APPLICATION FOR AMENDMENT

TO

FACILITY OPERATING LICENSE NUMBER NPF-3

DAVIS-BESSE NUCLEAR POWER STATION

UNIT NUMBER 1

Attached is the requested change to the Davis-Besse Nuclear Power Station, Unit Number 1, Facility Operating License Number NPF-3. Also included is the Safety Assessment and Significant Hazards Consideration.

The proposed change (submitted under cover letter Serial Number 2292) concerns:

Appendix A, Technical Specification Section 3.8.1.1 - A. C. Sources, Operating and Bases 3.0.5.

For: John P. Stetz, Vice President - Nuclear

By: _____
T. J. Myers, Director - Nuclear Assurance

Sworn to and subscribed before me this 1st day of June, 1995.

Nora Lynn Flood
Notary Public, State of Ohio - My Commission expires 9/3/97.

The following information is provided to support issuance of the requested changes to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1. Facility Operating License Number NPF-3, Appendix A, Technical Specifications. The changes involve Technical Specification 3.8.1.1 - A.C. Sources, Operating and Bases 3.0.5.

A. Time Required to Implement: This change is to be implemented within 90 days after the NRC issuance of the License Amendment.

B. Reason for Change (License Amendment Request Number 95-0005):

This application proposes changing the allowed outage time in Technical Specification 3.8.1.1 - A.C. Sources, Operating, for one unavailable Emergency Diesel Generator (EDG) from 72 hours to 7 days. This change is proposed as a result of: (1) the installation of the Station Blackout Diesel Generator (SBODG), equivalent in capacity to each of the two EDGs, pursuant to 10 CFR Section 50.63, (2) an evaluation of the impact of the extended EDG allowed outage time on the DBNPS probabilistic risk assessment (PRA), (3) the review of the risk associated with performing maintenance on an EDG during power operation and during an outage, and (4) the minimal effect of the 7 day allowed outage time on the availability of an EDG. A change is also proposed to Bases 3.0.5 to reflect the 7 day EDG AOT.

This change is also being submitted to the NRC as a Cost Beneficial Licensing Action (CBLA). This change will not adversely impact safety and will permit flexibility in performing preventive maintenance on the Emergency Diesel Generators during power operation. This represents a potential savings of $3,150,000 (1995 dollars) over the DBNPS's remaining life exclusive of replacement power costs. Replacement power cost savings could add, up to an additional $2,100,000 savings.

C. Safety Assessment and Significant Hazards Consideration: See Attachment

Docket Number 50-346
License Number NPF-3
Serial Number 2292
Attachment 1

SAFETY ASSESSMENT AND SIGNIFICANT
HAZARDS CONSIDERATION
FOR
LICENSE AMENDMENT REQUEST NO. 95-0005

(19 pages follow)

SAFETY ASSESSMENT AND SIGNIFICANT
HAZARDS CONSIDERATION
FOR
LICENSE AMENDMENT REQUEST NO. 95-0005

TITLE:

Proposed Modification to the Davis-Besse Nuclear Power Station (DBNPS), Unit Number 1, Facility Operating License NPF-3, Appendix A Technical Specifications to Revise Technical Specification 3.8.1.1 - A.C. Sources, Operating.

DESCRIPTION:

The purpose of the proposed change is to modify the Davis-Besse Nuclear Power Station (DBNPS), Operating License NPF-3, Appendix A Technical Specification (TS) 3.8.1.1 - A.C. Sources, Operating. The proposed change will revise TS 3.8.1.1 to increase the allowed outage time (AOT) period for one emergency diesel generator (EDG) being inoperable from 72 hours to seven (7) days. This increased AOT will primarily provide for increased flexibility in scheduling the performance of preventive maintenance consistent with ensuring the reliability of the EDGs and reducing the need to perform such maintenance during times of shutdown risk. As discussed in the following, there is a reasonable expectation that performance of the EDG preventive maintenance with the station on-line will not have a significant adverse effect on station safety. In addition, the increase in AOT will provide for additional time in troubleshooting and repairing an inoperable EDG should this occur while the reactor is on-line and reduce the likelihood of forcing the station through a shutdown transient with only one EDG available.

The EDGs provide onsite emergency alternating current (A.C.) electric power for the DBNPS in the event all offsite power sources are lost. TS 3.8.1.1 Limiting Condition for Operation requires that two EDGs be operable during operational Modes 1 through 4.

Action statement "a" is proposed for revision by relocating references to the EDGs to a new action statement "b".

Action statement "a" would state:

" 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 one hour and

at least once per 8 hours thereafter and by performing Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours. Restore at least two offsite circuits 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."

New action statement "b" is proposed which addresses the EDGs and the new seven (7) day AOT by stating:

"With 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 one hour and at least once per 8 hours thereafter and by performing Surveillance Requirement 4.8.1.1.2.a.4 within 24 hours. Restore at least two diesel generators to OPERABLE status within 7 days or be in HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours."

Current action statement "b"is redesignated as action statement "c" and revised to incorporate the proposed seven day (7) AOT for one EDG:

"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 Requirement 4.8.1.1.1.a within one hour and at least once per 8 hours thereafter and by performing Surveillance Requirement 4.8.1.1.2.a.4 within 8 hours. 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. With the inoperable offsite source restored, restore two diesel generators to OPERABLE status within 7 days from the time of the initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. With the inoperable diesel generator restored, restore two offsite power sources to OPERABLE status within 72 hours from the time of the initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours."

Current action statement "c" is redesignated as action statement "d" and is otherwise unchanged.

Current action statement "d" is redesignated as action statement "e" and is revised to increase the AOT for one inoperable EDG from 72 hours to seven (7) days:

"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 COLD SHUTDOWN within the following 30 hours. Restore at least two diesel generators to OPERABLE status within 7 days 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."

A change is also proposed to Bases 3.0.5 which references the 72-hour EDG AOT in an example of the application of TS 3.0.5. It is proposed that this Bases be revised to reference the seven (7) day EDG AOT.

SYSTEMS, COMPONENTS, AND ACTIVITIES AFFECTED:

Emergency Diesel Generators

FUNCTIONS OF THE AFFECTED SYSTEMS, COMPONENTS, AND ACTIVITIES:

The two 4.16 kv Class 1E Emergency Diesel Generators (EDGs) are described in the DBNPS Updated Safety Analysis Report (USAR) Section 8.3.1.1.4.1, Emergency Diesel Generators. The safety function of the EDGs is to provide highly reliable, independent sources of power to the various components necessary for the Engineered Safety Features (ESF) systems to function as assumed in the USAR. The safety function of the ESF systems is to protect the fuel cladding, ensure Containment Vessel integrity, and reduce the driving force for containment leakage in the event of an accident. As described in the USAR the starting and loading of one EDG is adequate to satisfy the minimum ESF requirements.

The two redundant EDGs, one connected to essential 4.16 kv bus C1 and the other to essential 4.16 kv bus D1, are provided as onsite standby power sources to supply their respective essential buses upon loss of the normal (station transformer) and the reserve (offsite) power sources. Bus load shedding and isolation, bus transfer to the EDG, and pick up of critical loads is automatic. Each EDG is a General Motors Electro-Motive diesel generator and has a continuous rating of 2600 kw. The EDGs are located in separate, adjacent rooms in the Seismic Class I Auxiliary Building.

During the applicable modes of TS 3.8.1.1 the EDGs are only required to function if the station's main generator is not supplying power to the Unit Auxiliary transformer, and the offsite power supply to an essential bus fails.

The proposed change affects the Limiting Condition for Operation (LCO) Action statement requirements for TS 3.8.1.1 during periods when one Emergency Diesel Generator (EDG) does not meet the requirements for operability, as defined in the Technical Specifications.

EFFECTS ON SAFETY:

A.C. Sources

The electrical system design is described in the DBNPS USAR Chapter 8, Electrical Power. Three offsite powered 345 kv lines connect the Toledo Edison transmission grid to the switchyard. This exceeds the TS 3.8.1.1

LCO requirement for only two 345 kv lines. The three 345 kv transmission lines access the site by two different right-of-ways. The two 345 kv transmission lines located on the same right-of-way are supported on structures set far enough apart to avoid the possibility of structural collapse of one causing an outage of both lines. The 345 kv switchyard design is a ring bus scheme with ultimate transition to a breaker-and-a-half scheme. Three overhead 345 kv lines are provided from the switchyard to the onsite station distribution system, one line to each of the two startup transformers and a third line to the main transformer. Each circuit is capable of carrying full station auxiliary loads assuming the other two circuits are not functioning.

The normal supply to the onsite distribution system during reactor power operation is the main generator via the unit auxiliary transformer. The reserve power supply and the startup sources are the two startup transformers. Normally each startup transformer is the reserve power source to one of the two 13.8 kv buses of the onsite distribution system. The transfer of a 13.8 kv bus between the three sources can be accomplished either manually or automatically. If either startup transformer is out-of-service the remaining transformer will be available, by manual pre-selection, to automatically supply both buses should the normal source fail. Offsite power is also available by manually removing the generator disconnect links permitting backfeed through the main transformer to the unit auxiliary transformer. The standby emergency power supply is provided by the two EDGs.

Two 4.16 kv essential buses of the onsite distribution system provide power to ESF systems for safe station shutdown. Each essential 4.16 kv bus is provided with a fast bus transfer scheme which will transfer the bus from its normal source to an alternate source of power.

The two EDGs are each connected to one of the essential 4.16 kv buses as a standby power source to supply the respective bus upon loss of the normal and reserve power sources. Bus load shedding and isolation, bus transfer to the EDG, and pickup of critical loads are automatic. Each diesel will receive a start signal when any of the following occurs:

a. Loss of essential bus voltage

b. A safety feature actuation signal (Level 2: high containment pressure or low RCS pressure)

c. Manual start

Any of the above conditions will initiate a start signal to the EDGs. However, except for manual synchronization during routine testing, the essential buses will be isolated only upon loss of voltage or a bus fault, and the EDG breaker will be closed only on loss of voltage without a bus fault.

The DBNPS is committed to a 0.95 target reliability for the EDGs. The DBNPS goal for the total unavailability of the EDGs is less than 1.5 percent per EDG. As of February 1995 the EDGs had experienced no start or load-run failures in the previous 100 demands and the 12 month and 36 month average unavailability were 0.3 percent. Toledo Edison estimates that with the proposed Technical Specification changes in effect, the EDG 36 month average planned unavailability will range between 0.6 to 1.0 percent due to performance of the required eighteen month inspection/preventative maintenance (PM), three year PM, and six year rebuild/PM during power operation. Therefore, the increase in planned unavailability as a result of the proposed Technical Specification changes, will be minimal and within the previously set unavailability goal.

Station Blackout Diesel Generator

In addition to three incoming offsite 345 kv transmission lines and the two EDGs, Toledo Edison has installed, at a cost of $9.07 million, a Station Blackout Diesel Generator (SBODG). The non-class 1E 4.16 kv SBODG meets the definition of an alternate A.C. source under the requirements of 10 CFR 50.2 and 10 CFR 50.63. The SBODG is described in USAR Section 8.3.1.1.4.2, Alternate AC Source - Station Blackout Diesel Generator. Preoperational testing of the SBODG was completed during the eighth refueling outage (1993). The NRC staff evaluated the SBODG for compliance with 10 CFR 50.63 and found it acceptable as documented in its letter of March 7, 1991 to Toledo Edison.

The SBODG is a General Motors Electro-Motive non-class 1E 4.16 kv, 2865 kw (continuous rating) diesel generator capable of providing A.C. power to all systems required for coping with a station blackout as defined in 10 CFR 50.2. The SBODG has a generating capacity greater than each EDG. The SBODG is located in a separate building, south of the station within the protected area. All cabling between this structure and the station is routed through a buried duct bank.

The SBODG is capable of supplying either of the DBNPS's essential 4.16 kv buses through non-essential bus D2 and is available within ten (10) minutes of the onset of Station Blackout. During an emergency, the SBODG can be manually started and loaded from the Control Room; automatic starting and loading is not provided. Operation of circuit breakers to line-up the SBODG to either essential bus can be accomplished from the Control Room.

The DBNPS maintains the SBODG in accordance with a reliability program meeting the requirements of NUMARC 87-00, Guideline and Technical Bases for NUMARC Initiative Addressing Station Blackout at Light Water Reactors, Appendix D and Regulatory Guide 1.155, Station Blackout. The SBODG and associated components have been incorporated into the DBNPS Quality Assurance program.

The DBNPS is committed to a 0.95 target reliability for the SBODG. The DBNPS goal for annual total unavailability of the SBODG is less than 2.5 percent. As of February 1995 the SBODG had not experienced any start or load-run failures and the 12 month average unavailability was 0.3 percent.

The SBODG represents a change to the DBNPS licensing basis since the issuance of the Operating License and its associated Technical Specifications in 1977. Under the original Technical Specifications issued by the NRC, two offsite 345 kv incoming transmission lines and two EDGs were required. With these requirements, a 72 hour AOT for a 345 kv line or EDG was provided in TS 3.8.1.1. With the addition of the SBODG and in consideration of the third offsite 345 kv incoming transmission line, it is reasonable that the EDG AOT be increased to seven (7) days.

Loss of All Station A.C. Power

The loss of all A.C. power or station blackout accident has been analyzed in USAR Section 15.2.9, Loss of all AC Power to the Station Auxiliaries (Station Blackout). The accident analysis shows that the loss of all A.C. power does not result in excessive pressure in the Reactor Coolant System (RCS) and the natural circulation characteristics of the RCS will assure core decay heat removal and a minimum core DNBR greater than 1.30. The SBODG is not credited in the analysis of this accident.

In consideration of the addition of the SBODG, the originally installed third 345 kv incoming transmission line, and the above analysis it is reasonable that the EDG AOT be increased to seven (7) days.

Probabilistic Risk Assessment

To further assess the overall effect on plant safety, the impact of an extended EDG AOT on the plant probabilistic risk analysis (PRA) was evaluated. This evaluation considered both the short term increase in plant risk during the period of EDG unavailability, and the long term increase in EDG average unavailability.

As part of the DBNPS Maintenance Rule implementation efforts, criteria have been developed for controlling the short term increase in plant risk due to on-line maintenance. These are based on the general methodology of:

$$(\Delta CDF)*AOT < n$$

where, CDF = Core Damage Frequency
AOT = Allowed Outage Time
n = 5.0E-06 (DBNPS specific value representing a potentially significant threshold of increased plant risk)

(Note: the DBNPS estimated baseline core damage frequency is 6.6E-5 as reported in the Individual Plant Examination for The Davis-Besse Nuclear Power Station, February 1993.)

Application of this criterion to the proposed four (4) day EDG AOT extension concludes that the revised EDG AOT of seven (7) days is well below, by more than a factor of two, the established guidelines.

In addition, based on the above methodology, measures have been incorporated into plant administrative processes for the control of on-line work performed concurrently on systems which are important with respect to plant risk, including the EDGs. If the estimated risk from a particular combination of unavailable equipment exceeds the established guidelines, further specific evaluation is required to determine if the resultant plant risk is acceptable. This further evaluation would take into account the availability of other plant equipment, specific compensating measures taken and the actual expected duration.

As stated previously, EDG performance criteria have been developed as part of the DBNPS Maintenance Rule implementation. As such, the overall long term average unavailability of each EDG will be monitored and trended. A value of 1.5 percent per EDG has been established as the level above which actions will be taken to reduce the total unavailability of an EDG (i.e., place the EDG into the "a(1)" Maintenance Rule category). Future work which would be enabled by the proposed AOT revision can be accommodated by this criterion. A similar criterion of 2.5 percent has been established for the SBODG.

The 1.5 percent unavailability criterion represents a factor of two increase in the approximate 0.75 percent EDG unavailability per EDG assumed in the DBNPS PRA. Sensitivity calculations indicate a resultant increase in the baseline plant risk of less than 2.5 percent. An increase of this order is not considered to be significant given the overall uncertainty associated with the baseline CDF estimation.

Maintenance Planning and Scheduling

With one EDG inoperable, TS 3.0.5 delineates the additional conditions that must be satisfied to permit operation to continue, consistent with the Action requirements of TS 3.8.1.1. TS 3.0.5 specifically prohibits operation when one division of the ESF systems is inoperable because its normal or emergency power source is inoperable and a system, subsystem, train, component or device in another division is inoperable for another reason. This restriction maintains the minimum ESF requirements.

Scheduling of EDG maintenance will be in accordance with plant administrative processes to control work on equipment important to plant risk, and configurations will be strictly controlled to assure the requirements of TS 3.0.5 are met and decrease the likelihood of a transient, thereby mitigating the impact on plant safety.

The DBNPS administrative processes control the combinations of risk significant systems that may be scheduled for on-line maintenance. Combinations of risk significant systems that exceeded established guidelines require further management review to determine if the resultant risk is acceptable. The DBNPS administrative processes require that work on risk significant systems be minimized both in frequency and duration by prudent scheduling methods. Entry into TS action statements to perform preventative and/or

corrective maintenance is permitted by the DBNPS administrative processes when the maintenance will enhance the reliability of the equipment or improve its function under design basis conditions.

In performing EDG planned maintenance at power, material and parts will be pre-staged in order to minimize the likelihood of delays during the performance of maintenance. DBNPS administrative processes require that this maintenance be performed on a continuous work basis (i.e., around the clock until the affected equipment is capable of performing its design function) in order to minimize the AOT used. Flexibility in scheduling EDG maintenance will assist in avoiding simultaneous outages of risk significant components. In addition, performing planned maintenance on-line, as opposed to during an outage, will allow Toledo Edison to better select and schedule the maintenance personnel and focus on the successful completion of the EDG outage.

The performance of preventive maintenance is intended to increase EDG reliability during power operations and shutdown conditions. Although a site specific shutdown PRA is not available for quantitative assessment, it should be noted, based on the reasoning outlined above, that conducting preventive maintenance evolutions at power rather than during shutdown conditions will reduce shutdown risk.

Toledo Edison has reviewed the maintenance requirements for the EDGs and projects that the most extensive preventive maintenance (six year preventive maintenance) will require a maximum of four days to complete. This is less than 58 percent of the EDG AOT of seven (7) days and allows margin should additional work be identified during the maintenance period. Therefore, the increase in the EDG AOT is expected to have a positive effect on maintenance planning and scheduling.

Restoration of an EDG Inoperable Due to Non-Maintenance Activities

An EDG is declared inoperable if it fails to pass its TS surveillance periodic tests. The AOT is entered and troubleshooting, repairs, and/or replacements are performed in order to restore the EDG to operability. At the DBNPS these activities are performed around the clock in order to restore the inoperable EDG as soon as possible. An increased AOT will have a positive effect by providing additional time to perform these activities, if required, and reducing the likelihood of forcing the station through a shutdown transient with only one EDG available. It will also have positive effect on safety by minimizing the likelihood of performing the required restoration activities during hot shutdown (Mode 4) and the early part of cold shutdown (Mode 5) when decay heat is high, the reactor coolant inventory is limited and only electric pumps are available to provide sources of cooling (i.e., main steam is not available).

Comparison With Other Nuclear Units

The proposed increase in the EDG AOT to seven (7) days can be compared against the number of other nuclear power units already having seven (7)

day EDG AOTs. Approximately thirty other nuclear power units, or about one-third of the nuclear industry, have an LCO AOT of seven days for an inoperable EDG.

Change to Technical Specification Bases 3.0.5

The proposed change to TS Bases 3.0.5 simply reflects the proposed change from a 72-hour EDG AOT in TS 3.8.1.1 to a seven (7) day EDG AOT. The reference to the 72-hour AOT in Bases 3.0.5 is in an example; therefore, the proposed change to a seven (7) day EDG AOT is an administrative change which has no adverse effect on safety.

Conclusion

The proposed change extends the allowed time period, as defined by TS 3.8.1.1 LCO action requirements, that the safety function of one EDG would be unavailable. Operation with one EDG inoperable satisfies the minimum ESF requirements and is bounded by the accident analysis of the USAR for loss of all A.C. power. As discussed above, the impact on safety has been evaluated with regards to increasing the EDG AOT to seven days and there is no significant adverse impact on safety.

SIGNIFICANT HAZARDS CONSIDERATION:

The Nuclear Regulatory Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazard exists due to a proposed amendment to an Operating License for a facility. A proposed amendment involves no significant hazards consideration if operation of the facility in accordance with the proposed changes would: (1) Not involve a significant increase in the probability or consequences of an accident previously evaluated; (2) Not create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) Not involve a significant reduction in a margin of safety. Toledo Edison has reviewed the proposed change and determined that a significant hazards consideration does not exist because operation of the Davis-Besse Nuclear Power Station (DBNPS), Unit No. 1, in accordance with this change would:

1a. Not involve a significant increase in the probability of an accident previously evaluated because the proposed change to increase the allowed outage time for one emergency diesel generator from three (3) days to seven (7) days does not make a change to any accident initiator, initiating condition or assumption. The accident previously evaluated in the DBNPS Updated Safety Analysis Report (USAR) Section 15.2.9, Loss of All AC Power to the Station Auxiliaries (Station Blackout), is not affected by this proposed change. The proposed change does not involve a significant change to the plant design or operation, only to the allowed outage time, and based on a review of the available alternate A.C. power sources, the effect on probabilistic risk at power, the effect on shutdown risk, and maintenance planning and scheduling, this change has been determined to be acceptable.

1b. Not involve a significant increase in the consequences of an accident previously evaluated because the proposed change does not invalidate assumptions used in evaluating the radiological consequences of an accident, does not alter the source term or containment isolation and does not provide a new radiation release path or alter potential radiological releases.

2. Not create the possibility of a new or different kind of accident from any previously evaluated because the proposed change does not introduce a new or different accident initiator or introduce a new or different equipment failure mode or mechanism.

3. Not involve a significant reduction in the margin of safety because the proposed change does not significantly reduce the margin to safety which exists in the present Technical Specification action statements. The DBNPS USAR Section 15.2.9 evaluates the acceptability of the loss of all A.C. power to the station, including the loss of both EDGs, and the margin of safety in this analysis is not affected by the proposed change. In addition, since the issuance of the original DBNPS Operating License Technical Specifications Toledo Edison has installed a Station Blackout Diesel Generator, comparable in continuous rating to the EDGs and capable of providing emergency A.C. power in the event all three offsite 345 transmission lines and the two EDGs are unavailable. This has positive effect on maintaining the margin to safety which exists in the Technical Specifications with a three day allowed outage time, which was established prior to installation of the SBODG.

CONCLUSIONS:

On the basis of the above, Toledo Edison has determined that the License Amendment Request does not involve a significant hazards consideration. As this License Amendment Request concerns a proposed change to the Technical Specifications that must be reviewed by the Nuclear Regulatory Commission, this License Amendment does not constitute an unreviewed safety question.

ATTACHMENT:

Attached are the proposed marked-up changes to the Operating License.

REFERENCES:

1. USAR Section 3D.1.13, Criterion 17 - Electric Power Systems

2. USAR Section 6.3.3.2.4, Minimum Conditions of ECCS.

3. USAR Section 8.3.1.1.4.1, Emergency Diesel Generators.

4. USAR Section 8.3.1.1.4.2, Alternate AC Source - Station Blackout Diesel Generator.

5. USAR Section 8.3.1.2, Analysis

6. USAR Section 15.2.9, Loss of All AC Power to the Station Auxiliaries (Station Blackout).

7. NUREG-0103 and Supplement 1, NRC Safety Evaluation Report for the DBNPS NPF-3 Operating License.

8. Regulatory Guide 1.155, Station Blackout.

9. NUMARC 87-00, Guideline and Technical Bases for NUMARC Initiative Addressing Station Blackout at Light Water Reactors.

10. Individual Plant Examination for The Davis-Besse Nuclear Power Station, February 1993.

11. DBNPS Work Process Guideline, WPG-1 Revision 2, April 1, 1995.

12. 10 CFR 50.2, Definitions.

13. 10 CFR 50.63, Loss of All Alternating Current Power.

14. 10 CFR 50.65, Requirements for Monitoring the Effectiveness of Maintenance of Nuclear Power Plants.

15. Letter from D. C. Di Ianni, NRC, to D. C. Shelton, Toledo Edison, dated March 7, 1991, Subject: Safety Evaluation of the DBNPS Unit No. 1, Station Blackout Rule 10 CFR 50.63 (TAC No. 68536).