.9.1 was based on the assumption that the RHR pumps receive an Engineered Safety Feature (ESF) actuation and are required for proper Safety Injection (SI) flow. The RHR system is not required for emergency core cooling under any accident conditions and is not capable of providing SI flow to the core. Therefore, the minimum differential pressure, that is required in the STS for SI pumps, is not applicable for North Anna's RHR pumps.

BASIS FOR NO SIGNIFICANT HAZARDS DETERMINATION

The proposed change in the RHR pump surveillance testing criteria does not involve a significant hazards consideration as defined in 10 CFR 50.92 because operation of North Anna Units 1 and 2 in accordance with this change would not:

1. result in a significant increase in the probability or consequence of an accident previously evaluated. Testing of the RHR pumps in accordance with ASME XI requirements instead of the 123 psi differential pressure test requirement will not increase the consequences of any previously evaluated accidents. North Anna's RHR system is not part of the ECCS. The RHR pumps are not required to flow to the core during a Safety Injection.

2. create the possibility of a new or different kind of accident from any accident previously identified. Because there are no significant changes to the RHR System, the possibility for a different type of accident or malfunction are not created. The possible accident sequences have been previously evaluated.

3. result in a significant reduction in a margin of safety. This change does not alter the conditions or assumptions of the accident analysis or the basis of the current Technical Specification. Since the RHR system does not perform any ECCS functions, testing of the RHR pumps in accordance with ASME Section XI instead of the current 123 psi differential pressure test requirement does not reduce any margin of safety and does enhance overall system reliability by eliminating pump wear from operation in a minimum recirculation flow condition.

Therefore, pursuant to 10 CFR 50.92, based on the above considerations, it has been determined that this change does not involve a significant hazards consideration.

3. ADMINISTRATIVE CHANGES

T.S. 3/4.7.9.1 RESIDUAL HEAT REMOVAL - OPERATING

The Surveillance Requirements 4.7.9.1 is being reformatted for consistency and clarity. Since the surveillances are required at 18 month intervals, this will be stated in the common header rather than restating it in each individual surveillance requirement. This is consistent with other Technical Specifications.

T.S. 3/4.7.9.2 RESIDUAL HEAT REMOVAL - SHUTDOWN

Currently, Specification 4.7.9.2 cites Specification 4.7.9.1 for the 18 month surveillance requirements. This change will reiterate these requirements in their entirety rather than requiring referring to a separate specification. This will eliminate confusion and clarify the requirements.

T.S. 3/4.7.9.1 RESIDUAL HEAT REMOVAL - OPERATING
T.S. 3/4.7.9.2 RESIDUAL HEAT REMOVAL - SHUTDOWN

Throughout specifications 3/4.7.9.1 and 3/4.7.9.2, the term "residual heat removal" is being replaced by "RHR". "RHR" is currently defined in the title of 3.7.9.1 and is currently used in the title of 3.7.9.2. This change brings uniformity by defining "RHR" in the title of each specification and thereafter using "RHR" throughout the two specifications.

DISCUSSION

These Changes are administrative in nature only and involve no changes to the plant equipment or operating practices.

BASIS FOR NO SIGNIFICANT HAZARDS DETERMINATION

We have reviewed the proposed administrative changes to Technical Specifications 3/4.7.9.1 and 3/4.7.9.2 and have found that these changes will not involve a significant hazards considerations because the changes conform to 48 FR 148764 (14870) "Examples of Amendments That Are Considered Not Likely To Involve Significant Hazards Considerations...", example (i) "A purely administrative change to technical specifications: for example a change to achieve consistency throughout the technical specifications, correction of an error, or a change in nomenclature." The proposed changes will not:

1. result in a significant increase in the probability or consequences of an accident previously evaluated, because, the changes are only of an administrative nature intended to clarify the affected technical specification and provide for greater consistency. These Changes involve no changes to the plant equipment or operating practices and procedures.

2. create the possibility of a new or different kind of accident, because, the changes are only of an administrative nature intended to clarify the affected technical specification and provide for greater consistency. These Changes involve no changes to the plant equipment or operating practices and procedures.

3. result in a significant reduction in the margins of safety because, the changes are only of an administrative nature intended to clarify the affected technical specification and provide for greater consistency. These Changes involve no changes to the plant equipment or operating practices and procedures.

Therefore, pursuant to 10 CFR 50.92, based on the above consideration, it has been determined that operation of North Anna Power Station Units 1 and 2, in accordance with these changes, will not involve a significant hazards consideration.

References

1. U.S.Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, "Safety ,Evaluation Report, North Anna Power Station Units 1 and 2, Docket Numbers 50-338 and 50-339." NUREG-0053, Original report Issued June 1976. Supplement Number 7 issued August 1977 section 5.2.8 Reactor Coolant Pressure Boundary, Overpressurization Protection. Supplement 11 issued August 1980.

2. Virginia Electric and Power Company, North Anna Power Station, "Licensee Event Reports" (LERs). Unit 1 Docket Number 50-338: 87-007-00. 83-003/03L-0. Unit 2, Docket Number 50-339: 83-036/03L-0, 83-023/03L-0, 80-001/03L-0.

3. U.S.Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, "Standard Technical Specifications for Westinghouse Pressurized Water Reactors", NUREG-0452, revision 4 issued Fall 1983.

4. U.S.Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants", NUREG-0800, revised June 1987.

5. United States Government. "Code of Federal Regulations", Title 10, Energy. revised January 1, 1988.

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