P.O. Box 63 Lycoming, New York 13093



£.,

2

Nine Mile Point Nuclear Station February 3, 2003 NMP2L 2082

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

SUBJECT: Nine Mile Point Unit 2 Docket No. 50-410

> Exigent License Amendment Request Pursuant to 10 CFR 50.90: Functional Testing of Suppression Chamber-to-Drywell Vacuum Breakers – SR 3.6.1.7.2 TAC No. MB7331

Gentlemen:

Pursuant to 10 CFR 50.90, Nine Mile Point Nuclear Station, LLC, (NMPNS) hereby requests an exigent amendment to Nine Mile Point Unit 2 (NMP2) Operating License NPF-69. The proposed changes to the Technical Specifications (TSs) contained herein would revise TS 3.6.1.7, "Suppression Chamber-to-Drywell Vacuum Breakers," to allow an exception to the periodic functional testing requirements (cycling the vacuum breaker open and closed) for one of eight vacuum breakers. Specifically, the proposed change revises Surveillance Requirement (SR) 3.6.1.7.2 such that the functional testing requirement would not apply to vacuum breaker 2ISC\*RV36B for the remainder of Cycle 9 (the current operating cycle).

The testing equipment used to perform SR 3.6.1.7.2 for vacuum breaker 2ISC\*RV36B is operating on an intermittent basis. The degraded testing equipment (test cylinder and linkage) is located in the drywell and cannot be accessed for repair or replacement at power. The proposed license amendment is necessary because future performance of SR 3.6.1.7.2 could cause failure of vacuum breaker 2ISC\*RV36B to return to the closed position after testing. The degraded testing equipment does not affect the ability of the vacuum breaker to perform its intended function. The proposed change will allow degraded testing equipment to be repaired or replaced during Refueling Outage 9 (RFO9). Should an outage of sufficient duration, and which permits drywell entry, occur prior to RFO9, the affected equipment will be repaired or replaced and functional testing resumed.

The proposed license amendment is needed to avoid a potential shutdown in accordance with TS 3.6.1.7, which would require NMP2 to be placed in Mode 3 within 84 hours and Mode 4 within the following 24 hours after failing to perform the functional test for

Page 2 NMP2L 2082

vacuum breaker 2ISC\*RV36B. Therefore, NMPNS requests approval of this license amendment application on an exigent basis and issuance of the amendment no later than February 21, 2003, with an implementation period of seven days. The NRC previously approved a similar TS change for NMP2 (for two vacuum breakers due to degraded position indication switches) in License Amendment No. 98, dated September 7, 2001 (TAC No. MB2567).

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c) and it has been determined that the change involves no significant hazards considerations.

Pursuant to 10 CFR 50.91(b)(1), NMPNS has provided a copy of this license amendment request and the associated analyses regarding no significant hazards considerations to the appropriate state representative.

I declare under penalty of perjury that the foregoing is true and correct. Executed on February 3, 2003.

Sincerely,

milism John T. Conway

Vice President Nine Mile Point

JTC/JJD/jm

Attachments:

- 1. Evaluation of Proposed Technical Specification Changes
- 2. Proposed Technical Specification Changes (Mark-up)
- 3. List of Regulatory Commitments
- 4. Explanation of the Exigency and Why the Situation Could Not Have Been Avoided
- Mr. H. J. Miller, NRC Regional Administrator, Region I
   Mr. G. K. Hunegs, NRC Senior Resident Inspector
   Mr. P. S. Tam, Senior Project Manager, NRR (2 copies)
   Mr. John P. Spath, NYSERDA

# EVALUATION OF PROPOSED TECHNICAL SPECIFICATION CHANGES

- Subject: Exigent License Amendment Request Pursuant to 10 CFR 50.90: Functional Testing of Suppression Chamber-to-Drywell Vacuum Breakers – SR 3.6.1.7.2
- 1.0 DESCRIPTION

.

•

- 2.0 PROPOSED CHANGE
- 3.0 BACKGROUND
- 4.0 TECHNICAL ANALYSIS
- 5.0 REGULATORY SAFETY ANALYSIS
- 6.0 ENVIRONMENTAL CONSIDERATION

# 1.0 DESCRIPTION

This letter is a request to amend Operating License NPF-69 for Nine Mile Point Unit 2 (NMP2).

The proposed changes would amend the Operating License to revise Technical Specification (TS) 3.6.1.7, "Suppression Chamber-to-Drywell Vacuum Breakers," to allow the deferral of functional testing for one of eight vacuum breakers until the next refueling outage. Functional testing of the vacuum breakers is required every 31 days and within 12 hours after any discharge of steam to the suppression chamber from the safety/relief valves by Surveillance Requirement (SR) 3.6.1.7.2.

During the last functional testing performed on vacuum breaker 2ISC\*RV36B, the vacuum breaker disc did not fully close during initial testing. Full closure was achieved after cycling the vacuum breaker several times. A Kepner-Tregoe analysis determined that the most probable cause of the intermittent closure of the vacuum breaker during the functional testing was due to degraded testing equipment (pneumatic actuator and linkages). Further degradation of the testing equipment could result in the failure of the vacuum breaker to fully close after testing and the subsequent shutdown of NMP2 for repairs. The degradation of the testing equipment does not affect the proper functioning of the vacuum breaker when required by drywell/suppression chamber conditions; only during the testing cycle. Vacuum breaker 2ISC\*RV36B is currently operable and capable of performing its open and closed safety functions.

The next functional test of 2ISC\*RV36B must be performed by February 21, 2003 (31 days plus the 25% extension allowed by SR 3.0.2). Nine Mile Point Nuclear Station, LLC (NMPNS) requests that this proposed amendment be approved and issued by February 21, 2003 to avoid further functional testing of 2ISC\*RV36B with degraded testing equipment.

# 2.0 PROPOSED CHANGE

The proposed change to TS 3.6.1.7, "Suppression Chamber-to-Drywell Vacuum Breakers," revises SR 3.6.1.7.2 to exclude performance of functional testing for one of eight vacuum breakers for the remainder of Cycle 9, approximately fourteen months. Specifically, the existing Note contained in SR 3.6.1.7.2 will be revised as follows:

"Not required to be met for vacuum breaker 2ISC\*RV36B for the remainder of Cycle 9."

The proposed change to the TSs is indicated on the mark-up page provided in Attachment 2. The TS Bases will not be revised to reflect this temporary TS change.

# 3.0 BACKGROUND

The primary function of the suppression chamber-to-drywell vacuum breakers is to relieve vacuum in the drywell. At NMP2, eight vacuum breakers are mounted in four lines (two in-series vacuum breakers per line) connecting the drywell and the suppression chamber. The vacuum breakers allow air and steam flow from the suppression chamber to the drywell when the drywell is at a negative pressure with respect to the suppression chamber. Therefore, the suppression chamber-to-drywell vacuum breakers function to prevent an excessive negative differential pressure across the suppression chamber-to-drywell boundary. Each vacuum breaker is a self-actuating valve, similar to a check valve.

A negative differential pressure across the drywell floor is caused by rapid depressurization of the drywell. Events that cause this rapid depressurization are inadvertent drywell spray actuation and steam condensation from sprays or subcooled water reflood of a break in the event of a primary system rupture. Cooling cycles result in minor pressure transients in the drywell that occur slowly and are normally controlled by heating and ventilation equipment. Spray actuation or spill of subcooled water out of a break results in more significant pressure transients and becomes important in sizing the vacuum breakers.

During accident scenarios, in the event of a primary system rupture, steam condensation within the drywell results in the most severe pressure transient. Following a primary system rupture, the atmosphere in the drywell is purged into the suppression chamber free airspace, leaving the drywell full of steam. Subsequent condensation of the steam can be caused by (1) emergency core cooling systems (ECCS) flow from a recirculation line break, or (2) drywell spray actuation following a loss of coolant accident (LOCA). These two cases determine the maximum depressurization rate of the drywell.

In addition, the waterleg in the NMP2 Mark II containment vent system downcomers is controlled by the drywell-to-suppression chamber differential pressure. If the drywell pressure is less than the suppression chamber pressure, there will be an increase in the vent waterleg height. This will result in an increase in the water clearing inertia in the event of a postulated LOCA, resulting in an increase in the peak drywell pressure. This in turn will result in an increase in the pool swell dynamic loads. The vacuum breakers limit the height of the waterleg in the vent system during normal operation.

Analytical methods and assumptions involving the suppression chamber-to-drywell vacuum breakers are presented in the NMP2 Updated Safety Analysis Report (USAR) as part of the accident response of the primary containment systems. The Design Basis Accident (DBA) analyses assume that the vacuum breakers are closed initially and remain closed and leak tight until the suppression chamber is at a positive pressure of 0.25 psid relative to the drywell.

During a LOCA, the vacuum breakers must initially be closed to limit drywell-tosuppression chamber bypass leakage. The vacuum breakers must also be capable of reclosing after a suppression pool swell event. A pool swell event would raise the water level in the suppression pool and pressurize the suppression chamber airspace sufficiently to momentarily open the vacuum breakers. This occurs after the initial steam release from the drywell to the suppression pool during a LOCA. The accident analysis assumptions for the closed function of the vacuum breakers are satisfied when at least one vacuum breaker in each of the four vacuum breaker lines is fully closed and capable of reclosing following a pool swell event. The additional vacuum breaker in each line satisfies the single failure criterion.

.

Both vacuum breakers in three of the four vacuum breaker lines must open during a LOCA to limit the negative differential pressure between the drywell and suppression chamber. An additional vacuum breaker line is provided to accommodate the postulated single failure of one vacuum breaker to open. The results of the analyses show that the design pressure for the drywell floor is not exceeded for the full spectrum of line breaks with proper operation of the vacuum breakers in three lines. The vacuum breaker opening differential pressure setpoint and the requirement that four vacuum breaker pairs be operable are a result of the requirement placed on the vacuum breakers to limit the vent system waterleg height assuming a single failure.

The technical specifications require the performance of three surveillances to provide assurance that the vacuum breakers remain operable:

SR 3.6.1.7.3 requires the opening setpoint of each vacuum breaker to be verified every 24 months. The setpoints were verified in Refueling Outage 8 (RFO8). This SR is not affected by the proposed change.

SR 3.6.1.7.2 requires performance of a functional test (cycling open and closed) of each vacuum breaker every 31 days and within 12 hours of a discharge of steam to the suppression chamber from the safety/relief valves (SRVs). The surveillance demonstrates that each vacuum breaker opens adequately to perform its design function and returns to the fully closed position. The surveillance frequency was chosen to be 31 days to be conservative relative to normal inservice testing requirements for testing of check valves quarterly because the vacuum breakers are located in a harsh environment (the suppression chamber airspace). Performance of the surveillance within 12 hours after a discharge from the SRVs was recommended by the NRC Staff in Generic Letter 93-05; however, the discharge of steam to the suppression chamber from the SRVs is not considered to affect vacuum breaker operability. The vacuum breakers are cycled during power operation remotely from the control room using a pneumatic actuator. The control room position indication is normally used to verify vacuum breaker position. As indicated in the Bases for TS 3.6.1.7, an alternate method for verifying that the vacuum breaker is closed after exercising is available by verifying a differential pressure is maintained between the drywell and suppression chamber. When the alternate method is used, one vacuum breaker in the line being tested must be opened to permit the position verification of the other vacuum breaker in the series.

SR 3.6.1.7.1 requires verification that each vacuum breaker is closed every 14 days. The surveillance verification ensures that a potential large bypass leakage path is not present. The surveillance is performed by observing the vacuum breaker position indication. Should position indication be lost, the surveillance can alternately be completed by verifying a differential pressure is maintained between the drywell and suppression chamber. When the alternate method is used, one vacuum breaker in the line being tested must be opened to permit the position verification of the other vacuum breaker in the series. This SR is not affected by the proposed change and will continue to be performed.

¢

On January 15, 2003, during performance of the functional testing required by SR 3.6.1.7.2, vacuum breaker 2ISC\*RV36B failed to fully reclose after test stroking to full open. After exercising vacuum breaker 2ISC\*RV36B several additional times, the vacuum breaker position switches indicated that the disc was closed and the functional testing for vacuum breaker 2ISC\*RV36B was successfully completed. Troubleshooting performed after the initial failure of the vacuum breaker to fully close determined that the proximity switches used for position indication were functioning properly. A Kepner-Tregoe analysis determined that the most probable cause of the intermittent closure of the vacuum breaker during the functional testing was due to degraded testing equipment (pneumatic actuator and linkages). The vacuum breaker was visually inspected during the last refueling outage (RFO8) in the spring of 2002.

Functional testing of the vacuum breakers is performed remotely from the NMP2 control room. The Parker-Hannifin pneumatic test actuator provides for a mechanical lever action to linkages which push the vacuum breaker disk to the full open position. Upon venting the motive gas from the test actuator, a return spring allows the test actuator and linkages to retract to their de-energized positions, clear of the vacuum breaker disc. The vacuum breaker disc then falls closed and is maintained closed by a set of permanent magnets. The full open and full closed position indications are displayed in the control room. The testing equipment in the de-energized position does not affect the capability of the vacuum breaker to function automatically.

This proposed change is necessary because future performance of SR 3.6.1.7.2 could cause vacuum breaker 2ISC\*RV36B to fail to fully close after testing due to failure of the testing equipment (pneumatic actuator and linkages) to fully retract after use. Inability to perform the functional testing required by SR 3.6.1.7.2 or to confirm the vacuum breaker closed as required by SR 3.6.1.7.1 would result in declaring the vacuum breaker inoperable. TS 3.6.1.7 would then require placing the reactor in Mode 3 within the next 84 hours and Mode 4 in the following 24 hours. NMPNS has concluded that a plant shutdown would unnecessarily challenge plant systems.

Consequently, NMPNS is requesting an exception to the functional testing requirement of SR 3.6.1.7.2 for vacuum breaker 2ISC\*RV36B for the remainder of Cycle 9 (approximately fourteen months). NMPNS will continue to verify that the vacuum breaker is closed every 14 days as required by SR 3.6.1.7.1.

A review was performed to identify the operational and maintenance activities that could affect the reliability of the vacuum breakers during the interval prior to RFO9. Based on the review, it was concluded that only the required quarterly reactor core isolation cooling (RCIC) system pump test (SR 3.5.3.3) would discharge steam to the suppression chamber during the testing. However, previous testing has not resulted in significant increases in the suppression chamber pressure, temperature, or humidity. Furthermore, since this test is required to be performed during plant operation, appropriate precautions are taken to ensure that the impact on other affected structures, systems, or components (including the vacuum breakers) that could affect their safety functions is minimized. Therefore, the required RCIC pump testing will not adversely affect vacuum breaker operability.

In November 2002, NMP2 experienced a condition where vacuum breaker 2ISC\*RV36B cycled three times in response to a steam discharge from the safety/relief valves (SRVs). Subsequent functional testing verified that the vacuum breaker remained operable. This provides additional assurance that an inadvertent actuation of an SRV during the proposed fourteen-month deferral of the functional testing requirement would not adversely affect vacuum breaker operability or performance.

The NRC previously approved a similar TS change for NMP2 in License Amendment No. 98, dated September 7, 2001 (TAC No. MB2567). This amendment allowed the deferral of functional testing of both vacuum breakers in one vacuum breaker pair (2ISC\*RV35A and 2ISC\*RV35B) for eight months until the next scheduled refueling outage. The functional testing was deferred due to degraded position indication switches, which could have prevented confirmation that the vacuum breakers were closed after functional testing. The degraded position indication switches were replaced with an improved design in RFO8.

The functional testing equipment for suppression chamber-to-drywell vacuum breaker 2ISC\*RV36B will be repaired or replaced during RFO9. Should an outage of sufficient duration and which permits drywell entry occur prior to RFO9, the testing equipment will be repaired or replaced and functional testing resumed.

# 4.0 TECHNICAL ANALYSIS

÷

1

As described above, the closed safety functions of the vacuum breakers are to close to limit drywell-to-suppression chamber bypass leakage and to reclose following a suppression pool swell event. The open safety function is to open to prevent an excessive negative differential pressure across the suppression chamber-to-drywell boundary. The proposed change does not physically modify the vacuum breakers. The proximity switches for all eight vacuum breakers were calibrated and the opening setpoint for each vacuum breaker was confirmed during the last refueling outage. The vacuum breakers were opened and confirmed closed after the last performance of SR 3.6.1.7.2. Therefore, all eight vacuum breakers (four vacuum breaker pairs) are considered operable.

The inability to perform functional testing of vacuum breaker 2ISC\*RV36B will not affect the ability of the vacuum breaker to operate when necessary. A review of NMP2 deviation event reports (DERs) and other plant records related to suppression chamberto-drywell vacuum breakers did not identify any failures to open or close when required due to mechanical problems with the vacuum breakers. Additionally, the review did not identify any past failures to close due to degraded testing equipment. A review of industry failure data for the type of vacuum breaker utilized at NMP2 (GPE Controls N/A Model LD240-496) found no failures to open upon demand due to mechanical causes. The review found two failures to close upon demand due to the test actuator failing to properly retract thereby holding the disc partially open. The review also found two instances at other plants in the last fourteen years when this type of vacuum breaker failed to close for reasons other than failure of test equipment. These two instances were attributable to inadequate maintenance. A review of NMP2 preventive maintenance procedures shows that the reliability concerns identified at the other units have been addressed by appropriate component replacement intervals. In general, based on the NMP2 DER and historical record reviews and available industry failure data, the vacuum breakers have high mechanical reliability.

The vacuum breakers are located in a normally inert environment, which minimizes corrosion potential. The vacuum breakers utilize a stainless steel body, flapper and hinge pin. This material is corrosion resistant. The vacuum breakers are also provided with magnetic latching to minimize vibrational wear. Therefore, the effects of corrosion and vibration are not expected to adversely affect the capability of the vacuum breakers to function automatically.

Inservice testing (IST) of the vacuum breakers is required by the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code OM-1987, Part 1 through 10 CFR 50.55a. At NMP2, the vacuum breakers are classified as pressure relief valves. Section 1.3.4.1(b) of OM-1987, Part 1 requires testing of each valve once each 10 years with a minimum of 20% of the valves tested within any 48 months. The IST includes verification of open and close capability, set pressure, leakage testing, and performance of position sensing accessories. NMP2 performs the IST on all eight vacuum breakers every 24 months (each refueling cycle). The Code required seat leakage test is performed every refueling outage. Therefore, a one-time extension of the functional testing surveillance requirement from 31 days to fourteen months for vacuum breaker 2ISC\*RV36B would still only be a fraction of the surveillance interval required by the ASME Code. Additionally, a 24 month testing frequency is recommended by the vendor in the technical manual for the vacuum breakers.

A risk analysis was performed for the potential extension of the surveillance interval for vacuum breaker 2ISC\*RV36B from 31 days to fourteen months. Fourteen months is the time remaining until RFO9. The risk analysis also included the potential impact of an inadvertent safety/relief valve lift. The risk analysis concluded that extension of the surveillance frequency would not be risk significant. The increase in core damage frequency and large early release frequency were found to both be less than 10<sup>-8</sup>/yr. The

changes both correspond to Region III of the acceptance guidelines presented in Regulatory Guide 1.174, "An Approach to Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis."

# 5.0 REGULATORY SAFETY ANALYSIS

÷

# 5.1 No Significant Hazards Consideration Analysis

Nine Mile Point Nuclear Station, LLC (NMPNS) is requesting an exception to the current requirement of the Nine Mile Point Unit 2 (NMP2) Technical Specifications (TS) Surveillance Requirement (SR) 3.6.1.7.2 to defer functional testing of suppression chamber-to-drywell vacuum breaker 2ISC\*RV36B until degraded testing equipment can be repaired or replaced in the next refueling outage. The ability of the vacuum breaker to function automatically is not affected by the degraded testing equipment. Reviews of industry and NMP2 component failures confirm that this type of vacuum breaker has high mechanical reliability. All four vacuum breaker pairs will remain capable of performing their open and closed safety functions and are considered operable. A risk assessment performed concluded that deferral of the surveillance was not risk significant.

NMPNS has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No.

Proper functioning of the suppression chamber-to-drywell vacuum breakers is required for accident mitigation. Failure of the vacuum breakers is not assumed as an accident initiator for any accident previously evaluated. Therefore, any potential failure of a vacuum breaker to perform when necessary will not affect the probability of an accident previously evaluated.

During a loss of coolant accident (LOCA), the vacuum breakers are assumed to initially be closed to limit drywell-to-suppression chamber bypass leakage and must be capable of reclosing following a suppression pool swell event. The vacuum breakers open to prevent an excessive negative differential pressure across the suppression chamber-to-drywell boundary. The proposed change will not affect the capability of the vacuum breakers to perform their open and closed safety functions. Therefore, all four vacuum breaker pairs will remain operable and available to mitigate the consequences of a LOCA. Therefore, the proposed changes do 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?

Response: No.

×.

The suppression chamber-to-drywell vacuum breakers are used to mitigate the potential consequences of an accident. The proposed change does not affect the capability of the vacuum breakers to perform their open and closed safety functions. Thus, the initial conditions assumed in the accident analysis are not affected. Since the vacuum breakers have demonstrated high reliability, proper functioning of the four vacuum breaker pairs is assured in order to satisfy the current accident analysis. The proposed amendment does not involve a change to plant design and does not involve any new modes of operation or testing methods. Accordingly, the vacuum breakers will continue to perform their accident mitigation safety functions as previously evaluated. Therefore, the proposed changes do 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?

Response: No.

The deferral of functional testing for one vacuum breaker for the remainder of Cycle 9 is not risk significant, in that the increase in core damage frequency and large early release frequency were found to be less that 10<sup>-8</sup>/yr. The vacuum breakers are not modified by the proposed amendment. Reviews of vacuum breaker failure history show that the vacuum breakers have a high reliability to open or close when necessary. Thus, both vacuum breakers in each of the four vacuum breaker lines are expected to remain available to perform their accident mitigation safety functions. Furthermore, the 14-day surveillance that verifies the vacuum breakers are closed will continue to be performed to ensure a potential bypass leakage path is not present. Accordingly, all four vacuum breaker pairs are considered operable. The accident analysis assumptions for the closed safety functions of the vacuum breakers are satisfied when at least one vacuum breaker in each of the four vacuum breaker lines is fully closed and capable of reclosing following a suppression pool swell event. The additional vacuum breaker in each line satisfies the single failure criterion. The open safety function of the vacuum breakers is satisfied when three of the four vacuum breaker pairs open during a design basis accident. The fourth vacuum breaker pair satisfies the single failure criterion. Since all of the vacuum breakers are considered operable and available to perform their open and closed safety functions, the proposed change will not involve a significant reduction in a margin of safety.

Based on the above, NMPNS concludes that the proposed amendment presents no significant hazards considerations under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

# 5.2 Applicable Regulatory Requirements/Criteria

æ

τ.

Based on the considerations discussed above evaluating the proposed change per the requirements of 10 CFR 50.91 and 50.92, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

# 6.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

e.

4

# PROPOSED TECHNICAL SPECIFICATION CHANGES (MARK-UP)

.

.

The current version of Technical Specification page 3.6.1.7-3 has been marked-up by hand to reflect the proposed change.

# Suppression Chamber-to-Drywell Vacuum Breakers 3.6.1.7

ς,

)

)

	SURVEILLANCE	FREQUENCY
SR 3.6.1.7.1	<ul> <li>Not required to be met for vacuum breakers that are open during Surveillances.</li> </ul>	
	<ol> <li>Not required to be met for vacuum breakers open when performing their intended function.</li> </ol>	
	Verify each vacuum breaker is closed.	14 days
SR 3.6.1.7.2	NOTE Not required to be met for vacuum 6 breakers 218C*RV35A and 2ISC*RV35B for the remainder of Cycle 8.	
	Perform a functional test of each vacuum breaker.	31 days
		Within 12 hours after any discharge of steam to the suppression chamber from the safety/relief valves
SR 3.6.1.7.3	Verify the opening setpoint of each vacuum breaker is $\leq 0.25$ psid.	24 months

.

.

7,

# LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Nine Mile Point Nuclear Station, LLC (NMPNS) in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

REGULATORY COMMITMENT	DUE DATE
1. Should an outage of sufficient duration and which permits drywell entry to occur prior to RFO9, the affected test cylinder and linkage will be repaired or replaced.	Prior to RFO9, if opportunity permits.
2. Should the affected test cylinder and linkage be repaired or replaced prior to RFO9, functional testing per SR 3.6.1.7.2 shall be resumed for vacuum breaker 2ISC*RV36B.	Prior to RFO9, if Commitment 1 is completed.
3. If not done sooner, the affected test cylinder and linkage will be repaired or replaced during RFO9.	Prior to the end of RFO9, if Commitment 1 is NOT completed.

· . . . .

## EXPLANATION OF THE EXIGENCY AND WHY THE SITUATION COULD NOT HAVE BEEN AVOIDED

The testing equipment for vacuum breaker 2ISC\*RV36B (pneumatic test actuator and linkages) began operating intermittently during the last functional test. The pneumatic test actuator provides for a mechanical lever action to push the vacuum breaker disk to the full open position. Upon venting the motive gas from the test actuator, a return spring allows the test actuator to retract to its de-energized position, clear of the vacuum breaker disc. The vacuum breaker disc will then fall closed and be maintained closed by a set of permanent magnets.

Currently, vacuum breaker 2ISC\*RV36B is verified closed. Future performance of functional tests on this vacuum breaker could cause a failure of the pneumatic test actuator to retract, thereby preventing 2ISC\*RV36B to return to a fully closed position. The failure of 2ISC\*RV36B to return to the closed position during testing would require Nine Mile Point Unit 2 to be placed in Mode 3 within 84 hours and Mode 4 within the following 24 hours. The degradation of the testing equipment was observed during the last functional testing surveillance conducted on January 15, 2003. The testing equipment cannot be repaired, replaced, or bypassed online. Per the technical specifications, the next functional test of the vacuum breakers must be performed by February 21, 2002 (31 days plus 25%), thus necessitating an exigent review by the NRC Staff.

The pneumatic test actuators for the vacuum breakers are currently replaced every third refueling outage. The pneumatic test actuator for vacuum breaker 2ISC\*RV36B was last replaced during refueling outage 7 (RFO7) in 2000 and was scheduled for replacement in the refueling outage (RFO10) in 2006. The eight vacuum breakers had all passed their 31 day functional tests since RFO8 with no evidence of impending failure until the last functional tests performed on January 15, 2003. Therefore, there was no prior indication that testing equipment would degrade.