

Carolina Power & Light Company

P.O. Box 1551 • Raleigh, N.C. 27602

APR 19 1990

A. B. CUTTER

Vice President

Nuclear Services Department

SERIAL: NLS-90-079

10CFR50.90

90TSB06

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NO. 1
DOCKET NO. 50-325/LICENSE NO. DPR-71
REQUEST FOR LICENSE AMENDMENT
ONE-TIME EXTENSION OF DIESEL GENERATOR SURVEILLANCE INTERVAL

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, Carolina Power & Light Company (CP&L) hereby requests a revision to the Technical Specifications for the Brunswick Steam Electric Plant (BSEP), Unit 1.

Technical Specification 4.8.1.1.2.d requires certain surveillances (4.8.1.1.2.d.1 through 4.8.1.1.2.d.7) of the diesel generators to be performed at least once per 18 months during shutdown. The proposed amendment revises the surveillance interval associated with Technical Specification 4.8.1.1.2.d.1 to allow a one-time only extension of these surveillances until October 31, 1990. This extension allows operation of Brunswick-1 until the upcoming Reload 7 outage currently scheduled to begin on September 8, 1990, thereby avoiding a mid-cycle shutdown solely to perform the diesel generator surveillances.

Enclosure 1 provides a detailed description of the proposed changes and the basis for the changes.

Enclosure 2 details the basis for the Company's determination that the proposed changes do not involve a significant hazards consideration.

Enclosure 3 provides the proposed Technical Specification pages for Unit 1.

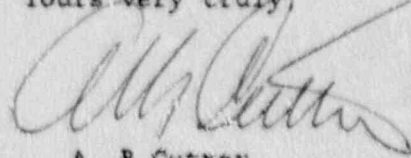
Surveillance Requirement 4.8.1.1.2.d.1 inspections are due by June 23, 1990 for diesel generator 2 and July 16, 1990 for diesel generator 1. As such, Carolina Power & Light Company requests that the proposed amendment be issued by June 20, 1990 in order to avoid a mid-cycle shutdown of Brunswick-1 solely to perform these inspections.

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Please refer any questions regarding this submittal to Mr. M. R. Oates at
(919) 546-6063.

Yours very truly,



A. B. Cutter

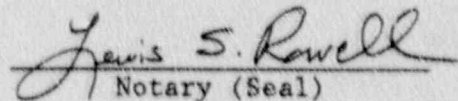
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Enclosures:

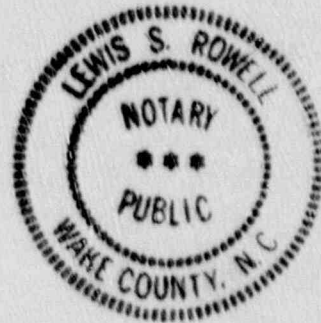
1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Technical Specification Page - Unit 1

cc: Mr. Dayne H. Brown
Mr. S. D. Ebner
Mr. N. B. Le
Mr. W. H. Ruland

A. B. Cutter, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.


Notary (Seal)

My commission expires: 7/12/94



ENCLOSURE 1

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BASIS FOR CHANGE REQUEST

Proposed Change

Technical Specification 4.8.1.1.2.d requires certain surveillances (4.8.1.1.2.d.1 through 4.8.1.1.2.d.7) of the diesel generators to be performed at least once per 18 months during shutdown. The proposed amendment revises the surveillance interval associated with Technical Specification 4.8.1.1.2.d.1 to allow a one-time only extension of these surveillances until October 31, 1990. This extension allows operation of Brunswick-1 until the upcoming Reload 7 outage currently scheduled to begin on September 8, 1990, thereby avoiding a mid-cycle shutdown solely to perform the diesel generator surveillances.

Basis

Brunswick-1 and Brunswick-2 were designed and are operated with a shared configuration of the four diesel generators. Diesel generators 1, 2, 3, and 4 supply emergency buses E1, E2, E3, and E4 respectively. Emergency buses E1 and E2 are associated with Brunswick-1 and E3 and E4 with Brunswick-2. In addition, selected redundant loads, such as two residual heat removal pumps are normally supplied by the opposite unit's emergency buses. While performing the required inspection of a given diesel generator, the loads associated with that diesel generator are subject to their Limiting Condition for Operation requirements.

Technical Specification 4.8.1.1.2.d requires certain surveillances (4.8.1.1.2.d.1 through 4.8.1.1.2.d.7) of the diesel generators be performed at least once per 18 months during shutdown. Until recently, CP&L has interpreted during shutdown to mean shutdown of the diesel generator since the defined term SHUTDOWN, referring to shutdown of the unit, was not specified in the surveillance requirement. As a result of discussions with NRC Region II, a clarification of Bases Section 3/4.8 was submitted to the NRC on February 23, 1990 (NLS-90-014). This clarification specifies that during shutdown means the shutdown of Brunswick-1 for inspection of diesel generators 1 and 2; and the shutdown of Brunswick-2 for inspection of diesel generators 3 and 4.

The previous 4.8.1.1.2.d.1 diesel generator inspections have, at times, been performed with the units operating and no effort was made to schedule diesel generator surveillances coincident with refueling outages. As such, the Surveillance Requirement 4.8.1.1.2.d.1 is due for diesel generators 1 and 2 on July 16, 1990 and June 23, 1990, respectively. These dates include the maximum allowable extension provided by Technical Specification 4.0.2.

Initially, the revised interpretation of the requirements of Technical Specification 4.8.1.1.2.d.1 did not present a problem because the upcoming Brunswick-1 refueling outage was scheduled to begin in June 1990. However, due to anticipated system load demands during the summer peak, the refueling outage has recently been rescheduled to begin on September 8, 1990. As such, the Company is currently faced with a mid-cycle shutdown of Brunswick-1 solely to perform diesel generator surveillances. Therefore, CP&L is requesting a one-time extension of the surveillance interval until October 31, 1990. This extension represents approximately 3.5 months for diesel generator 1 and 4.2 months for diesel generator 2, resulting in a total interval of approximately 26 months and 26.7 months for diesel generators 1 and 2, respectively. Performance of Technical Specification 4.8.1.1.2.d.1 surveillances requires partial disassembly of the diesel and takes approximately 1 week to complete. The requested extension provides sufficient time to complete the required surveillances during their normal refueling outage window and avoids simultaneously declaring both diesel generators inoperable and, thus, having to shutdown Brunswick-2 per Technical Specifications 3.8.1.1 and 3.8.1.2, resulting in a dual unit outage.

In addition, the Brunswick-1 Reload 7 outage is scheduled for 24 weeks in order to perform recirculation pipe replacement. Due to the length of the outage, performing the required diesel generator surveillances by their current due dates will potentially result in expiration of the new interval prior to the Reload 8 outage, which is currently scheduled to begin April 1992. Therefore, if the extension is not granted the diesel generator surveillances associated with Technical Specification 4.8.1.1.2.d.1 will have to be performed by their respective due dates and then repeated during the upcoming Reload 7 outage in order to "re-set the clock."

The proposed amendment extends the interval at which the surveillances associated with Technical Specification 4.8.1.1.2.d.1 are performed by a maximum of approximately 3.5 months for diesel generator 1 and 4.2 months for diesel generator 2. This extended surveillance interval is justified based on the high degree of reliability demonstrated by the Brunswick diesel generators. The previous Technical Specification 4.8.1.1.2.d.1 surveillance was completed satisfactorily for both diesel generators. In addition, the diesel manufacturer has stated that diesel generator reliability will not be adversely affected by the proposed extension of the surveillance interval associated with the inspection required in Surveillance Requirement 4.8.1.1.2.d.1 until October 31, 1990. This is based on the relatively low number of hours of diesel generator operation during the current operating cycle (approximately 103 hours for diesel generator 1 and 82 hours for diesel generator 2). The vendor's recommended diesel generator inspection interval is at least once per 1000 hours of diesel generator operation. In addition, the diesel generator lube oil is heated in order to avoid cold starting of the diesel. As such, the effects of extending the surveillance interval would be negligible.

Based on the above, the proposed extension of the diesel generator surveillance interval will not significantly affect the diesel generators' ability to perform their intended safety function.

ENCLOSURE 2

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10 CFR 50.92 EVALUATION

The Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. Carolina Power & Light Company has reviewed this proposed license amendment request and determined that its adoption would not involve a significant hazards consideration. The bases for this determination are as follows:

Proposed Change

Technical Specification 4.8.1.1.2.d requires certain surveillances (4.8.1.1.2.d.1 through 4.8.1.1.2.d.7) of the diesel generators to be performed at least once per 18 months during shutdown. The proposed amendment revises the surveillance interval associated with Technical Specification 4.8.1.1.2.d.1 to allow a one-time only extension of these surveillances until October 31, 1990. This extension allows operation of Brunswick-1 until the upcoming Reload 7 outage currently scheduled to begin on September 8, 1990, thereby avoiding a mid-cycle shutdown solely to perform the diesel generator surveillances.

Basis

The change does not involve a significant hazards consideration for the following reasons:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Extending the diesel generator surveillance interval until October 31, 1990 will not result in a significant increase in the probability of the diesel generator failing to perform its intended safety function. The diesel generators have demonstrated an extremely high degree of reliability. The previous Technical Specification 4.8.1.1.2.d.1 surveillance was completed satisfactorily for both diesel generators. As such, the effects of extending the surveillance interval would be negligible. In addition, the diesel manufacturer has stated that diesel generator reliability will not be adversely affected by delaying the inspection required in Technical Specification 4.8.1.1.2.d.1 until

October 31, 1990. This is based on the relatively low number of hours of diesel generator operation during the current operating cycle (approximately 103 hours for diesel generator 1 and 82 hours for diesel generator 2). The vendor's recommended diesel generator inspection interval is at least once per 1000 hours of diesel generator operation. In addition, the diesel generator lube oil is heated in order to avoid cold starting of the diesel. Therefore, the proposed amendment does not involve a significant increase in the probability of a previously evaluated accident.

The diesel generator surveillance requirements are intended to maintain diesel generator reliability at a level which assures that adequate electrical power is available under the most limiting accident conditions within the accident analysis for the Brunswick Plant. The most limiting accident condition includes the loss of off-site power and the loss of one diesel generator. The proposed surveillance frequency will not adversely affect diesel generator availability. As stated above, past diesel generator performance has indicated an extremely high degree for reliability over an extended period of time. Thus, extending the surveillance interval until October 31, 1990 will not significantly affect this reliability. As such, the proposed amendment does not involve a significant increase in the consequences of a previously evaluated accident.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed amendment only extends the surveillance interval for the diesel generators. There is no change to the plant or its manner of operation. Also, there are no changes to the surveillance acceptance criteria. Therefore, the proposed change can not create the possibility of a new or different kind of accident from any previously evaluated.
3. The proposed amendment does not involve a significant reduction in the margin of safety. Extending the diesel generator surveillance interval to October 31, 1990 will not result in a significant increase in the probability of the diesel generator failing to perform its intended safety function. The diesel generators have demonstrated an extremely high degree of reliability. The previous Technical Specification 4.8.1.1.2.d.1 surveillance was completed satisfactorily for both diesel generators. As such, the effects of extending the surveillance interval would be negligible. In addition, the diesel manufacturer has stated that diesel generator reliability will not be adversely affected by delaying the inspection required in Technical Specification 4.8.1.1.2.d.1 until October 31, 1990. This is based on the relatively low number of hours of diesel generator operation during the current operating cycle (approximately 103 hours for diesel generator 1 and 82 hours for diesel generator 2). The vendor's recommended diesel generator inspection interval is at least once per 1000 hours of diesel generator operation. In addition, the diesel generator lube oil is heated in order to avoid cold starting of the

diesel. Therefore, the proposed amendment does not involve a significant reduction in the margin of safety.