ATTACHMENT 1

LICENSE AMENDMENT APPLICATION 94-10 & 94-13, NLR-N94207
EMERGENCY DIESEL GENERATOR SURVEILLANCE CHANGES
FACILITY OPERATING LICENSE NPF-57
HOPE CREEK GENERATING STATION
DOCKET NO. 50-354

REVISED TECHNICAL SPECIFICATION PAGES WITH PEN AND INK CHANGES

The following Technical Specifications for Facility Operating License No. NPF-57 are affected by this revision:

| Technical Specification | Page |
|---|---|
| 3.8.1.1 | 3/4 8-1 and 3/4 8-2 |
| 4.8.1.1.2.h.8 | 3/4 8-8 |

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

A.C. SOURCES - OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and

b. Four separate and independent diesel generators, each with:

1. A separate fuel oil day tank containing a minimum of 200 gallons of fuel,
2. A separate fuel storage system consisting of two storage tanks containing a minimum of 48,800 gallons of fuel, and
3. A separate fuel transfer pump for each storage tank.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

a. With one offsite circuit of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter. ~~If any diesel generator has not been successfully tested within the past 24 hours, demonstrate its OPERABILITY by performing Surveillance Requirement 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 for each such diesel generator separately within 24 hours.~~ Restore the inoperable offsite circuit to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

an inoperable support system, an independently testable component, or

b. With one diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the above required A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter. If the diesel generator became inoperable due to any cause other than preplanned preventive maintenance or testing, demonstrate the OPERABILITY of the remaining diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 separately for each diesel generator within ~~24~~ 16 hours*. Restore the inoperable diesel generator to OPERABLE status within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

unless the absence of any potential common mode failure for the remaining diesel generators is demonstrated.

c. With one offsite circuit of the above required A.C. sources and one diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and

*This test is required to be completed regardless of when the inoperable diesel generator is restored to OPERABILITY.

LIMITING CONDITION FOR OPERATION (Continued)

ACTION: (Continued)

at least once per 8 hours thereafter. If a diesel generator became inoperable due to any causes other than preplanned preventive maintenance or testing, demonstrate the OPERABILITY of the remaining OPERABLE diesel generators separately for each diesel generator by performing Surveillance Requirement 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 within 24 hours* Restore at least two offsite circuits and all four of the above required diesel generators to OPERABLE status within 72 hours from time of the initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. A successful test(s) of diesel generator OPERABILITY per Surveillance Requirement 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 performed under this ACTION statement for the OPERABLE diesel generators satisfies the diesel generator test requirements of ACTION Statement b.

d. With both of the above required offsite circuits inoperable, ~~demonstrate the OPERABILITY of all of the above required diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 separately for each diesel generator within 8 hours unless the diesel generators are already operating~~, restore at least one of the above required offsite circuits to OPERABLE status within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours. With only one offsite circuit restored to OPERABLE status, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. A successful test(s) of diesel generator OPERABILITY per Surveillance Requirement 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 performed under this ACTION statement for the OPERABLE diesel generators satisfies the diesel generator test requirements of ACTION statement a.

e. With two diesel generators of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the above required A.C. offsite sources by performing Surveillance Requirement 4.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter and demonstrate the OPERABILITY of the remaining diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 separately for each diesel generator within 8 hours.* Restore at least one of the inoperable diesel generators to OPERABLE status within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours. Restore both of the inoperable diesel generators to OPERABLE status within 72 hours from time of initial loss or be in at least HOT SHUTDOWN within the next 12 hours and in

*This test is required to be completed regardless of when the inoperable diesel generator is restored to OPERABILITY.

frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during this test. Within 5 minutes after completing this 24-hour test, ~~perform Surveillance Requirement 4.8.1.1.2.h.4.b).~~ **

ADD INSERT FROM NEXT PAGE

9. Verifying that the auto-connected loads to each diesel generator do not exceed the continuous rating of 4430 kW.

10. Verifying the diesel generator's capability to:

    a) 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,

    c) Be restored to its standby status, and

    d) Diesel generator circuit breaker is open.

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.

12. Verifying that the fuel oil transfer pump transfers fuel oil from each fuel storage tank to the day tank of each diesel via the installed cross connection lines.

13. Verifying that the automatic load sequence timer is OPERABLE with the interval between each load block within ± 10% of its design interval.

14. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:

    a) Engine overspeed, generator differential, and low lube oil pressure (regular lockout relay, (1) 86R).
    b) Backup generator differential and generator overcurrent (backup lockout relay, (1) 86B)
    c) Generator ground and lockout relays-regular, backup and test, energized (breaker failure lockout relay, (1) 86F)

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**If ~~Surveillance Requirement 4.8.1.1.2.h.4.b)~~ the hot restart test is not satisfactorily completed, it is not necessary to repeat the preceding 24 hour test. Instead, the diesel generator ~~may~~ shall be operated at between 4300 kw and 4400 kw for ~~one hour or until operating temperature has stabilized~~ two hours prior to repeating ~~Surveillance Requirement 4.8.1.1.2.h.4.b).~~ the hot restart test.

**INSERT FOR PAGE 3/4 8-8:**

verify that the diesel generator starts and achieves voltage and frequency of the emergency busses at 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds of the start signal. This test shall continue for at least five minutes.**

ATTACHMENT 2

LICENSE AMENDMENT APPLICATION 94-10 & 94-13, NLR-N94201
EMERGENCY DIESEL GENERATOR SURVEILLANCE CHANGES
FACILITY OPERATING LICENSE NPF-57
HOPE CREEK GENERATING STATION
DOCKET NO. 50-354

REVISED TECHNICAL SPECIFICATION PAGE WITH PEN AND INK CHANGES FOR ATTACHMENT 3 OF THE AUGUST 5, 1994, LETTER NLR-N94127

The following Technical Specifications (assuming prior approval of LCR 93-23) for Facility Operating License No. NPF-57 are affected by this revision:

| Technical Specification | Page |
|---|---|
| 4.8.1.1.2.k* | 3/4 8-9 |

*Proposed Technical Specification

INSERT FOR PAGE 3/4 8-9:

k. At least once per refueling cycle# by:

1. Verifying the diesel generator operates for at least 24 hours. During the first 22 hours of this test, the diesel generator shall be loaded to between 4300 and 4400 kW## and during the remaining 2 hours of this test, the diesel generator shall be loaded to between 4800 and 4873 kW. The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds after the start signal; the steady state generator voltage and frequency shall be maintained within these limits during the test.

2. Within 5 minutes after completing 4.8.1.1.2.k.1, ~~simulate a loss of offsite power by itself and~~ verify that the diesel generator starts ~~on the auto start signal, energizes the emergency busses with permanently connected loads within 10 seconds after receipt of the start signal, energizes the autoconnected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization,~~ and achieves the ~~steady state~~ voltage and frequency ~~of the emergency busses shall be maintained~~ at 4160 ± 420 volts and 60 ± 1.2 Hz ~~during the test.~~ within 10 seconds after the start signal. This test shall continue for at least five minutes.

- OR -

Operate the diesel generator between 4300 kW and 4400 kW for ~~one hour or until operating temperature has stabilized.~~ two hours. Within 5 minutes of shutting down the diesel generator, ~~simulate a loss of offsite power by itself and~~ verify that the diesel generator starts, ~~on the auto-start signal, energizes the emergency busses with permanently connected loads within 10 seconds after receipt of the start signal, energizes the autoconnected shutdown loads through the load sequencer and operates for greater than or equal to 5 minutes while its generator is loaded with the shutdown loads. After energization, the steady state~~ and achieves voltage and frequency ~~of the emergency busses shall be maintained~~ at 4160 ± 420 volts and 60 ± 1.2 Hz ~~during the test.~~ within 10 seconds after the start signal. This test shall continue for at least five minutes.