SAFETY EVALUATION

FOR

REQUESTED CHANGE TO THE DAVIS-BESSE NUCLEAR POWER STATION UNIT 1

TECHNICAL SPECIFICATIONS

(APPENDIX A TO OPERATING LICENSE NO. NPF-3)

Technical Specification 3.8.1.1b2 and 4.8.1.1.2b should be revised as shown on the attached revised pages 3/4 8-1 and 3/4 8-3 of the Davis-Besse Unit 1 Technical Specifications to reflect the installation of the redundant emergency diesel generator fuel storage tanks.

These new tanks have been added to provide a separate tornado missile protected seven day fuel oil supply to each emergency diesel generator. The design of these emergency generator fuel oil tanks was described in Section 9.5.4 of the FSAR in Revision 17 in March, 1976. The installation of these fuel oil storage tanks is a condition on Operating License No. NPF-3.

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 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 independent circuits between the offsite transmission network and the onsite Class 1E distribution system, each consisting of;

1. One OPERABLE 345 KV transmission line,

2. One OPERABLE 345-13.8 KV startup transformer, and

3. One OPERABLE 13.8 KV bus, and

b. Two separate and independent diesel generators each with:

1. A separate day fuel tank containing a minimum volume of 4000 gallons of fuel,

2. A separate fuel storage system containing a minimum volume of 32,000 gallons of fuel, and

3. A separate fuel transfer pump.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

a. With either an offsite circuit or diesel generator of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter; restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With one offsite circuit 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 Requirements 4.8.1.1.1.a and 4.8.1.1.2.a.4 within

ACTION (Continued)

one hour and at least once per 8 hours thereafter; restore at least one of the inoperable sources to OPERABLE status within 12 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two offsite circuits and two diesel generators to OPERABLE status within 72 hours from the time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

c. With two of the above required offsite A.C. circuits inoperable, demonstrate the OPERABILITY of two diesel generators by performing Surveillance Requirement 4.8.1.1.2.a.4 within one hour and at least once per 8 hours thereafter, unless the diesel generators are already operating; restore at least one of the inoperable offsite sources to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours. With only one offsite source restored, restore at least two offsite circuits to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

d. With two of the above required diesel generators inoperable, demonstrate the OPERABILITY of two offsite A.C. circuits by performing Surveillance Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter; restore at least one of the inoperable diesel generators to OPERABLE status within 2 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore at least two diesel generators to OPERABLE status within 72 hours from time of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

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. Determined OPERABLE at least once per 7 days by verifying correct breaker alignments and indicated power availability, and

b. Demonstrated OPERABLE at least once per 18 months during shutdown by transferring (manually and automatically) unit power supply to each of the 345 KV transmission lines.

SURVEILLANCE REQUIREMENTS (Continued)

4.8.1.1.2 Each diesel generator shall be demonstrated OPERABLE:

a. At least once per 31 days 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 can be started and transfers fuel from the storage system to the day tank,

4. Verifying the diesel starts from ambient condition and accelerates to at least 900 rpm in $\leq$ 10 seconds,

5. Verifying the generator is synchronized, loaded to $\geq$ 1000 kw, and operates for $\geq$ 60 minutes, and

6. Verifying the diesel generator is aligned to provide standby power to the associated essential busses.

7. Verifying that the automatic load sequence timer is OPERABLE with each load sequence time within $\pm$ 10% of its required value.

b. At least once per 92 days by verifying that a sample of diesel fuel from each of the two fuel storage tanks is within the acceptable limits specified in Table 1 of ASTM D975-68 when checked for viscosity, water and sediment.

c. At least once per 18 months during shutdown by:

1. Subjecting the diesel to an inspection in accordance with procedures prepared in conjunction with its manufacturer's recommendations for this class of standby service,

2. Verifying the generator capability to reject a load of $\leq$ 480 kw without tripping,

3. Simulating a loss of offsite power in conjunction with a safety injection actuation test signal, and:

a) Verifying de-energization of the essential busses and load shedding from the essential busses,

SURVEILLANCE REQUIREMENTS (Continued)

b) Verifying the diesel starts from ambient condition on the auto-start signal, energizes the essential busses with permanently connected loads, energizes the auto-connected essential loads through the load sequencer and operates for ≥ 5 minutes while its generator is loaded with the essential loads.

c) Verifying that all diesel generator trips, except engine overspeed and generator differential, are automatically bypassed upon loss of voltage on the essential bus and/or an SFAS test signal.

4. Verifying the diesel generator operates for ≥ 60 mirutes while loaded to ≥ 2000 kw.

5. Verifying that the auto-connected loads to each diesel generator do not exceed the 2000 hour rating of 2838 kw.