



10 CFR 50.46(a)(3)(ii)

SEP 11 2007

SERIAL: BSEP 07-0095

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Docket Nos. 50-325 and 50-324/License Nos. DPR-71 and DPR-62
Annual Report of Emergency Core Cooling System Evaluation Model
Changes and Errors

Reference: Letter from Randy C. Ivey to the U.S. Nuclear Regulatory Commission,
"Annual Report of Emergency Core Cooling System Evaluation Model
Changes and Errors," dated September 28, 2006, ADAMS Accession
Number ML062780225

Ladies and Gentlemen:

In accordance with 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors," paragraph (a)(3)(ii), Carolina Power & Light Company (CP&L), now doing business as Progress Energy Carolinas, Inc., is submitting the annual report of the emergency core cooling system (ECCS) evaluation model changes and errors for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2.

This report covers the period from August 16, 2006, through August 15, 2007. The previous annual report for BSEP, Units 1 and 2, was submitted by CP&L's letter dated September 28, 2006. Since the previous annual report, no error or change notifications have been issued by Global Nuclear Fuels which affect the ECCS evaluation model for BSEP, Units 1 and 2. Therefore, the estimated licensing basis peak cladding temperatures (PCTs) remain unchanged from the values previously reported (i.e., 1567° F for GE14 fuel).

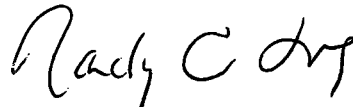
Progress Energy Carolinas, Inc.
Brunswick Nuclear Plant
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NRR

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No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Ms. Annette H. Pope, Supervisor - Licensing/Regulatory Programs, at (910) 457-2184.

Sincerely,



Randy C. Ivey
Manager - Support Services
Brunswick Steam Electric Plant

WRM/wrm

cc: U. S. Nuclear Regulatory Commission, Region II
ATTN: Dr. William D. Travers, Regional Administrator
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U. S. Nuclear Regulatory Commission
ATTN: Mr. Joseph D. Austin, NRC Senior Resident Inspector
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ATTN: Mr. Stewart N. Bailey (Mail Stop OWFN 8B1)
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Rockville, MD 20852-2738

Chair - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

2007 BRUNSWICK ANNUAL 10 CFR 50.46 REPORT

Prepared By: David J. Pribyl (NFM&SA)
Date: August 22, 2007
PassPort NTM: 00207790

BNP 10 CFR 50.46

Assessment Period: August 16, 2006 – August 15, 2007

A. Introduction

The documentation herein supports compliance to 10 CFR 50.46 (a)(3)(ii) (Reference B.1) requiring licensees of light-water nuclear power reactors to report the nature of a change or the error in an ECCS evaluation model to the Commission at least annually. The purpose of this assessment is to support the 2007 Brunswick Annual 10 CFR 50.46 Report. The requirements of 10 CFR 50.46 with regard to the identification and evaluation of changes to or errors in the LOCA evaluation model are implemented by Progress Energy procedure REG-NGGC-0006 (Reference B.2).

B. References

- B.1 Title 10 Code of Federal Regulation 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Reactors," June 29, 2007.
- B.2 Progress Energy Procedure REG-NGGC-0006, "Identification of Changes to (or Errors in) LOCA Evaluation Models or Applications According to 10 CFR 50.46," Revision 2.
- B.3 Email Correspondence from Mark Mneimneh (GNF) to Eric Geyer (PGN), "RE: 10 CFR 50.46 Notification – 2007 – Brunswick," August 21, 2007 (Attachment 1).
- B.4 PassPort Condition Report 00168654, "2006 Annual 10 CFR 50.46 Report."
- B.5 Brunswick Design Calculation 0B21-0112, "10CFR50.46 SAFER/GESTR-LOCA ECCS Analysis Update," Revision 12, January 25, 2007.

C. Summary

As reported by GNF in Reference B.3 (Attachment 1), there have been no additional notices for Brunswick since 2006-01. Notice 2006-001 was addressed in the 2006 Brunswick Annual 10 CFR 50.46 Report (Reference B.4). Therefore, there are no changes to (or errors in) the Brunswick LOCA evaluation model to record for the Brunswick 2007 10 CFR 50.46 assessment period. The assessment of the Brunswick LOCA evaluation model in Reference B.5 remains valid.

Tables 1, 2, and 3 (below) summarize the current LOCA evaluation results as documented in Reference B.5.

Table 1								
BNP SAFER/GESTR-LOCA ECCS Analysis Change/Error Summary								
Change or Error Notice	Notice or Document Date	Period Covered	Change or Error Description	GE BWR Estimated Licensing PCT Impact	Estimated BNP Licensing PCT Impact and Estimated PCT (GE14)	Cumulative BNP Licensing PCT Change	Is BNP Licensing PCT Change Greater than 50°F?	
							Incremental	Cumulative
NA	NA	Through 8/15/07	NA	NA	NA	NA	NA	NA

Table 2			
BNP Licensing PCT Change Summary Through 8/15/07*			
Fuel Type (most recent LOCA analysis Licensing PCT)	Most Recent Licensing PCT Reported in a LOCA Document Submitted to the NRC (Analysis or Notice)	Current Estimated Licensing PCT	Change from reported Licensing PCT
GE14	<1567°F	<1567°F	0°F

Table 3			
BNP Upper Bound PCT Change Summary Through 8/15/07*			
Fuel Type (most recent LOCA analysis Upper Bound PCT)	Upper Bound PCT Corresponding to Table 2 Most Recent Submitted to the NRC	Current Estimated Upper Bound PCT	Change from Previous Upper Bound PCT
GE14	<1497°F	<1497°F	0°F

* BNP LOCA Results presented for Unit 2, which bounds Unit 1.

ATTACHMENT 1

From: Mneimneh, Mark (GNF) [Mark.Mneimneh@gnf.com]
Sent: Tuesday, August 21, 2007 3:37 PM
To: Geyer, Eric; Pribyl, David
Subject: RE: 10 CFR 50.46 Notification - 2007 - Brunswick

Eric, Dave;

There have been no additional notices for Brunswick since 2006-01.

Annual notifications letters have not been sent since 2001. In the past these letters were sent to NRC and then sent to each customer as an attachment. At some point, GE realized that utilities, as the owner of plant configuration, are the right entities to send the annual notification to NRC. The SRLR is now used as the means to summarize the 50.46 errors. We have been sending emails to customers (on request, similar to this) with the list of errors since their last SRLR.

Thanks
Mark

From: Geyer, Eric [mailto:eric.geyer@pgnmail.com]
Sent: Monday, August 20, 2007 5:13 PM
To: Mneimneh, Mark (GNF)
Cc: Lingenfelter, Andy (GNF); Pribyl, David
Subject: FW: 10 CFR 50.46 Notification - 2007 - Brunswick

Mark,
Is an annual reporting letter pending? Or no news is good news?

Last notice we received (attached) was 7/28/06.

Thanks,
Eric

<<20060728 10 CFR50-46 Notification 2006-01 Brunswick GNF Email Attachment.pdf>>
<<20060728 10 CFR50-46 Notification 2006-01 Brunswick GNF Email.pdf>>

-----Original Message-----

From: Pribyl, David
Sent: Monday, August 20, 2007 1:41 PM
To: Geyer, Eric
Subject: 10 CFR 50.46 Notification - 2007 - Brunswick

Eric,

Has GNF transmitted the 50.46 notification for Brunswick? Can I get a copy?

I need to start preparing the Brunswick transmittal soon.

Thanks ... David

David Pribyl
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