

ATTACHMENT A

NIAGARA MOHAWK POWER CORPORATION
LICENSE NO. NPF-69
DOCKET NO. 50-410

PROPOSED CHANGES TO THE TECHNICAL SPECIFICATIONS

Replace pages 3/4 8-10 and 3/4 8-11 with the attached revised pages. These pages have been retyped in their entirety with marginal markings to indicate changes to the text.

ELECTRICAL POWER SYSTEMS

AC SOURCES

AC SOURCES - OPERATING

SURVEILLANCE REQUIREMENTS

4.8.1.1.2.e (Continued)

8. Verify the diesel generator operates for at least 24 hours.

- a) For Divisions I and II:

During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 4840 kW*. During the remaining 22 hours of this test, the diesel generator shall be loaded to greater than or equal to 4400 kW*. The generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 3.0 Hz within 10 seconds and 4160 ± 416 volts and 60 ± 1.2 Hz within 13 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test.

- b) For Division III:

During the first 2 hours of this test, the diesel generator shall be loaded to greater than or equal to 2860 kW*. During the remaining 22 hours of this test, the diesel generator shall be loaded to greater than or equal to 2600 kW*. The generator voltage and frequency shall be 4160 ± 416 volts and 60 ± 1.2 Hz within 15 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test.

9. Verifying that the autoconnected loads to each diesel generator do not exceed the 2000-hour rating of 4750 kW for diesel generators EDG*1 and EDG*3 and 2850 kW for diesel generator EDG*2.
10. Verifying the diesel generator's capability to:
- a) Manually synchronize with the offsite power source while the generator is loaded with its emergency loads upon a simulated restoration of offsite power,
 - b) Transfer its loads to the offsite power source, and
 - c) Be restored to its standby status.
11. Verifying that with the diesel generator operating in a test mode and connected to its bus, a simulated ECCS actuation signal overrides the test mode by (1) returning the diesel generator to standby operation and (2) automatically energizes the emergency loads with offsite power.

* Momentary transients due to changing bus loads shall not invalidate the test.

ELECTRICAL POWER SYSTEMS

AC SOURCES

AC SOURCES - OPERATING

SURVEILLANCE REQUIREMENTS

4.8.1.1.2.e (Continued)

12. Verifying that the automatic load timer relays are OPERABLE with the interval between each load block within $\pm 10\%$ of its design interval for diesel generators EDG*1 and EDG*3.
13. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:
 - a) For Divisions I and II, turning gear engaged and emergency stop.
 - b) For Division III, engine in the maintenance mode and diesel generator lockout.
- f. At least once per 18 months verify each diesel generator starts and accelerates to at least 600 RPM within 10 seconds for EDG*1 and EDG*3, and 870 RPM within 10 seconds for EDG*2. The generator voltage and frequency for EDG*1 and EDG*3 shall be 4160 ± 416 volts and 60 ± 3.0 Hz within 10 seconds and 4160 ± 416 volts and 60 ± 1.2 Hz within 13 seconds after the start signal. The generator voltage and frequency for EDG*2 shall be 4160 ± 416 volts and 60 ± 1.2 Hz within 15 seconds after the start signal. This test shall be performed within 5 minutes of shutting down the diesel generator after the diesel generator has operated for at least 2 hours at 4400 kW or more for EDG*1 and EDG*3 and 2600 kW or more for EDG*2. For any start of a diesel, the diesel must be operated with a load in accordance with manufacturer's recommendations. Momentary transients due to changing bus loads shall not invalidate this test.
- g. At least once per 10 years or after any modifications which could affect diesel generator interdependence by starting all three diesel generators simultaneously, during shutdown, and verifying that all diesel generators EDG*1 and EDG*3 accelerate to at least 600 rpm and EDG*2 accelerates to at least 870 rpm in less than or equal to 10 seconds.
- h. At least once per 10 years by:
 1. Draining each fuel oil storage tank, removing the accumulated sediment and cleaning the tank using a sodium hypochlorite solution, and
 2. Performing a pressure test of those portions of the diesel fuel oil system designed to Section III, subsection ND of the ASME Code in accordance with ASME Code Section II Article IWD-5000.

4.8.1.1.3 All diesel generator failures, valid or non-valid, shall be reported to the Commission pursuant to Specification 6.9.2, within 30 days. Reports of diesel generator failures shall include the information recommended in Position C.3.b of RG 1.108, Revision 1, August 1977. If the number of failures in the last 100 valid tests, on a per nuclear unit basis, is greater than or equal to 7, the report shall be supplemented to include the additional information recommended in Position C.3.b of RG 1.108, Revision 1, August 1977.

ATTACHMENT B

NIAGARA MOHAWK POWER CORPORATION LICENSE NO. NPF-69 DOCKET NO. 50-410

SUPPORTING INFORMATION AND NO SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

INTRODUCTION

As presently written, Technical Specification 4.8.1.1.2.e.8 requires the demonstration of diesel generator hot restart capability by initiating a Loss of Off-site Power test within 5 minutes of completing the 24 hour diesel generator run for each of the three emergency diesel generators. This requirement to perform the hot restart test, in the above described manner, creates significant scheduling demands during an outage. Niagara Mohawk proposes to replace the current hot restart requirement, a Loss of Off-Site Power test immediately following the 24 hour full power run (4.8.1.1.2.e.8), with the performance of a hot restart test. The hot restart test will be preceded by at least a 2 hour full load run and may be performed in any operating condition. This will ensure that the diesel generators are at normal operating temperatures prior to the performance of the hot restart test. This will provide greater flexibility on scheduling outage activities. The Loss of Off-site Power test will continue to be performed at standby conditions to provide assurance that the Diesel Generator is capable of responding to a Loss of Off-site Power as assumed in the accident analysis. The relettering of sections 4.8.1.1.2.f and g to 4.8.1.1.2.g and h is to administratively account for the adding of the new section 4.8.1.1.2.f.

DESCRIPTION

The proposed changes will delete the requirement that a Loss of Off-Site Power test be performed following the 24 hour full power run (4.8.1.1.2.e.8) and replace it with the performance of a hot restart test following any fully loaded diesel run of greater than 2 hours (4.8.1.1.2.f). Current Sections 4.8.1.1.2.f and g are relettered to 4.8.1.1.2.g and h.

EVALUATION

As presently written, Technical Specification 4.8.1.1.2.e.8 requires the demonstration of diesel generator hot restart capability by initiating a Loss of Off-site Power test within 5 minutes of completing the 24 hour diesel generator run. This requirement is derived from Regulatory Guide 1.108, Rev. 1, "Periodic Testing of Diesel Units Used as Onsite Electric Power Systems at Nuclear Power Plants." The current Technical Specification requirement creates significant scheduling demands during outages by reducing schedule flexibility and imposing unnecessary operational burdens without a corresponding increase in diesel generator reliability. The requirement to start and load the diesel generator, as opposed to just starting the diesel generator, does not contribute to verifying the ability of the diesel generator to start from normal operating temperature. The proposed changes will delete

the requirement that a Loss of Off-Site Power test be performed following the 24 hour full power run (4.8.1.1.2.e.8) and replace it with the performance of a hot restart test following a fully loaded diesel run of greater than 2 hours (4.8.1.1.2.f). The Loss of Off-site Power test will be performed at standby conditions to provide assurance that the Diesel Generator is capable of responding to a Loss of Off-site Power as assumed in the accident analysis. Niagara Mohawk believes that the proposed Technical Specification changes satisfy the intent of Regulatory Guide 1.108, Rev. 1, and of Regulatory Guide 1.9, Rev. 3, as discussed below.

Regulatory Guide 1.108, Rev. 1, Position C.2.a(5), which is the basis for the performing a Loss of Off-site Power test immediately after the 24 hour test, states that the purpose of the requirement is to "demonstrate functional capability at full load temperature conditions." Functional capability, i.e., the ability of the diesel generator to start from normal operating temperature, can be adequately demonstrated by either manually or automatically starting the diesel generator from normal operating temperature. As stated earlier, loading the diesel generator does not contribute to verifying that the diesel generator will start from normal operating temperature.

Demonstrating diesel generator hot restart capability without loading does not invalidate or reduce the effectiveness of the hot restart test, because normal operating temperature conditions are achieved prior to demonstrating hot restart capability. Normal operating temperature conditions will be assured by performing the test within 5 minutes of completing at least a 2 hour run in which the diesel generator has operated at 4400kW or more for EDG*1 and EDG*3 and 2600kW or more for EDG*2. According to the diesel generator manufacturers, running a diesel generator at full load for two hours will achieve normal operating temperature on that diesel generator.

The requirement to perform the hot restart test during shutdown is removed in accordance with the Improved Standard Technical Specifications, NUREG 1434, to provide flexibility in the performance of this surveillance. This flexibility is allowed since this test is similar to the monthly diesel test in that it can be performed at power with no adverse effect on plant operations.

The proposed changes are in accordance with the Improved Standard Technical Specifications, NUREG 1434, issued on September 28, 1992 and are consistent with Regulatory Guide 1.9, Rev. 3, section C.2.2.10. Additionally, the NRC has previously reviewed and approved the separation of the 24 hour run and the Loss of Off-site Power test at other plants (e.g., Seabrook, Amendment No. 13, dated August 10, 1992).

CONCLUSION

Niagara Mohawk proposes to delete the requirement that a Loss of Off-site Power test follow the 24 hour run and will now perform a hot restart test at least once per 18 months following a full power run of at least 2 hours or greater in any operating condition on each diesel generator. Nine Mile Point Unit 2 can be safely operated with the proposed changes since the new requirements will fulfill all of the testing requirements currently in the Technical Specification and as outlined in Regulatory Guide 1.108, Rev. 1, and Regulatory Guide 1.9 Rev. 3. These changes will not invalidate or reduce the effectiveness the hot

restart test because full load temperature conditions are reached prior to performing the hot restart test. Diesel generator design and function remain as previously analyzed. Their response during accident conditions is not affected by these changes. Thus, the probability of diesel generator failure when required to actuate during an accident is not increased.

Therefore, there is reasonable assurance that the operation of Nine Mile Point Unit 2 in the proposed manner will not endanger the public health and safety, and that issuance of the proposed amendment will not be inimical to the common defense and security.

NO SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

10 CFR 50.91 requires that at the time a licensee requests an amendment, it must provide to the Commission its analysis using the standards in 10 CFR 50.92 concerning the issue of no significant hazards consideration. Therefore, in accordance with 10 CFR 50.91, 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.

Regulatory Guide 1.108, Rev. 1, states the performance of a Loss of Off-site Power test (Technical Specification 4.8.1.1.2.e.4) immediately following the 24 hour run demonstrates that the Diesel Generator can start in the prescribed time when the Diesel Generator is at its normal operating temperature. The Loss of Off-site Power test will be performed at standby conditions to provide assurance that the Diesel Generator is capable of responding to a Loss of Off-site Power as assumed in the accident analysis. The purpose of performing the Loss of Off-site Power test immediately following the 24 hour run is to demonstrate the hot restart capability of the diesel generator at full load temperature conditions. However, establishing full load temperature conditions with other than a 24 hour run (i.e., with at least a 2 hour full power run) provides the necessary initial conditions for the hot restart test. Demonstrating diesel generator hot restart capability, without loading the engine, does not invalidate or reduce the effectiveness of the hot restart test, because normal operating temperatures are achieved prior to demonstrating hot restart capability. The proposed method of establishing full load temperature conditions has been previously reviewed by the NRC and found to be an acceptable alternative to the 24 hour run. This test may be performed in any plant condition since its performance at power will have no adverse effect on plant operations. The reliability of the diesel generators is not affected by these changes. Therefore, the probability of a diesel generator failure when required to actuate during an accident is not increased due to these changes.

Diesel generator design and function remain as previously analyzed. Their response during accident conditions are not affected by these changes. Therefore, no significant increase in the probability or consequences of an accident previously evaluated results from these changes.

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.

This request does not involve a physical change in any system configuration and no new operating configurations are introduced. The proposed surveillances are consistent with current requirements. These changes will not result in any net reduction in testing and will not affect Diesel Generator reliability. This test may be performed in any plant condition since its performance at power will have no adverse effect on plant operations. Therefore, these changes do not create the possibility of a new or different kind of accident from any 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.

Allowing the diesel generators to reach full temperature conditions by other than the 24 hour run required by Technical Specification 4.8.1.1.2.e.8 has been found to be acceptable by the NRC staff as satisfying the intent of Regulatory Guide 1.108, Rev. 1, Position C.2.a(5) for conducting the hot restart test following the 24 hour load test. These changes will not result in any net reduction in testing and will not affect diesel generator reliability, as the hot restart test will be preceded by at least a 2 hour full power run to ensure that the diesel generators are at normal operating temperatures. This test may be performed in any plant condition since its performance at power, will have no adverse effect on plant operations. As proposed, these changes will adequately demonstrate the diesel generator's functional capability at full load temperature conditions, thus ensuring the designed margin of safety in the diesel generator's ability to start and accept the required loads in the prescribed time. Therefore, these changes will not involve a significant reduction in a margin of safety.