



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-2016-048

10 CFR 50.71(e)

June 6, 2016

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2746

Subject: Duke Energy Carolinas, LLC
Oconee Nuclear Station
Docket Numbers 50-269, 50-270, and 50-287
UFSAR/Selected Licensee Commitment Change

Pursuant to 10 CFR 50.71(e), please find attached the latest revision to the Oconee Nuclear Station Selected Licensee Commitments (SLC) Manual. Revision 001 of the attached was never issued to the NRC and is superseded in its entirety by Revision 002. The SLC Manual constitutes Chapter 16 of the Updated Final Safety Analysis Report (UFSAR).

Any questions regarding this information should be directed to Sam Adams, Regulatory Affairs, at (864) 873-3348.

I certify that I am a duly authorized officer of Duke Energy Carolinas, LLC, and that the information contained herein accurately represents changes made to Chapter 16 of the UFSAR since the previous submittal. I declare under penalty of perjury that the foregoing is true and correct. Executed on June 6, 2016.

Sincerely,

Scott L. Batson
Vice President
Oconee Nuclear Station

Attachment

A053
NRR

cc: Ms. Catherine Haney
Administrator, Region II
U.S. Nuclear Regulatory Commission
Marquis One Tower
245 Peachtree Center Ave., NE, Suite 1200
Atlanta, GA 30303-1257

Mr. James R. Hall, Senior Project Manager (ONS)
(By electronic mail only)
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Mail Stop O-8G9A
Rockville, MD 20852-2746

Mr. Eddy L. Crowe
Senior Resident Inspector
Oconee Nuclear Station

ONS-2016-048
June 6, 2016

Attachment

Revised Oconee Nuclear Station SLC Manual Pages

SLC List of Effective Pages (LOEPs), Rev. 012 LOEP 1 - 4

SLC 16.9.24 FLEX - Equipment and Connections, Rev. 002 16.9.24 1 - 11

Oconee Nuclear Station
Selected Licensee Commitments Revised 5/26/16

List of Effective Pages

<u>Page</u>	<u>Revision Number</u>	<u>Implementation Date</u>
16.0	000	05/21/15
16.1	000	10/15/07
16.2	000	08/25/14
16.3	001	06/29/15
16.4	---	PENDING
16.5.1	000	11/26/12
16.5.2	000	11/15/12
16.5.3	000	02/21/07
16.5.4	000	11/15/12
16.5.5	---	Deleted 5/16/09
16.5.6	---	Deleted 02/10/14
16.5.7	000	12/13/06
16.5.8	000	01/31/07
16.5.8a	---	Deleted 5/19/05
16.5.9	000	11/15/12
16.5.10	000	10/08/03
16.5.11	000	01/31/00
16.5.12	000	03/27/99
16.5.13	000	03/27/99
16.6.1	000	07/23/12
16.6.2	000	01/31/07
16.6.3	000	11/15/12
16.6.4	000	11/15/12
16.6.5	000	12/14/00
16.6.6	000	11/15/12
16.6.7	000	03/27/99
16.6.8	000	03/27/99
16.6.9	000	11/15/12
16.6.10	000	11/15/12
16.6.11	000	11/15/12
16.6.12	000	11/15/12
16.6.13	000	03/31/08
16.6.14	000	04/21/14
16.6.15	000	11/15/12
16.7.1	000	11/15/12

Oconee Nuclear Station
Selected Licensee Commitments Revised 5/26/16

List of Effective Pages

<u>Page</u>	<u>Revision Number</u>	<u>Implementation Date</u>
16.7.2	000	11/15/12
16.7.3	000	11/15/12
16.7.4	000	07/14/05
16.7.5	000	11/15/12
16.7.6	000	04/08/14
16.7.7	000	11/15/12
16.7.8	000	03/27/99
16.7.9	000	10/23/03
16.7.10	000	11/15/12
16.7.11	000	11/15/12
16.7.12	000	06/30/04
16.7.13	000	12/05/12
16.7.14	000	11/15/12
16.7.15	000	04/08/14
16.7.16	000	10/14/15
16.8.1	000	08/09/01
16.8.2	000	02/10/05
16.8.3	001	01/26/16
16.8.4	000	02/10/05
16.8.5	000	05/21/15
16.8.6	000	01/04/07
16.8.7	000	01/31/00
16.8.8	000	01/31/00
16.8.9	000	06/21/05
16.9.1	000	12/05/12
16.9.2	001	02/09/16
16.9.3	000	12/31/12
16.9.4	000	12/01/14
16.9.5	001	02/26/16
16.9.6	001	08/03/15
16.9.7	000	07/23/12
16.9.8	000	02/15/06
16.9.8a	000	02/07/05
16.9.9	001	12/22/15
16.9.9a	000	01/30/15

Oconee Nuclear Station
Selected Licensee Commitments Revised 5/26/16

List of Effective Pages

<u>Page</u>	<u>Revision Number</u>	<u>Implementation Date</u>
16.9.10	000	01/12/04
16.9.11	001	06/29/15
16.9.11a	000	10/20/14
16.9.12	001	09/21/15
16.9.13	000	01/31/07
16.9.14	000	10/28/04
16.9.15	000	03/27/99
16.9.16	000	10/15/14
16.9.17	000	05/23/01
16.9.18	000	07/15/14
16.9.19	000	03/31/05
16.9.20	000	05/28/14
16.9.21	000	07/09/09
16.9.22	000	06/13/14
16.9.23	000	12/22/15
16.9.24	002	05/26/16
16.9.25	000	12/22/15
16.10.1	000	11/15/12
16.10.2	000	12/02/03
16.10.3	000	03/27/99
16.10.4	000	11/15/12
16.10.5	---	Deleted 08/24/04
16.10.6	000	03/27/99
16.10.7	001	09/21/15
16.10.8	000	11/27/06
16.10.9	000	11/25/09
16.11.1	000	03/15/11
16.11.2	000	01/31/00
16.11.3	000	11/20/08
16.11.4	000	06/30/14
16.11.5	000	10/30/02
16.11.6	000	11/08/13
16.11.7	000	01/31/00
16.11.8	000	12/21/09
16.11.9	000	03/22/10

Oconee Nuclear Station
 Selected Licensee Commitments Revised 5/26/16

List of Effective Pages

<u>Page</u>	<u>Revision Number</u>	<u>Implementation Date</u>
16.11.10	000	05/14/14
16.11.11	000	03/27/99
16.11.12	000	04/10/03
16.11.13	000	03/27/99
16.11.14	000	03/27/99
16.12.1	000	03/27/99
16.12.2	000	05/03/07
16.12.3	000	05/01/03
16.12.4	000	03/27/99
16.12.5	000	03/27/99
16.12.6	000	11/08/07
16.13.1	001	12/22/15
16.13.2	000	12/15/04
16.13.3	000	12/15/04
16.13.4	000	03/27/99
16.13.5	---	Deleted 11/30/99
16.13.6	000	03/27/99
16.13.7	000	12/15/04
16.13.8	000	03/27/99
16.13.9	000	03/27/99
16.13.10	000	03/27/99
16.13.11	000	03/27/99
16.14.1	000	11/15/12
16.14.2	000	07/23/12
16.14.3	000	03/27/99
16.14.4	---	Deleted 03/15/11
16.14.4.a	000	03/15/11
16.15.1	000	04/12/06
16.15.2	000	11/15/12
16.15.3	000	11/15/12

Note: With the introduction of Fusion in June 2015, all controlled documents require a three-digit revision number. Thus, the revision numbers were set to "000" in the summer of 2015. As such, the revision dates for Revision 000 are based on the implementation dates for revisions in effect prior to this change.

16.9 AUXILIARY SYSTEMS

16.9.24 FLEX – Equipment and Connections

COMMITMENT Equipment and connections as specified in Tables 16.9.24-1, 16.9.24-2, 16.9.24-3, 16.9.24-4, 16.9.24-5, and 16.9.24-6 shall be maintained FUNCTIONAL/accessible to mitigate Beyond Design Basis External Events (BDBEE) as required per NEI 12-06 Rev.0.

-----NOTE-----
Applicable to Unit 2. Applicable to Unit 3 upon reaching Mode 3 on startup from U3EOC28.

APPLICABILITY: At all times.

ACTIONS

-----NOTE-----
Separate Condition Entry is allowed for each piece of equipment listed in Tables 16.9.24-1, 16.9.24-2, 16.9.24 -3, 16.9.24-4, 16.9.24-5, and 16.9.24-6.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Primary or alternate FLEX connection (Table 16.9.24-2, Table 16.9.24-3, Table 16.9.24-4, or Table 16.9.24-5) to permanent plant SSC is inaccessible.	A.1 Log SLC entry identifying applicable connection in Operations Log.	NA
	<u>AND</u>	
	A.2 Verify the other permanent plant connection is accessible.	12 hours
	<u>AND</u>	
	A.3 Restore inaccessible FLEX connection.	60 days

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>B. Both the alternate and primary FLEX connections (Table 16.9.24-2, Table 16.9.24-3, Table 16.9.24-4, or Table 16.9.24-5) to permanent plant SSC for the same strategy are inaccessible.</p>	<p>B.1 Log SLC entry identifying the specific connection in the Operations Log.</p> <p><u>AND</u></p> <p>B.2 Initiate actions to restore/repair at least one of the connections.</p> <p><u>AND</u></p> <p>B.3 If applicable as shown in the Plant Mode column, implement appropriate compensatory actions.</p>	<p>NA</p> <p>24 hours</p> <p>72 hours</p>
<p>C. FLEX equipment (Table 16.9.24-1) is non-functional, but the FUNCTIONAL FLEX equipment is maintained at "N."</p>	<p>C.1 Log SLC entry identifying the non-functional equipment in the Operations Log.</p> <p><u>AND</u></p> <p>C.2.1 Restore non-functional equipment to FUNCTIONAL such that the FLEX equipment is at "N+1."</p> <p><u>OR</u></p> <p>C.2.2 Obtain alternate suitable equipment.</p>	<p>NA</p> <p>60 days</p> <p>60 days</p>

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>D. FUNCTIONAL FLEX equipment (Table 16.9.24-1) is less than "N."</p>	<p>D.1 Log SLC entry identifying the non-functional equipment in the Operations Log.</p> <p><u>AND</u></p> <p>D.2 Initiate actions to restore the minimum required FLEX equipment to FUNCTIONAL such that FLEX equipment is at "N."</p> <p><u>AND</u></p> <p>D.3 If applicable as shown in the Plant Mode column, implement appropriate compensatory actions.</p>	<p>NA</p> <p>24 hours</p> <p>72 hours</p>
<p>E. FLEX support equipment and connections (Table 16.9.24-6) is non-functional or inaccessible.</p>	<p>E.1 Log SLC entry identifying the non-functional equipment or connection in the Operations Log.</p> <p><u>AND</u></p> <p>E.2 Implement appropriate compensatory actions (e.g. reliance on alternate equipment, etc.).</p> <p><u>AND</u></p> <p>E.3 Restore/repair the equipment or connection to FUNCTIONAL or accessible status.</p>	<p>NA</p> <p>72 hours</p> <p>30 days</p>

BASES

Following the accident at Fukushima Daiichi in March 2011, the US Nuclear Regulatory Commission (NRC) assembled a Near-Term Task Force (NTTF) to advise the Commission on actions the US nuclear industry should take to preclude core damage and a release of radioactive material after a natural disaster such as that seen at Fukushima. The NTTF report (Reference 1) contained many recommendations to fulfill this charter, including assessing extreme external event hazards and strengthening station capabilities for responding to beyond-design-basis external events.

Based on NTTF Recommendation 4.2, the NRC issued Order EA-12-049 (Reference 2) on March 12, 2012, to implement mitigation strategies for Beyond-Design-Basis External Events (BDBEEs).

The Nuclear Energy Institute (NEI) developed NEI 12-06 (Reference 3), which provides guidelines for nuclear stations to assess extreme external event hazards and implement the mitigation strategies specified in NRC Order EA-12-049. The NRC issued Interim Staff Guidance JLD-ISG-2012-01 (Reference 4), dated August 29, 2012, which endorsed NEI 12-06, with certain clarifications.

NEI 12-06 states:

“The unavailability of equipment and applicable connections that directly performs a FLEX mitigation strategy for core, containment, and SFP [Spent Fuel Pool] should be managed such that risk to mitigating strategy capability is minimized.”

FLEX equipment needed to perform a mitigating strategy consists of both portable equipment and installed plant connections and is identified in Tables 16.9.24-1, 16.9.24-2, 16.9.24-3, 16.9.24-4, and 16.9.24-5.

Although not considered FLEX equipment that directly performs a mitigating strategy for core, containment, or spent fuel pool as described in Reference 3, Table 16.9.24-6 includes unavailability tracking of additional FLEX support items. Reference 5 details FLEX Support Building Protection Features.

Per Reference 3, in order to assure reliability and availability of the FLEX equipment required to meet the specified capabilities, the site should have sufficient equipment to address all functions at all Units on-site, plus one additional spare (i.e., N+1). It is also acceptable to have a single resource that is sized to support the required functions for multiple Units at a site (i.e. a single pump capable of all water supply functions for all Units onsite). In this case, the N+1 could simply involve a second pump of equivalent capability.

Examples of immediate actions associated with Conditions B or D include increasing the priority on the generated work requests/orders in an effort to raise awareness and expedite repair within the next 30 days. Examples of appropriate compensatory actions associated with Conditions B, D, or E can be found in Attachment E of CSD-EG-ONS-1619.1000, Diverse and Flexible Coping Strategies (FLEX) Program Document (Reference 5).

This SLC does not apply to other permanently installed plant equipment which provides a FLEX mitigation strategy function (e.g., SSF ASW, CFT valves, etc.).

BASES (continued)

This SLC is applicable to Unit 2 at all times. This SLC is applicable to Unit 3 when the unit reaches Mode 3 on startup from U3EOC28. All three units will not be in compliance until December 2016 (i.e., U1 - Mode 3 following startup from U1EOC29).

REFERENCES

1. Recommendations for Enhancing Reactor Safety in the 21st Century; The Near-Term Task Force Review of Insights from the Fukushima Daiichi Accident, July 12, 2011
2. NRC Order EA-12-049; Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond Design Basis External Events (BDBEE), March 12, 2012
3. NEI 12-06, Rev. 0; Diverse and Flexible Coping Strategies (FLEX) Implementation Guide
4. JLD-ISG-2012-01; Rev. 0; Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond Design Basis External Events, August 29, 2012
5. CSD-EG-ONS-1619.1000 - Diverse and Flexible Coping Strategies (FLEX) Program Document

Table 16.9.24-1
Portable FLEX Equipment

Portable Equipment	Plant Modes	N (# Required to perform function)	N+1 (N+ required spare)
Diesel low pressure pumps (0EDMPU0005/6)	1-6, no mode	1	2
Diesel shutdown modes pumps (0EDMPU0015/16/19)	5,6	2	3
Diesel high pressure pumps (0EDMPU0008/9/10/11)	1-4	2	3
Diesel hydraulic submersible pumps (0EDMPU0012/13/14)	1-6, no mode	1	2
500 KW / 600 V diesel generators (0EDMGN0001/2/3/4)	1-6, no mode	2	3
6 KW / 120 V diesel generators (0EDMGN0005/6/7/8/9/10/11/12)	1-6, no mode	1	2
10 KW / 120/240 VAC diesel generators (0EDMGN0013/14/15/16)	1-6, no mode	2	3
600 / 208 V transformers (0EDMTF0001/2/3/4)	1-6, no mode	2	3
Cable Splitter Boxes (XO, XP) (0EDMEM0001/2/3/4)	1-4	2	3
Cable Splitter Boxes (KVIA, KVIB, KVIC) (0EDMEM0005/6/7/8)	1-6, no mode	2	3
Cable Splitter Boxes (SKJ, SKK, SKL) (0EDMEM0009/10/11/12)	1-6, no mode	2	3
Cable Splitter Boxes (KVIA/B/C, SKJ/K/L) (0EDMEM0013/14/15/16)	1-6, no mode	2	3

Table 16.9.24-2
Unit 2 Mechanical FLEX Connections

Strategy	Plant Modes	Equipment (Primary)	Equipment (Alternate)
SGMU	1-5	2PSW-29*	2CCW-528
RCMU (suction)	1-6, No Mode	2LP-219	N/A
RCMU (discharge) (Any 2 valves per strategy - Primary or Alternate)	1-4	2HP-123 2HP-124 2HP-204 2HP-211 2HP-202 2HP-209	2HP-149 2HP-150 2HP-218 2HP-216 2HP-223 2HP-225
Modes 5/6	5-6, No Mode	2BS-26	SF-45 bonnet
		2LRT-16	N/A
		2LRT-17	N/A
SFPMU	1-6, No Mode	U1/2 SFP Refill pipe	Boggs Box

*Note: If 2PSW-29 (SGMU Primary connection point) is unavailable, this condition exists for all applicable units as defined by this SLC (i.e. Tables 16.9.24-2 & 16.9.24-3 are both affected).

Table 16.9.24-3
Unit 3 Mechanical FLEX Connections

Strategy	Plant Modes	Equipment (Primary)	Equipment (Alternate)
SGMU	1-5	2PSW-29*	3CCW-528
RCMU (suction)	1-6, No Mode	3LP-219	N/A
RCMU (discharge) (Any 2 valves per strategy - Primary or Alternate)	1-4	3HP-123 3HP-124 3HP-204 3HP-211 3HP-202 3HP-209	3HP-149 3HP-150 3HP-218 3HP-216 3HP-223 3HP-299
Modes 5/6	5-6, No Mode	3BS-26	3SF-43 bonnet
		3LRT-16	N/A
		3LRT-17	N/A
SFPMU	1-6, No Mode	U3 SFP Refill pipe	Boggs Box

*Note: If 2PSW-29 (SGMU Primary connection point) is unavailable, this condition exists for all applicable units as defined by this SLC (i.e. Tables 16.9.24-2 & 16.9.24-3 are both affected).

Table 16.9.24-4
Unit 2 Electrical FLEX Connections

Parameter	Plant Modes	Equipment (Primary)	Equipment (Alternate)
RCS Wide Range Pressure (RCPT0244 & 245)	1-5 (RCS Loops Raised) **also required in Mode 5 with RCS Loops Dropped	2PSW-EM-2XPSWFLX1 (loc. AB, 2nd floor)	2EL-SX-2SKJFLX1
RCS THOT Wide Range (RCRD0084B & 85B)			and
Pressurizer Level ** (RCLT0004P1, 4P2 & 4P3)			2EL-SX-2SKKFLX1
Steam Generator Level (FDWLT0080, 81, 82, 83)			and
Steam Generator Pressure (MSPT0277, 0278, 0279, 0280)			2EL-SX-2KVIAFLX1
Core Exit T/Cs (IITEs)			and
RVLIS (RCLT0123, 0124, 0125, 0126)			2EL-SX-2KVIBFLX1
Excore NI-1 & NI-2**			and
RB Normal and Emerg Sump Lvl** (LPILT0003P, 0112; LWDLT0113, 0120)			2EL-SX- 2SKLFLX1
RCS High Point Vent Valves (RC-155, 156, 157 & 158)			(loc. Cable Room)
RCS Head Vent Valves (RC-159 & 160)			
RB Wide Range Pressure (BSPT0230) or (BSPT0231)	1-6, No Mode	2EL-SX-2SKJFLX1 or 2EL-SX-2SKKFLX1 (loc. Cable Room)	2EL-SX-2SKKFLX1 or 2EL-SX-2SKJFLX1 (loc. Cable Room)
Core Flood Tank Outlet & Vent Valves (CF-1 & CF-2) or (CF-5 & CF-6)	1-4	2EL-EM-2XOF4EFLX1 and 2EL-EM-2XPF1FFLX1 (loc. Equip Room)	2EL-EM-2XOR5EFLX1 and 2EL-EM-2XPR4CTFLX (loc. Equip Room)
RCS TCOLD Wide Range (RCRD0005B & 7B or 6A & 8A) Note: If a Primary connection point is unavailable, this condition exists for all applicable units as defined by this SLC (i.e. Tables 16.9.24-4 & 16.9.24-5 are both affected).	1-5	0EL-EM-KSFC18FLX2 and OSSF-CA-IC2* and OSSF-PL-SSFCP* (loc. SSF)	2EL-PL-2TDC31* (loc. Cable Room) and 2ICS-CA-0007* (loc. Control Room) and 2ICS-CA-0009* (loc. Control Room)

*Connection points within these cabinets are procedurally controlled (Reference FG/2/A/1900/020).

Table 16.9.24-5
Unit 3 Electrical FLEX Connections

Parameter	Plant Modes	Equipment (Primary)	Equipment (Alternate)
RCS Wide Range Pressure (RCPT0244 & 245)	1-5 (RCS Loops Raised) **also required in Mode 5 with RCS Loops Dropped	3PSW-EM-3XPSWFLX1 (loc. AB, 2nd floor)	3EL-SX-3SKJFLX1
RCS THOT Wide Range (RCRD0084B & 85B)			and
Pressurizer Level ** (RCLT0004P1, 4P2 & 4P3)			3EL-SX-3SKKFLX1
Steam Generator Level (FDWLT0080, 81, 82, 83)			and
Steam Generator Pressure (MSPT0277, 0278, 0279, 0280)			3EL-SX-3KVIAFLX1
Core Exit T/Cs (IITEs)			and
RVLIS (RCLT0123, 0124, 0125, 0126)			3EL-SX-3KVIBFLX1
Excore NI-1 & NI-2**			and
RB Normal and Emerg Sump Lvl** (LPILT0003P, 0112; LWDLT0113, 0120)			3EL-SX-3SKLFLX1
RCS High Point Vent Valves (RC-155, 156, 157 & 158)			
RCS Head Vent Valves (RC-159 & 160)			
RB Wide Range Pressure (BSPT0230) or (BSPT0231)	1-6, No Mode	3EL-SX-3SKJFLX1 or 3EL-SX-3SKKFLX1 (loc. Cable Room)	3EL-SX-3SKKFLX1 or 3EL-SX-3SKJFLX1 (loc. Cable Room)
Core Flood Tank Outlet & Vent Valves (CF-1 & CF-2) or (CF-5 & CF-6)	1-4	3EL-EM-3XOF5ATLX1 and 3EL-EM-3XPF1FFLX1 (loc. Equip Room)	3EL-EM-3XOR3ATFLX1 and 3EL-EM-3XPR4BBFLX1 (loc. Equip Room)
RCS TCOLD Wide Range (RCRD0005B & 7B or 6A & 8A)	1-5	OEL-EM-KSFC18FLX2 and OSSF-CA-IC2* and OSSF-PL-SSFCP* (loc. SSF)	3EL-PL-3TDC31* (loc. Cable Room)
Note: If a Primary connection point is unavailable, this condition exists for all applicable units as defined by this SLC (i.e. Tables 16.9.24-4 & 16.9.24-5 are both affected).			and 3ICS-CA-0007* (loc. Control Room) and 3ICS-CA-0009* (loc. Control Room)

*Connection points within these cabinets are procedurally controlled (Reference FG/3/A/1900/020).

Table 16.9.24-6
FLEX Support Equipment & Connections

Equipment (Primary)	Equipment (Alternate - if applicable)	Affected Unit	Plant Modes
FLEX Support Building (FSB) Protection Features	N/A	ALL	1-6, No Mode
FLEX wheel loader	N/A	ALL	1-6, No Mode
FLEX pickup truck	N/A	ALL	1-6, No Mode
U1 CCW Manway 1A4	U1 CCW Manway 1B4	ALL	1-5
2CCW-26	2ESV-11	Unit 2	1-5
3CCW-26	3ESV-11	Unit 3	1-5
2CCW-28	2ESV-12	Unit 2	1-5
3CCW-28	3ESV-12	Unit 3	1-5