



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

GULF STATES UTILITIES COMPANY

DOCKET NO. 50-458

RIVER BEND STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 63
License No. NPF-47

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Gulf States Utilities Company (the licensee) dated May 14, 1991, as supplemented by letter dated December 2, 1991, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter 1;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

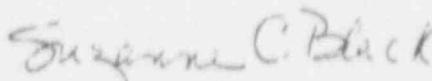
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-47 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 63 and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. GSU shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance to be implemented within 60 days of date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Suzanne C. Black, Director
Project Directorate IV-2
Division of Reactor Projects - III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 13, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 63

FACILITY OPERATING LICENSE NO. NPF-47

DOCKET NO. 50-458

Refer to the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and page number in the following table indicating the areas of change. The overleaf pages are provided to maintain document completeness.

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ELECTRICAL POWER SYSTEMS

LIMITING CONDITION FOR OPERATION (Continued)

ACTION (Continued)

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 Requirements 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.

- g. With diesel generators 1A and 1B 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 and Surveillance Requirements 4.8.1.1.2.a.4 and 4.8.1.1.2.a.5 for diesel generator 1C within 8 hours.* Restore at least one of the inoperable diesel generators 1A and 1B 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 diesel generators 1A and 1B 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.
- h. With one offsite circuit of the above-required A.C. electrical power sources inoperable and diesel generator 1C inoperable, apply the requirements of ACTION statements a and d specified above.
- i. With either diesel generator 1A or 1B inoperable and diesel generator 1C inoperable, apply the requirements of ACTION statements b, d and e specified above.

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

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS

4.8.1.1.1 Each of the above required independent circuits between the offsite transmission network and the onsite Class 1E distribution system shall be:

- a. At least once per 7 days, determined OPERABLE by verifying correct breaker alignments and indicated power availability, and
- b. At least once per 18 months, demonstrated OPERABLE, during shutdown, by manually transferring unit power supply from the normal circuit to the alternate circuit.

4.8.1.1.2 Each of the above required diesel generators shall be demonstrated OPERABLE:

- a. In accordance with the frequency specified in Table 4.8.1.1.2-1 on a STAGGERED TEST BASIS by:
 1. Verifying the fuel level in the day fuel tank.
 2. Verifying the fuel level in the fuel storage tank.
 3. Verifying the fuel transfer pump starts and transfers fuel from the storage system to the day fuel tank.
 4.
 - a) For diesel generators 1A and 1B, verifying the diesel starts** from ambient condition and accelerates to at least 450 rpm in less than or equal to 10 seconds. The generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds after the start signal.
 - b) For diesel generator 1C, verifying the diesel starts** from ambient condition and accelerates to at least 882 rpm in less than or equal to 10 seconds. The generator voltage and frequency shall not exceed a maximum of 5400 volts and 66.75 Hz and shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 13 seconds.
 5. Verifying the diesel generator is synchronized, loaded to 3000-3100 kw*** for diesel generators 1A and 1B and 2500-2600 kw*** for diesel generator 1C in less than or equal to 60 seconds**, and operates with this load for at least 60 minutes.

**All diesel generator starts for the purpose of this surveillance test may be preceded by an engine prelube period. Further, all surveillance tests, with the exception of once per 184 days, may also be preceded by warmup procedures and may also include gradual loading (>150 sec) as recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

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

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- 2) Verifying the diesel generator starts** on the auto-start signal, energizes the emergency busses with permanently connected loads within 10 seconds, energizes the auto-connected loads through the sequencing logic, and operates for greater than or equal to 5 minutes while its generator is loaded with the loads. After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test.
- b) For division III:
 - 1) Verifying de-energization of the emergency bus.
 - 2) Verifying the diesel generator starts** on the auto-start signal, energizes the emergency bus with the permanently connected loads within 13 seconds, energizes the auto-connected loads through the sequence logic, and operates for greater than or equal to 5 minutes while its generator is loaded with the loads. After energization, the steady-state voltage and frequency of the emergency bus shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test.
- c) Operating** with the diesel generator loaded to 3000-3100 kW*** for diesel generators 1A and 1B and 2500-2600 kW*** for diesel generator 1C for at least 60 minutes or until operating temperatures have stabilized. Within 5 minutes after completing this test, perform Surveillance Requirement 4.8.1.1.2.f.4.a)2) and b)2).
5. Verifying that, on an ECCS actuation test signal without loss of offsite power, the diesel generator starts on the auto-start signal and operates on standby for greater than or equal to 5 minutes. For diesel generator 1A and 1B, the generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds after the auto-start signal. For diesel generator 1C, the generator voltage and frequency shall not exceed a maximum of 5400 volts and 66.75 Hz and shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 13 seconds. The steady-state generator voltage and frequency shall be maintained within these limits during this test.

**All diesel generator starts for the purpose of this surveillance test may be preceded by an engine prelube period. Further, all surveillance tests, with the exception of once per 184 days, may also be preceded by warmup procedures and may also include gradual loading (>150 sec) as recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

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

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

6. Simulating a loss of offsite power in conjunction with an ECCS actuation test signal and:

a) For divisions I and II:

- 1) Verify deenergization of the emergency busses and load shedding from the emergency busses.
- 2) Verifying the diesel generator starts** on the auto-start signal, energizes the emergency busses with permanently connected loads within 10 seconds, energizes the auto-connected loads through the sequencing logic, and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads.

After energization, the steady-state voltage and frequency of the emergency busses shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test.

**All diesel generator starts for the purpose of this surveillance test may be preceded by an engine prelube period. Further, all surveillance tests, with the exception of once per 184 days, may also be preceded by warmup procedures and may also include gradual loading (>150 sec) as recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b) For division III:
- 1) Verifying de-energization of the emergency bus.
 - 2) Verifying the diesel generator starts** on the auto-start signal, energizes the emergency bus with its permanently connected loads within 13 seconds, energizes the auto-connected loads through the sequencing logic, and operates for greater than or equal to 5 minutes while its generator is loaded with the emergency loads. After energization, the steady-state voltage and frequency of the emergency bus shall be maintained at 4160 ± 420 volts and 60 ± 1.2 Hz during this test.
7. Verifying that, upon an ECCS actuation signal, all automatic diesel generator trips are automatically bypassed except engine overspeed and generator differential current.
8. Verifying the diesel generator operates for at least 24 hours. Diesel generators 1A and 1B shall be loaded to 3030-3130 kw*** for the duration of the test. Diesel generator 1C shall be loaded to 2750-2850 kw*** for the first 2 hours of the test and to 2500-2600 kw*** for the remaining 22 hours of the test. For diesel generator 1A and 1B, the generator voltage and frequency shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 10 seconds after the start signal. For diesel generator 1C, the generator voltage and frequency shall not exceed a maximum of 5400 volts and 66.75 Hz and shall be 4160 ± 420 volts and 60 ± 1.2 Hz within 13 seconds. The steady-state generator voltage and frequency shall be maintained within these limits during this test.
9. Verifying that the auto-connected loads to each diesel generator do not exceed 3130 kw for diesel generator 1A and 1B and 2600 kw for diesel generator 1C.

**All diesel generator starts for the purpose of this surveillance test may be preceded by an engine prelube period. Further, all surveillance tests, with the exception of once per 184 days, may also be preceded by warmup procedures and may also include gradual loading (>150 sec) as recommended by the manufacturer so that the mechanical stress and wear on the diesel engine is minimized.

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

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

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, 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 energizing the emergency loads with offsite power.
12. Verifying that the automatic load sequence timers are OPERABLE with the interval between each load block within $\pm 10\%$ of its design interval for diesel generators 1A, 1B and 1C.
13. Verifying that the following diesel generator lockout features prevent diesel generator starting only when required:
 - a) For Diesel Generators 1A and 1B:
 - 1) Loss of control power to diesel control panel.
 - 2) Starting air pressure below 150 psi.
 - 3) Stop-solenoid energized.
 - 4) Diesel in the maintenance mode (includes barring device engaged).
 - 5) Overspeed trip device actuated.
 - 6) Generator backup protection lockout relay tripped.
 - b) For Diesel Generator 1C:
 - 1) Diesel generator lockout relays not reset.
 - 2) Diesel engine mode switch not in "AUTO" position.
 - 3) Diesel generator output breaker closed before start of diesel.
 - 4) Diesel generator output breaker in racked-out position.
 - 5) †Diesel generator regulator mode switch not in "AUTO" position.
 - 6) Insufficient starting air pressure.
 - 7) Loss of dc power to diesel generator controls.
- g. By verifying the Division III diesel generator ambient room temperature to be $\geq 40^{\circ}\text{F}$:
 1. At least once per 24 hours with the last reported room temperature $\geq 50^{\circ}\text{F}$, or

†Item 5) does not electrically block diesel generator from emergency starting; however, it will affect the loading and operation of the diesel.

ELECTRICAL POWER SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

2. At least once per 12 hours with the last reported room temperature <50°F.
- h. 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 three diesel generators accelerate to at least 450 rpm for diesel generators 1A and 1B and 882 rpm for diesel generator 1C in less than or equal to 10 seconds.
- i. 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 or equivalent 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 XI Article IWD-5000.

4.8.1.1.3 Reports - 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 Regulatory Position C.3.b of Regulatory Guide 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 Regulatory Position C.3.b of Regulatory Guide 1.108, Revision 1, August 1977.