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10 CFR 50.46

Serial: RA-16-0025  
May 31, 2016

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

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2  
DOCKET NOS. 50-325 AND 50-324 / RENEWED LICENSE NOS. DPR-71 AND DPR-62

CATAWBA NUCLEAR STATION, UNITS 1 AND 2  
DOCKET NOS. 50-413 AND 50-414 / RENEWED LICENSE NOS. NPF-35 AND NPF-52

MCGUIRE NUCLEAR STATION, UNITS 1 AND 2  
DOCKET NOS. 50-369 AND 50-370 / RENEWED LICENSE NOS. NPF-9 AND NPF-17

OCONEE NUCLEAR STATION, UNIT NOS. 1, 2 AND 3  
DOCKET NOS. 50-269, 50-270 AND 50-287 / RENEWED LICENSE NOS. DPR-38, DPR-47  
AND DPR-55

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1  
DOCKET NO. 50-400 / RENEWED LICENSE NO. NPF-63

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-261 / RENEWED LICENSE NO. DPR-23

**SUBJECT: DUKE ENERGY  
ANNUAL REPORT OF CHANGES PURSUANT TO 10 CFR 50.46**

Pursuant to 10 CFR 50.46 (a)(3)(ii), Duke Energy Progress, Inc. and Duke Energy Carolinas, LLC, collectively referred to hence forth as Duke Energy, hereby submits the enclosed annual reports of changes to or errors in Emergency Core Cooling System (ECCS) evaluation models. These reports cover the time period ending December 31, 2015, for the Brunswick Steam Electric Plant, Catawba Nuclear Station, H. B. Robinson Steam Electric Plant, McGuire Nuclear Station, Shearon Harris Nuclear Power Plant and the Oconee Nuclear Station. Rebaselining of the Annual 10 CFR 50.46 Reports submission dates for the respective sites allows Duke Energy the flexibility of submitting one consolidated 10 CFR 50.46 report.

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This document contains no regulatory commitments. Please refer any questions regarding this submittal to Mr. Art Zaremba at 980-373-2062.

Sincerely,



John Elnitsky

Senior Vice President - Nuclear Engineering

**Enclosures:**

1. Brunswick Steam Electric Plant, Units 1 and 2
2. Catawba Nuclear Station, Units 1 and 2
3. H. B. Robinson Steam Electric Plant, Unit 2
4. McGuire Nuclear Station, Units 1 and 2
5. Shearon Harris Nuclear Power Plant, Unit 1
6. Oconee Nuclear Station, Units 1, 2 and 3

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Michelle P. Catts  
NRC Senior Resident Inspector  
Brunswick Nuclear Plant

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xc (with Enclosures; continued):

G.A. Hutto, III  
NRC Senior Resident Inspector  
Catawba Nuclear Station

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McGuire Nuclear Station

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bxc (with Enclosures):

M.C. Nolan  
A.H. Zaremba  
A. Young  
M.C. Handrick  
K. Nolan  
S.B. Thomas  
D.C. Culp  
D.A. Cummings  
ELL  
File: (Corporate)

W.R. Gideon  
L.J. Grzeck  
W.R. Murray (For BSEP Licensing/Nuclear Records)

K. Henderson  
C.A. Fletcher  
NCMPA  
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CNS Master File 801.01 - CN04DM  
T. S. Lowery (For CNS Licensing/Nuclear Records)

S.L. Batson  
C.J. Wasik  
P.C. Metler (For ONS Licensing/Nuclear Records)  
ONS Master File 801.01 - ON03DM

M.R. Glover  
M.S. Connelly  
C.A. Caudell (For RNP Licensing/Nuclear Records)

S.D. Capps  
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Christine Magner (For HNP Licensing/Nuclear Records Files)

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**Enclosure 1**  
**Brunswick Steam Electric Plant, Units 1 and 2**

**A10 Summary**

**A10XM Summary**

**Atrium 11 Summary**

## A10 Summary

### 10 CFR 50.46 Report for Brunswick Steam Electric Plant Units 1, and 2

Plant:	Brunswick Steam Electric Plant, Unit 1	
Reporting Period:	August 6, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):		
Evaluation Model:	EMF-2361(P)(A), Revision 0 EXEM BWR-2000 ECCS Evaluation Model, May 2001	
Fuel:	ATRIUM-10 (A10)	
A. Analysis of Record PCT	1904 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect 1 °F	Absolute PCT Effect 1 °F
C. Baseline PCT for assessing new changes for significance (A + B)	1905 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None	--	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect 0 °F	Absolute PCT Effect 0 °F
F. Licensing Basis PCT (C + E)	1905 °F	

## A10XM Summary

### 10 CFR 50.46 Report for Brunswick Steam Electric Plant Units 1, and 2

Plant:	Brunswick Steam Electric Plant, Units 1 and 2	
Reporting Period:	August 6, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):		
Evaluation Model:	EMF-2361(P)(A), Revision 0 EXEM BWR-2000 ECCS Evaluation Model, May 2001	
Fuel:	ATRIUM 10XM (A10XM)	
A. Analysis of Record PCT	1885 °F*	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  N/A*	Absolute PCT Effect  N/A*
C. Baseline PCT for assessing new changes for significance (A + B)	1885 °F*	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period		
1. Implementation of ACE correlation in RELAX error (Reference: AREVA Report FS1-0020025, Revision 2.0)	+2 °F	
2. Evaluation of the effect of exposure-dependent thermal conductivity degradation (Reference: AREVA Report FS1-0020025, Revision 2.0)	0 °F	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  2 °F	Absolute PCT Effect  2 °F
F. Licensing Basis PCT (C + E)	1887 °F	

\* A LOCA re-analysis establishing a new Analysis of Record PCT of 1885 °F was performed during this reporting period (Reference: AREVA Report ANP-2943(P), Revision 3).



## ATRIUM 11 Summary

### 10 CFR 50.46 Report for Brunswick Steam Electric Plant Units 1, and 2

Plant:	Brunswick Steam Electric Plant, Unit 2	
Reporting Period:	August 6, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):		
Evaluation Model:	EMF-2361(P)(A), Revision 0 EXEM BWR-2000 ECCS Evaluation Model, May 2001	
Fuel:	ATRIUM 11 (A11)	
A. Analysis of Record PCT	1762 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect 0 °F	Absolute PCT Effect 0 °F
C. Baseline PCT for assessing new changes for significance (A + B)	1762 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None	---	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect 0 °F	Absolute PCT Effect 0 °F
F. Licensing Basis PCT (C + E)	1762 °F	

**Enclosure 2**  
**Catawba Nuclear Station, Units 1 and 2**

**General Code Maintenance**

**Catawba Unit 1, Large Break LOCA**  
**Catawba Unit 1, Small Break LOCA**

**Catawba Unit 2, Large Break LOCA**  
**Catawba Unit 2, Small Break LOCA**

## **GENERAL CODE MAINTENANCE**

Affected Evaluation Models: 1985 Westinghouse Small Break LOCA Evaluation Model with NOTRUMP

Various changes have been made to enhance the usability of codes and to streamline future analyses. Examples of these changes include modifying input variable definitions, units and defaults; improving the input diagnostic checks; enhancing the code output; optimizing active coding; and eliminating inactive coding. These changes represent Discretionary Changes that will be implemented on a forward-fit basis in accordance with Section 4.1.1 of WCAP-13451.

The nature of these changes leads to an estimated peak cladding temperature impact of 0 °F.

## **INCORRECT LOWER SUPPORT PLATE UNHEATED CONDUCTOR INPUT**

Affected Evaluation Model: 1996 Westinghouse Best Estimate Large Break LOCA

An error in the wetted perimeter input for the lower support plate unheated conductor was discovered in the Catawba and McGuire Units 1 and 2 Best-Estimate Large Break Loss-of-Coolant Accident (BE LBLOCA) analysis-of-record (AOR). A wetted perimeter 3.5% lower than the calculated value was inadvertently input in the analysis. This error was evaluated to estimate the impact on the Catawba/McGuire BE LBLOCA analysis. The primary impact of this error is an underestimation of the lower support plate metal heat transfer area. The resolution of this issue represents a Non-Discretionary Change in the application of the Evaluation Model as described in Section 4.1.2 of WCAP-13451.

This error was evaluated to have a negligible impact on the existing analysis, leading to an estimated Peak Cladding Temperature (PCT) impact of 0°F for Catawba and McGuire Units 1 and 2.

## **DISCREPANCY IN WETTED PERIMETER INPUTS**

Affected Evaluation Model: 1996 Westinghouse Best Estimate Large Break LOCA

An inconsistency was discovered in the wetted perimeter inputs in the upper head region of the Catawba Units 1 and 2 and McGuire Units 1 and 2 Best-Estimate Large Break Loss-of-Coolant Accident (BE LBLOCA) analysis-of-record (AOR). An evaluation of the impact was performed on the current licensing-basis analysis results. The resolution of this issue represents a Non-Discretionary Change in the application of the Evaluation Model as described in Section 4.1.2 of WCAP-13451.

This error was evaluated to have a negligible impact on the Large Break LOCA analysis results, leading to an estimated Peak Cladding Temperature (PCT) impact of 0°F for Catawba Units 1 and 2 and McGuire Units 1 and 2.

**10 CFR 50.46 Report for Catawba Unit 1 – Large Break LOCA**

Plant:	Catawba Nuclear Station, Unit 1	
Reporting Period:	January 1, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Large Break	
Evaluation Model:	WCAP-12945-P-A, Revision 0  Code Qualification Document for Best Estimate LOCA Analysis	
Fuel:	17x17 RFA	
A. Analysis of Record PCT	2028 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +42 °F	Absolute PCT Effect  362 °F
C. Baseline PCT for assessing new changes for significance (A + B)	2070 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. MUR Uprate to 101.7% of 3411 MWt	+16 °F	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  +16 °F	Absolute PCT Effect  16 °F
F. Licensing Basis PCT (C + E)	2086 °F	

### 10 CFR 50.46 Report for Catawba Unit 1 – Small Break LOCA

Plant:	Catawba Nuclear Station, Unit 1	
Reporting Period:	January 1, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Small Break	
Evaluation Model:	WCAP-10054-P-A, Revision 0  NOTRUMP	
Fuel:	17x17 RFA	
A. Analysis of Record PCT	1323 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +0 °F	Absolute PCT Effect  0 °F
C. Baseline PCT for assessing new changes for significance (A + B)	1323 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None	0 °F	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	1323 °F	

**10 CFR 50.46 Report for Catawba Unit 2 – Large Break LOCA**

Plant:	Catawba Nuclear Station, Unit 2	
Reporting Period:	January 1, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Large Break	
Evaluation Model:	WCAP-12945-P-A, Revision 0  Code Qualification Document for Best Estimate LOCA Analysis	
Fuel:	17x17 RFA	
A. Analysis of Record PCT	2028 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +42 °F	Absolute PCT Effect  362 °F
C. Baseline PCT for assessing new changes for significance (A + B)	2070 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None	0 °F	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	2070 °F	

### 10 CFR 50.46 Report for Catawba Unit 2 – Small Break LOCA

Plant:	Catawba Nuclear Station, Unit 2	
Reporting Period:	January 1, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Small Break	
Evaluation Model:	WCAP-10054-P-A, Revision 0  NOTRUMP	
Fuel:	17x17 RFA	
A. Analysis of Record PCT	1243 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +0 °F	Absolute PCT Effect  0 °F
C. Baseline PCT for assessing new changes for significance (A + B)	1243 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None	0 °F	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	1243 °F	

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**Enclosure 3**  
**H. B. Robinson Unit 2**

**H. B. Robinson Unit 2 - Large Break LOCA**  
**H. B. Robinson Unit 2 - Small Break LOCA**



**10 CFR 50.46 Report for H. B. Robinson Unit 2 – Large Break LOCA**

Plant:	H. B. Robinson , Unit 2	
Reporting Period:	October 26, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Large Break	
Evaluation Model:	EMF-2103(P)(A), Revision 0 Realistic Large Break LOCA for PWRs	
Fuel:	15x15 HTP	
A. Analysis of Record PCT	2084 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +4 °F	Absolute PCT Effect  24 °F
C. Baseline PCT for assessing new changes for significance (A + B)	2088 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections - This Reporting Period 1. Error in power cutback ratios for once-burned gadolinia bearing fuel rods	0 °F	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	2088 °F	

**10 CFR 50.46 Report for H. B. Robinson Unit 2 – Small Break LOCA**

Plant:	H. B. Robinson , Unit 2	
Reporting Period:	October 26, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Small Break	
Evaluation Model:	EMF-2328(P)(A), Revision 0 PWR Small Break LOCA Evaluation Model	
Fuel:	15x15 HTP	
A. Analysis of Record PCT	1492 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +60 °F	Absolute PCT Effect  98 °F
C. Baseline PCT for assessing new changes for significance (A + B)	1552 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None		
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	1552 °F	

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**Enclosure 4**  
**McGuire Nuclear Station, Units 1 and 2**

**General Code Maintenance**

**McGuire Units 1 and 2, Large Break LOCA**  
**McGuire Units 1 and 2, Small Break LOCA**

## **GENERAL CODE MAINTENANCE**

Affected Evaluation Models: 1985 Westinghouse Small Break LOCA Evaluation Model with NOTRUMP

Various changes have been made to enhance the usability of codes and to streamline future analyses. Examples of these changes include modifying input variable definitions, units and defaults; improving the input diagnostic checks; enhancing the code output; optimizing active coding; and eliminating inactive coding. These changes represent Discretionary Changes that will be implemented on a forward-fit basis in accordance with Section 4.1.1 of WCAP-13451.

The nature of these changes leads to an estimated peak cladding temperature impact of 0 °F.

## **INCORRECT LOWER SUPPORT PLATE UNHEATED CONDUCTOR INPUT**

Affected Evaluation Model: 1996 Westinghouse Best Estimate Large Break LOCA

An error in the wetted perimeter input for the lower support plate unheated conductor was discovered in the Catawba and McGuire Units 1 and 2 Best-Estimate Large Break Loss-of-Coolant Accident (BE LBLOCA) analysis-of-record (AOR). A wetted perimeter 3.5% lower than the calculated value was inadvertently input in the analysis. This error was evaluated to estimate the impact on the Catawba/McGuire BE LBLOCA analysis. The primary impact of this error is an underestimation of the lower support plate metal heat transfer area. The resolution of this issue represents a Non-Discretionary Change in the application of the Evaluation Model as described in Section 4.1.2 of WCAP-13451.

This error was evaluated to have a negligible impact on the existing analysis, leading to an estimated Peak Cladding Temperature (PCT) impact of 0°F for Catawba and McGuire Units 1 and 2.

## **DISCREPANCY IN WETTED PERIMETER INPUTS**

Affected Evaluation Model: 1996 Westinghouse Best Estimate Large Break LOCA

An inconsistency was discovered in the wetted perimeter inputs in the upper head region of the Catawba Units 1 and 2 and McGuire Units 1 and 2 Best-Estimate Large Break Loss-of-Coolant Accident (BE LBLOCA) analysis-of-record (AOR). An evaluation of the impact was performed on the current licensing-basis analysis results. The resolution of this issue represents a Non-Discretionary Change in the application of the Evaluation Model as described in Section 4.1.2 of WCAP-13451.

This error was evaluated to have a negligible impact on the Large Break LOCA analysis results, leading to an estimated Peak Cladding Temperature (PCT) impact of 0°F for Catawba Units 1 and 2 and McGuire Units 1 and 2.

### 10 CFR 50.46 Report for McGuire Units 1 & 2 – Large Break LOCA

Plant:	McGuire Nuclear Station, Units 1 & 2	
Reporting Period:	January 1, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Large Break	
Evaluation Model:	WCAP-12945-P-A, Revision 0  Code Qualification Document for Best Estimate LOCA Analysis	
Fuel:	17x17 RFA	
A. Analysis of Record PCT	2028 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +58 °F	Absolute PCT Effect  378 °F
C. Baseline PCT for assessing new changes for significance (A + B)	2086 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None	0 °F	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	2086 °F	

### 10 CFR 50.46 Report for McGuire Units 1 & 2 – Small Break LOCA

Plant:	McGuire Nuclear Station, Units 1 & 2	
Reporting Period:	January 1, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Small Break	
Evaluation Model:	WCAP-10054-P-A, Revision 0  NOTRUMP	
Fuel:	17x17 RFA	
A. Analysis of Record PCT	1323 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +0 °F	Absolute PCT Effect  0 °F
C. Baseline PCT for assessing new changes for significance (A + B)	1323 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None	0 °F	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	1323 °F	

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**Enclosure 5**  
**Shearon Harris Unit 1**

**Shearon Harris Unit 1 - Large Break LOCA**  
**Shearon Harris Unit 1 - Small Break LOCA**

**10 CFR 50.46 Report for Shearon Harris Unit 1 – Large Break LOCA**

Plant:	Shearon Harris , Unit 1	
Reporting Period:	April 9, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Large Break	
Evaluation Model:	EMF-2103(P)(A), Revision 0 Realistic Large Break LOCA for PWRs	
Fuel:	17x17 HTP	
A. Analysis of Record PCT	1935 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +138 °F	Absolute PCT Effect  138 °F
C. Baseline PCT for assessing new changes for significance (A + B)	2073 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections - This Reporting Period 1. Error in power cutback ratios for once-burned gadolinia bearing fuel rods	0 °F	
E. Sum of 10CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	2073 °F	



**10 CFR 50.46 Report for Shearon Harris Unit 1 – Small Break LOCA**

Plant:	Shearon Harris , Unit 1	
Reporting Period:	April 9, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Small Break	
Evaluation Model:	EMF-2328(P)(A), Revision 0 PWR Small Break LOCA Evaluation Model	
Fuel:	17x17 HTP	
A. Analysis of Record PCT	1664 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +17 °F	Absolute PCT Effect  17 °F
C. Baseline PCT for assessing new changes for significance (A + B)	1681 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections - This Reporting Period 1. None		
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	1681 °F	

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**Enclosure 6**  
**Oconee Nuclear Station, Units 1, 2 and 3**

**Oconee Units 1, 2 and 3, Large Break LOCA**  
**Oconee Units 1, 2 and 3, Small Break LOCA**

**10 CFR 50.46 Report for Oconee Units 1, 2, & 3 – Large Break LOCA (1 of 2)**

Plant:	Oconee Nuclear Station, Units 1, 2, & 3	
Reporting Period:	January 1, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Large Break	
Evaluation Model:	BAW-10192P-A, Revision 0, BWNT LOCA Evaluation Model for Once-Through Steam Generator Plants	
Fuel:	15x15 Mark-B-HTP	
A. Analysis of Record PCT	1852 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect +2 °F	Absolute PCT Effect 858 °F
C. Baseline PCT for assessing new changes for significance (A + B)	1854 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None	0 °F	
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect 0 °F	Absolute PCT Effect 0 °F
F. Licensing Basis PCT (C + E)	1854 °F	

**10 CFR 50.46 Report for Oconee Units 1, 2, & 3 – Small Break LOCA (2 of 2)**

Plant:	Oconee Nuclear Station, Units 1, 2, & 3	
Reporting Period:	January 1, 2015 – December 31, 2015	
LOCA Analysis Type (if applicable):	Small Break	
Evaluation Model:	BAW-10192P-A, Revision 0, BWNT LOCA Evaluation Model for Once-Through Steam Generator Plants	
Fuel:	15x15 Mark-B-HTP	
A. Analysis of Record PCT Full Power – 100% FP	1598 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +0 °F	Absolute PCT Effect  0°F
C. Baseline PCT for assessing new changes for significance (A + B)	1598 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None		
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	1598 °F	

**10 CFR 50.46 Report for Oconee Units 1, 2, & 3 – Small Break LOCA  
(2 of 2 continued)**

A. Analysis of Record PCT <b>Reduced Power – 50% FP</b>	1480 °F	
B. Net Cumulative 10 CFR 50.46 Changes and Error Corrections - Previously Reported	Net PCT Effect  +0 °F	Absolute PCT Effect  0°F
C. Baseline PCT for assessing new changes for significance (A + B)	1480 °F	
D. Cumulative 10 CFR 50.46 Changes and Error Corrections – This Reporting Period 1. None		
E. Sum of 10 CFR 50.46 Changes and Error Corrections against Baseline PCT	Net PCT Effect  0 °F	Absolute PCT Effect  0 °F
F. Licensing Basis PCT (C + E)	1480 °F	