DUKE ENERGY®

Scott L. Batson
Vice President
Oconee Nuclear Station

Duke Energy
ON01VP | 7800 Rochester Hwy
Seneca, SC 29672

o: 864.873.3274
f 864.873.4208
Scott.Batson@duke-energy.com

ONS-2015-073

June 30, 2015

ATTN: Document Control Desk
Director, Division of Spent Fuel Storage and Transportation
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2746

10 CFR 72.4
10 CFR 72.48
10 CFR 72.70

Subject: Duke Energy Carolinas, (LLC) (Duke Energy)
Oconee Nuclear Station, Units 1, 2, and 3
Docket Nos. 72-4, 50-269, 50-270, 50-287
Independent Spent Fuel Storage Installation
Updated Final Safety Analysis Report, Revision 24

Pursuant to 10 CFR 72.70(c), and in accordance with 10 CFR 72.4, Duke Energy hereby submits the Oconee Nuclear Station Independent Spent Fuel Storage Installation (ISFSI) Updated Final Safety Analysis Report (UFSAR), Revision 24. The effective date of the revision is December 31, 2014, as indicated at the bottom of each page. There were no changes made to the Oconee ISFSI UFSAR in Rev. 24.

The Oconee ISFSI UFSAR, Revision 24, is enclosed on one compact disk (CD). The contents are in Adobe Acrobat Portable Document Format (pdf). As required by NRC guidance for electronic submissions, Attachment 1 provides a listing of the document components that comprise the enclosed CD. Attachment 2 provides the List of Effective Pages (LOEP) for Tables and Figures. Attachment 3 provides insertion instructions for those receiving hardcopy distribution.

Attachment 4 provides the report of changes, tests, and experiments performed pursuant to 10 CFR 72.48.

This submittal document contains no new or revised regulatory commitments. If you have any questions regarding this submittal, please contact Susan Perry at (864) 873-4370.

I declare under penalty of perjury that the foregoing is true and correct. Executed on June 30, 2015.

Sincerely,

Scott L. Batson
Vice President
Oconee Nuclear Station

A053
NMSS26

Attachments:

1. Document Components on CD
2. List of Effective Pages (LOEP) for Tables and Figures
3. Insertion Instructions (for hardcopy distribution only)
4. 10 CFR 72.48 Report

Enclosure:

CD: Oconee Nuclear Station Independent Spent Fuel Storage Facility, 2014 Update - Rev 24

cc: Mr. Victor McCree, NRC Region II Administrator (CD)
U.S. Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE, Suite 1200
Atlanta, GA 30303-1257

Mr. James R. Hall, Project Manager (CD)
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop O-8G9A
Rockville, MD 20852

Mr. Eddy Crowe (hardcopy)
Senior Resident Inspector
Oconee Nuclear Station

ONS-2015-073
Document Control Desk
June 30, 2015

Attachment 1
Document Components on CD
(1 page)

Filename	File Size
001 ONS ISFSI Rev 24 Title Page	52 KB
001 ONS ISFSI Rev 24 Text	1,505 KB
002 ONS ISFSI Rev 24 Tables	1,282 KB
003 ONS ISFSI Rev 24 Figures	26,181 KB

Attachment 2
List of Effective Pages (LOEP) for Tables and Figures
(3 pages attached)

OCONEE ISFSI UFSAR - 2014 UPDATE
List of Effective Pages (LOEP) for Table and Figures

The purpose of this list is to assure that the pages in the Tables and Figures section of your manual match the most recent issue, as well as to show a full accounting of all tables and figures, including those that have been deleted. The earliest effective date, 12/31/07, was used when all tables and figures were re-issued.

Effective Date	Table No.	Table Title
12/31/07	A-1	Design Parameters for the Oconee ISFSI
12/31/07	A-2	Summary of ISFSI Fuel Handling Operations
12/31/07	A-3	Primary Design Parameters for the ISFSI Transport Systems
12/31/07	A-4	Major Systems, Subsystems, and Components of the Oconee ISFSI
12/31/07	A-5	Population Growth in Oconee, Pickens, and Anderson Counties, South Carolina (1980-2005)
12/31/07	A-6	Population Projections for Oconee, Pickens, and Anderson Counties, South Carolina (2010-2050)
12/31/07	A-7	Joint Frequencies of Wind Direction and Speed by Stability Class
12/31/07	A-8	Soil Permeability Test Results
12/31/07	A-9	Significant Earthquakes in the Southeast United States (Intensity V or Greater)
12/31/07	A-10	Physical Characteristics of PWR Fuel Assemblies Based on Nominal Design
12/31/07	A-11	Transfer Cask Stress Analysis for Tornado Effects
12/31/07	A-12	Oconee ISFSI Major Components and Functions
12/31/07	A-13	Oconee ISFSI Radioactive Material Confinement Barriers
12/31/07	A-14	Oconee ISFSI Major Components and Design Requirements
12/31/07	A-15	ONS ISFSI Project Transfer Trailer Design Parameters
12/31/07	A-16	Oconee ISFSI Major Components and Classification
12/31/07	A-17	Gamma Energy Spectrum
12/31/07	A-18	Shielding Analysis Results
12/31/07	A-19	Summary of Estimated On-site Doses Resulting from ISFSI Operations (Per DSC Transfer to HSM)
12/31/07	A-20	Dose Estimate for Construction of Additional Horizontal Storage Modules Based on Labor Estimates for 2 X 10 Array
12/31/07	A-21	Neutron and Gamma Energy Spectrum
12/31/07	A-22	Comparison of Total Dose Rates for HSM With and Without Air Outlet Shielding Blocks
12/31/07	A-23	Cask Drop Target Parameters

Effective Date	Figure No.	Figure Title
12/31/07	B-1	Location of ISFSI
12/31/07	B-2	General Location
12/31/07	B-3	Site Plan
12/31/07	B-4	ISFSI Layout
12/31/07	B-5	Topography Within 5 Miles
12/31/07	B-6	Relative Positions of Meteorological Instruments
12/31/07	B-7	Relative Elevations of Meteorological Instruments
12/31/07	B-8	Areal Groundwater Survey
12/31/07	B-9	Groundwater Survey at Station Site
12/31/07	B-10	Well Permeameter Test Apparatus
12/31/07	B-11	Formulae for Determining Permeability
12/31/07	B-12	General Site Area
12/31/07	B-13	Site Boring Plan
12/31/07	B-14	Core Boring Record
12/31/07	B-15	Core Boring Record
12/31/07	B-16	Core Boring Record
12/31/07	B-17	Core Boring Record
12/31/07	B-18	Core Boring Record
12/31/07	B-19	Core Boring Record
12/31/07	B-20	Core Boring Record
12/31/07	B-21	Core Boring Record
12/31/07	B-22	Core Boring Record
12/31/07	B-23	Core Boring Record
12/31/07	B-24	Core Boring Record
12/31/07	B-25	Core Boring Record
12/31/07	B-26	Core Boring Record
12/31/07	B-27	Core Boring Record
12/31/07	B-28	ISFSI Foundation Profile
12/31/07	B-29	Site Layout and Route
12/31/07	B-30	Site Plan

Effective Date	Figure No.	Figure Title
12/31/07	B-31	Transfer Cask Lifting Yoke
12/31/07	B-32	Transfer Cask Lift Extension
12/31/07	B-33	Spent Fuel Pool Area
12/31/07	B-34	Spent Fuel Pool Area
12/31/07	B-35	Spent Fuel Pool Area
12/31/07	B-36	NUHOMS® System Loading Operations Flowchart
12/31/07	B-37	NUHOMS® System Loading Operations Flowchart
12/31/07	B-38	NUHOMS® System Loading Operations Flowchart
12/31/07	B-39	NUHOMS® System Loading Operations Flowchart
12/31/07	B-40	NUHOMS® System Loading Operations Flowchart
12/31/07	B-41	NUHOMS® System Loading Operations Flowchart
12/31/07	B-42	Location of Dose Rates
12/31/07	B-43	Dose Rate Versus Distance From Surface of HSM
12/31/07	B-44	Dose From Filled HSM Array
12/31/07	B-45	Dose From Filled HSM Array
12/31/07	B-46	Radiation Zone Map of Modules Surface Dose Rates
12/31/07	B-47	Deleted Per 1991 Update
12/31/07	B-48	Fuel Assembly Burnup Requirements

Attachment 3
Insertion Instructions
(for hardcopy distribution only)
(1 page)

Insertion Instructions
(for hardcopy distribution only)

1. Replace List of Effective Pages (LOEP) for Tables and Figures with the 2014 LOEP Update.
2. Replace entire text portions with the updated text portion (including the List of Abbreviations, Table of Contents, List of Tables, and List of Figures.)
3. Update Tables and Figures according to the following instructions.

   NOTE: There were no Tables or Figures updated during this revision.

Attachment 4
10 CFR 72.48 Report
(1 page)

Oconee Nuclear Station hereby informs the Nuclear Regulatory Commission that no changes, tests or experiments were made under the provisions of 10 CFR 72.48 between January 1, 2014 and December 31, 2014.