Niagara Mohawk®

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August 17, 2001
NMP2L 2027

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

RE: Nine Mile Point Unit 2
Docket No. 50-410
NPF-69
TAC No. MB2567

Subject: ***Application for Exigent Amendment to Technical Specification 3.6.1.7, "Suppression Chamber-to-Drywell Vacuum Breakers"***

Gentlemen:

Niagara Mohawk Power Corporation (NMPC) hereby transmits an application for exigent amendment to Nine Mile Point Unit 2 (NMP2) Operating License NPF-69. Enclosed as Attachment A is the proposed change to the Technical Specifications (TSs) as set forth in Appendix A to the above mentioned license. Pursuant to 10 CFR 50.92, the supporting information and analyses demonstrating that the proposed change involves no significant hazards consideration are included as Attachment B. Attachment C provides a "marked-up" copy of the affected TS page. Attachment D presents environmental considerations and concludes that the proposed change meets the criteria for categorical exclusion from performing an environmental assessment. The exigency and why it could not have been avoided are addressed in Attachment E pursuant to 10 CFR 50.91(a)(6)(vi).

This license amendment application proposes to revise TS 3.6.1.7, "Suppression Chamber-to-Drywell Vacuum Breakers," to allow an exception to the periodic functional testing requirements for two specific vacuum breakers (cycling the vacuum breakers open and closed). Specifically, the proposed change revises Surveillance Requirement (SR) 3.6.1.7.2 such that the functional testing requirement would not apply to vacuum breakers 2ISC*RV35A and 2ISC*RV35B for the remainder of Cycle 8 (the current operating cycle).

The position indication circuitry for vacuum breaker 2ISC*RV35A and the permissive logic circuitry to allow cycling vacuum breaker 2ISC*RV35B are currently operating on an intermittent basis due to one or more degraded limit switches for vacuum breaker 2ISC*RV35A. The degraded limit switches and associated permissive logic circuits are 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 the position indication for vacuum breaker 2ISC*RV35A, which is the normal method for verifying the vacuum breaker is closed. Furthermore, because the permissive logic inputs from vacuum breaker 2ISC*RV35A are not operating reliably, it

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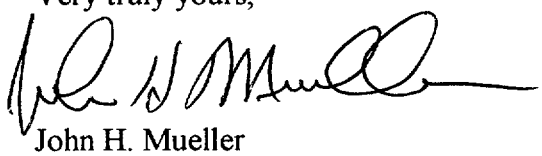
may not be possible to exercise vacuum breaker 2ISC*RV35B for the performance of SR 3.6.1.7.2. Loss of the capability to exercise vacuum breaker 2ISC*RV35B would also prohibit use of the alternate pressure testing method available to verify that vacuum breaker 2ISC*RV35A is closed. The degraded limit switches and permissive logic circuitry do not affect the ability of the vacuum breakers to perform their intended function. The proposed change will allow the limit switches to be replaced with a new design during Refueling Outage 8 (RFO8). Should an outage of sufficient duration and which permits drywell entry occur prior to RFO8, the affected limit switches will be repaired or replaced and functional testing resumed.

The proposed license amendment is needed to avoid a potential noncompliance 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 the vacuum breaker 2ISC*RV35B or failure to confirm vacuum breaker 2ISC*RV35A closed. Therefore, NMPC requests approval of this license amendment application on an exigent basis and issuance of the amendment no later than September 6, 2001.

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

Very truly yours,



John H. Mueller
Senior Vice President and
Chief Nuclear Officer

JHM/JJD/mlg
Attachments

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Records Management

UNITED STATES NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
Niagara Mohawk Power Corporation	)	**Docket No. 50-410**
	)	
Nine Mile Point Unit 2	)	

APPLICATION FOR EXIGENT AMENDMENT TO OPERATING LICENSE

Pursuant to Section 50.90 of the regulations of the Nuclear Regulatory Commission, Niagara Mohawk Power Corporation (NMPC), holder of Facility Operating License No. NPF-69, hereby requests that Technical Specification (TS) 3.6.1.7, "Suppression Chamber-to-Drywell Vacuum Breakers," as set forth in Appendix A to the License be amended on an exigent basis.

The proposed TS change contained herein would allow an exception to the periodic functional test required for vacuum breakers 2ISC*RV35A and 2ISC*RV35B for the remainder of Cycle 8 (the current operating cycle). The proposed change to TS 3.6.1.7 is included as Attachment A. Pursuant to 10 CFR 50.92, the supporting information and analyses demonstrating that the proposed change involves no significant hazards consideration are included as Attachment B. Attachment C provides a "marked-up" copy of the affected TS page, while Attachment D addresses the environmental considerations related to the proposed change. The exigency and why it could not be avoided are discussed in Attachment E.

WHEREFORE, Applicant respectfully requests that Appendix A to Facility Operating License No. NPF-69 be amended in the form attached hereto as Attachment A.

NIAGARA MOHAWK POWER CORPORATION

By _____
John H. Mueller
Senior Vice President and
Chief Nuclear Officer

Subscribed and Sworn to before me
on this 17th day of Aug. 2001.

_____
NOTARY PUBLIC

SANDRA A. OSWALD
Notary Public, State of New York
No. 01OS6032276
Qualified In Oswego County
Commission Expires 10/25/01

ATTACHMENT A

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. NPF-69

DOCKET NO. 50-410

Proposed Changes to the Current Technical Specifications (TSs)

Replace existing TS page 3.6.1.7-3 with the attached corresponding revised page. The revised replacement page has been retyped in its entirety, incorporating the changes, and includes marginal markings (revision bars) to indicate the changes to the text.

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.6.1.7.1	----------NOTES---------- 1. Not required to be met for vacuum breakers that are open during Surveillances. 2. Not required to be met for vacuum breakers open when performing their intended function. --- Verify each vacuum breaker is closed.	14 days
SR 3.6.1.7.2	----------NOTE---------- Not required to be met for vacuum breakers 2ISC*RV35A and 2ISC*RV35B for the remainder of Cycle 8. --- Perform a functional test of each vacuum breaker.	31 days AND 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 ≤ 0.25 psid.	24 months

ATTACHMENT B

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. NPF-69

DOCKET NO. 50-410

Supporting Information and No Significant Hazards Consideration Analysis

Introduction

The primary function of the suppression chamber-to-drywell vacuum breakers is to relieve vacuum in the drywell. At Nine Mile Point Unit 2 (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, air 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 downcomer 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 loss of coolant accident (LOCA), the vacuum breakers must initially be closed to limit drywell-to-suppression 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 are 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 7 (RFO7). 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 July 30, 2001, during performance of the functional testing required by SR 3.6.1.7.2, vacuum breaker 2ISC*RV35B initially failed to open. Troubleshooting identified that the control logic permissive (indicating that vacuum breaker 2ISC*RV35A was closed) was not satisfied. Vacuum breakers 2ISC*RV35A and 2ISC*RV35B are in series in one line. During testing only, one of the pair of vacuum breakers in series is allowed to be open. The permissive prevents both vacuum breakers from being open at the same time. After exercising vacuum breaker 2ISC*RV35A several additional times, the permissive was satisfied and the functional testing for vacuum breaker 2ISC*RV35B was successfully completed. The red indicator light for vacuum breaker 2ISC*RV35A was extinguished (showing vacuum breaker closure) after three of the six times the vacuum breaker was exercised. The corresponding computer points for vacuum breaker 2ISC*RV35A cleared (showing vacuum breaker closure) five of the six times the vacuum breaker was exercised. Based on the inconsistent results of the testing, it was concluded that at least one of the limit switches for vacuum breaker 2ISC*RV35A is degraded and functioning intermittently.

Each vacuum breaker is equipped with three "valve closed" limit switches physically located around the circumference of the valve disc. The limit switches function to provide position indication, alarm and computer inputs, and permissive logic input for the test circuit. The limit switches and associated permissive logic circuits are located in the drywell and cannot be accessed for repair or replacement during power operation due to the inerted environment. The red indicating light control circuit is relied upon during performance of functional testing to provide positive indication that the vacuum breaker

has closed (red light has extinguished). The red indicating light control circuit is configured such that one contact from each of the three closed limit switches is connected in series with an Agastat relay. When the vacuum breaker travels to the full closed position, the three limit switches close to energize the relay. When energized, a contact on the relay opens to extinguish the red light, thus indicating the vacuum breaker has closed. A different contact from the same Agastat relay provides input for an alarm and associated computer point. Additional contacts on the same three closed limit switches are utilized for the permissive logic in the test circuit for the other vacuum breaker in the line. The limit switches and associated permissive logic circuits are for test purposes only and do 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 failure of the position indication for vacuum breaker 2ISC*RV35A after cycling, which would result in loss of the normal method for verifying the vacuum breaker is closed. Furthermore, because the permissive logic inputs from vacuum breaker 2ISC*RV35A are not operating correctly, the potential exists that vacuum breaker 2ISC*RV35B could not be exercised for performance of SR 3.6.1.7.2. Loss of the capability to exercise vacuum breaker 2ISC*RV35B would also prohibit use of the alternate pressure testing method available to verify that vacuum breaker 2ISC*RV35A is closed. 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. Niagara Mohawk Power Corporation (NMPC) has concluded that a plant shutdown would unnecessarily challenge plant systems.

Consequently, NMPC is requesting an exception to the functional testing requirement of SR 3.6.1.7.2 for vacuum breakers 2ISC*RV35A and 2ISC*RV35B for the remainder of Cycle 8 (approximately eight months). NMPC will continue to verify that the vacuum breakers are 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 Refueling Outage 8 (RFO8). 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 1998, NMP2 experienced a condition where vacuum breakers 2ISC*RV35A and 2ISC*RV35B opened in response to a steam discharge from the SRVs. Subsequent functional testing verified that the vacuum breakers remained operable. This provides

additional assurance that an inadvertent actuation of an SRV during the proposed eight month deferral of the functional testing requirement would not adversely affect vacuum breaker operability or performance.

The limit switches for the suppression chamber-to-drywell vacuum breakers will be replaced with a new design during RFO8. The new design will provide greater reliability. Should an outage of sufficient duration and which permits drywell entry occur prior to RFO8, the affected limit switches will be repaired or replaced and functional testing resumed.

Evaluation

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 limit 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 breakers 2ISC*RV35A and 2ISC*RV35B will not affect the ability of the vacuum breakers to operate when necessary. A review of NMP2 deviation event reports (DERs) and other plant records related to suppression chamber-to-drywell vacuum breakers did not identify any failures to open or close when required due to mechanical problems with the vacuum breakers. However, the review did identify past failures of the permissive logic circuitry and closure indication due to degraded limit switches. 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 did find two instances at other plants in the last thirteen 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 OMa-1988 through 10 CFR 50.55a. At NMP2, the vacuum breakers are classified as pressure relief valves. Section 1.3.4.1(b) of OMa-1988 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 eight months for vacuum breakers 2ISC*RV35A and 2ISC*RV35B 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 breakers 2ISC*RV35A and 2ISC*RV35B from 31 days to eight months. Eight months is the time remaining until RFO8. 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^{-8}/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."

Conclusions

NMPC is requesting an exception to the current requirement of SR 3.6.1.7.2 to defer functional testing of vacuum breakers 2ISC*RV35A and 2ISC*RV35B until the degraded limit switches on vacuum breaker 2ISC*RV35A used to provide position indication and permissive inputs can be repaired or replaced. The ability of the vacuum breakers to function automatically is not affected by the degraded limit switches. 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. Therefore, continued operation for the remainder of Cycle 8, approximately eight months, without further functional testing of vacuum breakers 2ISC*RV35A and 2ISC*RV35B will not present an undue risk to the public health and safety.

No Significant Hazards Consideration Analysis

According to 10 CFR 50.91, at the time a licensee requests an amendment to its operating license, the licensee must provide to the NRC its analysis, using the standards in 10 CFR 50.92, concerning the issue of no significant hazards consideration. According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant

hazards considerations if operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated; or

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.

NMPC has evaluated this proposed amendment pursuant to 10 CFR 50.91 and has determined that it involves no significant hazards considerations.

The following analysis has been performed:

The operation of Nine Mile Point Unit 2, in accordance with the proposed amendment, will not involve a significant increase in the probability or consequences of an accident previously evaluated.

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 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. Accordingly, the proposed amendment will not significantly increase the consequences of an accident previously evaluated.

The operation of Nine Mile Point Unit 2, in accordance with the proposed amendment, will not create the possibility of a new or different kind of accident from any accident previously evaluated.

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, operation with the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The operation of Nine Mile Point Unit 2, in accordance with the proposed amendment, will not involve a significant reduction in a margin of safety.

The deferral of functional testing for one vacuum breaker pair for the remainder of Cycle 8 is not risk significant, in that the increase in core damage frequency and large early release frequency were found to be less that 10^{-8}/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 are 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.

ATTACHMENT C

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. NPF-69

DOCKET NO. 50-410

"Marked-Up" Copy of the Current Technical Specifications (TSs)

The current version of TS page 3.6.1.7-3 has been marked-up to reflect the proposed changes. Text additions are shown in ***bold italics***. No text is deleted.

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.6.1.7.1	----------NOTES---------- 1. Not required to be met for vacuum breakers that are open during Surveillances. 2. Not required to be met for vacuum breakers open when performing their intended function. ----------	
	Verify each vacuum breaker is closed.	14 days
SR 3.6.1.7.2	----------***NOTE***---------- ***Not required to be met for vacuum breakers 2ISC*RV35A and 2ISC*RV35B for the remainder of Cycle 8.*** ----------	
	Perform a functional test of each vacuum breaker.	31 days <u>AND</u> 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 ≤ 0.25 psid.	24 months

ATTACHMENT D

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. NPF-69

DOCKET NO. 50-410

Eligibility for Categorical Exclusion from Performing an Environmental Assessment

The provisions of 10 CFR 51.22 provide criteria for, and identification of, licensing and regulatory actions eligible for exclusion from performing an environmental assessment. Niagara Mohawk Power Corporation has reviewed the proposed amendment and determined that it does not involve significant hazard considerations, and there will be no significant change in the types or a significant increase in the amounts of any effluents that may be released offsite; nor will there be any significant increase in individual or cumulative occupational radiation exposure. Therefore, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment is required to be prepared in connection with the issuance of this license amendment.

ATTACHMENT E

NIAGARA MOHAWK POWER CORPORATION

LICENSE NO. NPF-69

DOCKET NO. 50-410

Explanation of the Exigency and
Why the Situation Could Not Have Been Avoided

The limit switch(es) on vacuum breaker 2ISC*RV35A began operating intermittently during the last functional test. The limit switches provide position indication to verify that vacuum breaker 2ISC*RV35A is closed. The limit switches also provide input to a permissive logic that allows opening vacuum breaker 2ISC*RV35B when vacuum breaker 2ISC*RV35A is confirmed closed. An alternate pressure test method for verifying that vacuum breaker 2ISC*RV35A is closed is available for use only if vacuum breaker 2ISC*RV35B can be opened.

Currently, both of vacuum breakers 2ISC*RV35A and 2ISC*RV35B are verified closed. Future performance of functional tests on vacuum breaker 2ISC*RV35A could cause failure of the position indication, which is the normal method for verifying the vacuum breaker is closed. Furthermore, because the permissive logic inputs from vacuum breaker 2ISC*RV35A are not operating correctly, exercising vacuum breaker 2ISC*RV35B may not be possible in order to satisfy its functional testing requirement. Loss of the capability to exercise vacuum breaker 2ISC*RV35B would prohibit use of the alternate pressure testing method for verifying that vacuum breaker 2ISC*RV35A is closed.

Thus, failure of the limit switch would require NMP2 to be placed in Mode 3 within 84 hours and Mode 4 within the following 24 hours due to a loss of position indication for verifying vacuum breaker 2ISC*RV35A is closed and the inability to perform a pressure test. The degradation of the limit switches was observed during the last functional testing surveillance conducted on July 30, 2001. The limit switches cannot be repaired, replaced, or bypassed online. Per the technical specifications, the next functional test of the vacuum breakers must be performed by September 6, 2001 (31 days plus 25%), thus necessitating an exigent review by the NRC Staff.

The limit switches for the vacuum breakers are currently replaced every other refueling outage. The limit switches for vacuum breakers 2ISC*RV35A and 2ISC*RV35B were replaced during the last refueling outage (RFO7). The eight vacuum breakers had all passed their 31 day functional tests since RFO7 with no evidence of impending failure until the last tests on July 30, 2001. Therefore, there was no prior indication that the limit switches would degrade.