

POST-APPROVAL SITE INSPECTION FOR LICENSE RENEWAL

PROGRAM APPLICABILITY: IMC 2515

71003-01 INSPECTION OBJECTIVES

01.01 To verify that license conditions added as part of the renewed license, license renewal commitments, selected aging management programs, and license renewal commitments revised after the renewed license was granted, are implemented in accordance with Title 10 of the *Code of Federal Regulations* (CFR) Part 54, "Requirements for the Renewal of Operating Licenses for Nuclear Power Plants."

01.02 To verify that "newly identified" systems, structures, and components (SSCs), pursuant to 10 CFR 54.37(b), and Regulatory Issue Summary RIS-2007-16, are implemented in accordance with 10 CFR Part 54.

01.03 To verify, on a sample basis, that the description of the aging management programs and related activities covered in §01.01 are, or will be, contained in the updated final safety analysis report (UFSAR) and that the description of the programs is consistent with the programs implemented by the licensee.

71003-02 INSPECTION REQUIREMENTS

General Inspection Requirements. The post-renewal inspections (PRI) verify, on a sampling basis, that:

- a. (1) The licensee has completed the necessary actions to comply with the license conditions that are a part of the renewed operating license, and has implemented the aging management programs and time-limited aging analyses (TLAA) included in the staff's license renewal safety evaluation report (SER).
- (2) The licensee followed the guidance in NEI 99-04 for the license renewal commitment change process, including the elimination of commitments, and properly evaluated, and reported where necessary, changes to license renewal commitments listed in the UFSAR in accordance with 10 CFR 50.59.

(3) The licensee has identified, evaluated, and incorporated “newly identified” SSCs into the renewed license in accordance with 10 CFR 54.37(b).

- b. The UFSAR supplement describes the aging management programs and TLAA, approved by the NRC in the SER issued with the renewed license. This inspection will also verify that the UFSAR description matches the aging management program or TLAA being implemented and that changes, caused by the inclusion of “newly identified” SSCs, were included in the UFSAR. If the licensee has not submitted a UFSAR update since implementing the program or TLAA, review the planned UFSAR changes and verify that they are included in the an appropriate tracking system.

71003-03 INSPECTION GUIDANCE

03.01 General Guidance

- a. The inspection is intended to sample the licensee’s implementation of the following license renewal-related activities covered in §01 in the following manner:
1. Inspectors should familiarize themselves with the requirements and guidance relating to license renewal in general. The inspectors should familiarize themselves with the specific license renewal application and associated SER for the plant being inspected. License renewal requirements and guidance documents that should be reviewed prior to an inspection include:
 - 10 CFR Part 54, “Requirements for Renewal of Operating Licenses for Nuclear Power Plants”
 - The statement of consideration published with the revision to 10 CFR Part 54 in the Federal Register, Vol. 60, No. 88, Monday, May 8, 1995, pages 22461 to 22495
 - The plant-specific renewed license and license conditions
 - The SERs for the plant(s) to be inspected
 - Appendix A of the SER
 2. In selecting samples, consideration should be given to attributes such as:
 - the risk significance of the commitments, using insights gained from sources such as the NRC’s “SDP Risk Informed Inspection Notebooks”, Revision 2
 - the extent of previous license renewal audits and inspections of aging management programs
 - the extent of a commitment

- the extent that baseline inspection programs will inspect an SSC or commodity group
 - the amount of time since the renewed license was granted and beginning of the period of extended operation
 - the results of the one time inspection (e.g., selective leaching inspection), to ensure that either there is no aging effect or aging effects detected were properly evaluated
- b. The lead inspector will determine the number and nature of license conditions and commitments to be reviewed prior to performing these inspections. The sample should include all conditions placed on the license as part of license renewal, and as many commitments, which were identified by the staff during the course of the application review, as inspection resources will allow. The inspection will also include those commitments made by the applicant, which were either modified/enhanced or agreed upon by the staff, and selected in accordance with the risk guidance given in the above Section 03.01.a.

The population of license conditions and commitments will be inspected to the extent necessary to determine that the license conditions and commitments were implemented as described in the SER, that any modification of commitments was done in accordance with 10 CFR 50.59 and established commitment management guidance, and that prior NRC approval was obtained for changes to license conditions. The inspection team should determine there is reasonable assurance the commitment tracking program is effective.

Any “newly identified” SSCs will be inspected to the extent necessary to ensure that the licensee adequately evaluated and included applicable SSCs into its aging management programs or TLAAs, as required under 10 CFR 54.37(b).

1. Inspection of outstanding commitments should include a review of supporting documentation to determine if the licensee has taken the appropriate actions, including corrective action, to satisfy a particular license condition or commitment. Appropriate technical expertise should be sought if needed.
2. The PRI may require visual inspection of structures and components during the resolution of a particular commitment. Therefore, portions of the inspection may have to be performed during a unit outage to allow visual observation of those structures and components which are not accessible during power operation, e.g., inside containment, and normal high radiation areas. The inspectors should request assistance from NRR technical staff if the visual observations require intricate knowledge of aging effects to a specific structure or component.
3. Commitments that are not implemented by the licensee, except those the NRC previously agreed could be delayed, deferred, or eliminated, after the

extended period of operation commences will be evaluated for NRC enforcement action using Inspection Manual Chapter (IMC) 0308 "Reactor Oversight Process Basis Document", IMC 609 "Significance Determination Process", in keeping with the NRC's "General Statement of Policy and Procedure for NRC Enforcement Actions - Enforcement Policy,"

- c. The inspectors should verify the UFSAR supplement describes the aging management programs and TLAAs as approved by the NRC in the SER issued with the renewed license, or as subsequently amended. The inspectors should determine the basis for the removal or addition of SSCs or commodity groups from/to an aging management program and whether the basis was justified.
- d. The PRI program will be implemented before commencement of the extended period of operation, which should be clearly stated in the inspection plan. This plan will also state the appropriate time and duration of the program. Portions of the inspection program may be performed before the period of extended operation and/or during the unit outage preceding the extended operation date. Subsequent inspection(s) may be necessary, if outstanding commitments and/or issues remain after the completion of the initial PRI.

71003-04 RESOURCE ESTIMATES

It has been estimated that the post-renewal inspections will require approximately two weeks of inspection time onsite involving a team of four inspectors and an inspection lead. An additional week will be allocated each to inspection preparation, in-office review between two onsite weeks, and for documentation of the inspection results. The team leader will require an additional week of preparation and an additional two weeks in order to finalize the inspection report. Based on these estimates, each PRI will require about 28 inspection weeks. It is estimated that each unit at each site will require an inspection; however, later inspections at multi-unit sites may not require the same level of effort as the first unit PRI inspection. The level of remaining effort will be determined by the Regional Administrator, or his designee, following completion of the first inspection at a particular site.

Note to the Lead Inspector Regarding the Identification of Newly Identified SSCs. Licensees may identify new SSCs that should be within the scope of its license renewal program at any time. These SSCs are "newly identified" pursuant to 10 CFR 54.37(b), which has been further clarified in Regulatory Issue Summary RIS-2007-16 as part of NRC generic communications. The NRC may also specify additional newly identified SSCs that one or more holders of renewed licenses must evaluate and include as applicable in its next FSAR update in accordance with §54.37(b).

Contact NRR/DLR staff for (1) information on generic communications that were issued naming newly identified SSCs, or (2) technical assistance in the review of new aging management programs that have been developed by the licensee. The intent of

§54.37(b) is to capture those SSCs that, if they had been identified at the time of the license renewal application, would have been subject to an AMR or evaluation as a TLAA. Newly identified SSCs are those SSCs that meet one of the two following conditions:

- a. There is a change to the current licensing basis (CLB) that:
 - Impacts SSCs that were not in scope for license renewal when the license renewal application was approved, and
 - The SSCs would have been in the scope of license renewal based on the CLB change if §54.4(a) were applied to the SSCs;
- b. SSCs were installed in the plant at the time of the license renewal review that in accordance with its CLB at the time, should have been in the scope of license renewal per §54.4(a) but were not identified as in scope until after the renewed license was issued.

SSCs that are plant additions or modifications installed after the renewed license is issued are not subject to the provision of §54.37(b) as per staff communication with the industry when RIS-2007-16 was issued.

END

ATTACHMENT 1

EXPIRATION DATES OF ORIGINAL LICENSES

The following pages provide a convenient compilation of operating license expiration dates for inspection planning purposes. Plants are listed on an individual unit basis, by region and the date when their [original] operating license expires. Inclusion on this list does not mean that the plant has come in with an application to operate beyond the original operating license nor does it mean that NRC has granted a renewed operating license. Prior to scheduling this inspection, it is incumbent upon the Region to determine that a renewed operating license has been granted and that the conditions for performing the inspection have been met.

Region I Plants — Original Operating License Expiration Dates

<u>Plant Name</u>	<u>Expiration Date</u>
Oyster Creek Generating Station	04/09/09
Nine Mile Point Nuclear Station, Unit 1	08/22/09
Ginna Nuclear Power Plant	09/18/09
Vermont Yankee Nuclear Power Station	03/21/12
Pilgrim Nuclear Power Station	06/08/12
Peach Bottom Atomic Power Station, Unit 2	08/08/13
Indian Point Nuclear Generating, Unit 2	09/28/13
Three Mile Island Station, Unit 1	04/19/14
Peach Bottom Atomic Power Station, Unit 3	07/02/14
Calvert Cliffs Nuclear Power Plant, Unit 1	07/31/14
James A. FitzPatrick Nuclear Power Plant	10/17/14
Millstone Power Station, Unit 2	07/31/15
Indian Point Nuclear Generating, Unit 3	12/15/15
Beaver Valley Power Station, Unit 1	01/29/16
Calvert Cliffs Nuclear Power Plant, Unit 2	08/13/16
Salem Nuclear Generating Station, Unit 1	08/13/16
Salem Nuclear Generating Station, Unit 2	04/18/20
Susquehanna Steam Electric Station, Unit 1	07/17/22
Susquehanna Steam Electric Station, Unit 2	03/23/24
Limerick Generating Station, Unit 1	10/26/24
Millstone Power Station, Unit 3	11/25/25
Hope Creek Nuclear Generating Station	04/11/26
Seabrook Station	10/17/26
Nine Mile Point Nuclear Station, Unit 2	10/31/26
Beaver Valley Power Station, Unit 2	05/27/27
Limerick Generating Station, Unit 2	06/22/29

Region II Plants — Original Operating License Expiration Dates

<u>Plant Name</u>	<u>Expiration Date</u>
H. B. Robinson Steam Electric Plant	07/31/10
Surry Power Station, Unit 1	05/25/12
Turkey Point Nuclear Plant, Unit 3	07/19/12
Surry Power Station, Unit 2	01/29/13
Oconee Nuclear Station, Unit 1	02/06/13
Turkey Point Nuclear Plant, Unit 4	04/10/13
Oconee Nuclear Station, Unit 2	10/06/13
Browns Ferry Nuclear Plant, Unit 1	12/20/13
Browns Ferry Nuclear Plant, Unit 2	06/28/14
Oconee Nuclear Station, Unit 3	07/19/14
Edwin I. Hatch Nuclear Plant, Unit 1	08/06/14
Brunswick Steam Electric Plant, Unit 2	12/27/14
St. Lucie Nuclear Plant, Unit 1	03/01/16
Browns Ferry Nuclear Plant, Unit 3	07/02/16
Brunswick Steam Electric Plant, Unit 1	09/08/16
Crystal River, Unit 3	12/03/16
Joseph M. Farley Nuclear Plant, Unit 1	06/25/17
North Anna Power Station, Unit 1	04/01/18
Edwin I. Hatch Nuclear Plant, Unit 2	06/13/18
North Anna Power Station, Unit 2	08/21/20
Sequoyah Nuclear Plant, Unit 1	09/17/20
Joseph M. Farley Nuclear Plant, Unit 2	03/31/21
McGuire Nuclear Station, Unit 1	06/12/21
Sequoyah Nuclear Plant, Unit 2	09/15/21
Virgil C. Summer Nuclear Station	03/03/23
St. Lucie Nuclear Plant, Unit 2	04/06/23
Catawba Nuclear Station, Unit 1	12/06/24
Catawba Nuclear Station, Unit 2	02/24/26
Shearon Harris Nuclear Power Plant	10/24/26
Vogtle Electric Generating Station, Unit 1	01/16/27
Vogtle Electric Generating Station, Unit 2	02/09/29
Watts Bar Nuclear Plant	11/09/35

Region III Plants — Original Operating License Expiration Dates

<u>Plant Name</u>	<u>Expiration Date</u>
Dresden Nuclear Power Station, Unit 2	12/22/09
Monticello Nuclear Generating Plant	09/08/10
Point Beach Nuclear Plant, Unit 1	10/05/10
Dresden Nuclear Power Station, Unit 3	01/12/11
Palisades Nuclear Power Plant	03/24/11
Quad Cities Nuclear Power Station, Unit 1	12/14/12
Quad Cities Nuclear Power Station, Unit 2	12/14/12
Point Beach Nuclear Plant, Unit 2	03/08/13
Prairie Island Nuclear Generating Plant, Unit 1	08/09/13
Kewaunee Power Station	12/21/13
D. C. Cook Nuclear Power Plant, Unit 1	10/25/14
Prairie Island Nuclear Generating Plant, Unit 2	10/29/14
Davis-Besse Nuclear Power Station	04/22/17
D. C. Cook Nuclear Power Plant, Unit 2	12/23/17
LaSalle County Station, Unit 1	04/17/22
LaSalle County Station, Unit 2	12/16/23
Duane Arnold Energy Center	02/21/24
Byron Station, Unit 1	10/31/24
Fermi Power Plant, Unit 2	03/20/25
Perry Nuclear Power Plant	03/18/26
Clinton Power Station	09/29/26
Braidwood Nuclear Power Plant, Unit 1	10/17/26
Byron Station, Unit 2	11/06/26
Braidwood Nuclear Power Plant, Unit 2	12/18/27

Region IV Plants — Original Operating License Expiration Dates

<u>Plant Name</u>	<u>Expiration Date</u>
Fort Calhoun Station	08/09/13
Cooper Nuclear Station	01/18/14
Arkansas Nuclear One, Unit 1	05/20/14
Arkansas Nuclear One, Unit 2	07/17/18
Diablo Canyon Power Plant, Unit 1	09/22/21
San Onofre Nuclear Generating Station, Unit 2	02/16/22
San Onofre Nuclear Generating Station, Unit 3	11/15/22
Columbia Generating Station	12/20/23
Callaway Plant	10/18/24
Grand Gulf Nuclear Station	11/01/24
Waterford Steam Electric Station, Unit 3	12/18/24
Palo Verde Nuclear Station, Unit 1	12/31/24
Wolf Creek Generating Station	03/11/25
Diablo Canyon Power Plant, Unit 2	04/26/25
River Bend Station	08/29/25
Palo Verde Nuclear Station, Unit 2	12/09/25
Palo Verde Nuclear Station, Unit 3	03/25/27
South Texas Project Electric Generating Station, Unit 1	08/20/27
South Texas Project Electric Generating Station, Unit 2	12/15/28
Comanche Peak Steam Electric Station, Unit 1	02/08/30
Comanche Peak Steam Electric Station, Unit 2	02/02/33

LICENSE CONDITIONS, COMMITMENTS, AND TLAAs
FOR POST-RENEWAL INSPECTIONS

The license conditions can be found in the Introduction and General Discussion section of the Safety Evaluation Report (SER). The license renewal commitments can be found appended to the SER, with the exception of four plants as described below. Time-limited aging analyses are those described in Section 4.0 of the SER and are those licensee calculations and analyses that, in part, involve conclusions or provide the basis for conclusions related to the capability of SSCs to perform its intended functions as delineated in 10 CFR 54.21 54.4(b).

- (1) License Conditions – License conditions are normally listed at the end of Section 1, Introduction and General Discussion, of the SER. There are two generic conditions:
- a. The licensee is required to include the UFSAR supplements required by 10 CFR 54.21(d) in the next UFSAR 10 CFR 50.71(e) update following the issuance of the renewed license.
 - b. The activities identified in the UFSAR supplements are required to be completed in accordance with the schedule as appended to the safety evaluation report as discussed below.

In addition to the above two conditions, there are others that might be required, depending upon the plant specific's material aging, degradation, and/or operating issues that were evaluated at the time of the staff review.

- (2) Commitments – The list of commitments can be found in the following locations:

Arkansas Nuclear One; Edwin I. Hatch Nuclear Power Plant; Oconee Nuclear Station and Turkey Point Nuclear Plant	SER NUREG body ¹
Calvert Cliffs Nuclear Power Plant	SER NUREG Appendix E
Catawba, McGuire, North Anna, Peach Bottom, St. Lucie, Surry	SER NUREG Appendix D
Fort Calhoun Station and all renewed licenses since January 2004	SER NUREG Appendix A

¹ The commitments for these four plants have been compiled and can be found in ADAMS ML070640041

(3) Approved Renewed Operating License (ROL) – The following table provides a list of those nuclear power plants which have had renewed operating licenses approved. This table will be revised, as necessary, but may not be current. Future approved ROL plants and related SER NUREG information can be found on ADAMS Accession No. ML070850037, or the NRC external website at the following link: <http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html>.

The List of Approved Renewed Operating Licenses (ML070850037) will be updated annually by NRR/DLR.

Table 2-1

List of Plants With Approved Renewed Operating Licenses (AROLs)

(See ML070850037 for later list of AROLs)

<u>Site With Approved Renewed OLS</u>	<u>Unit</u>	<u>Line 1 Expiration of Initial License</u> <u>Line 2 ROL SER/NUREG Issued Date</u> <u>Line 3 And Related ADAMS ML# Nos</u>	<u>71002 IR#</u>
Arkansas Nuclear One	Unit 1	05/20/2014 NUREG-1743 Issued 04/2001 ML011640099, ML011640177, ML011640217	00-17 01-03 01-02
	Unit 2	07/17/2018 NUREG-1828 Issued 06/2005 ML051730233	04-06 04-07 05-12
Browns Ferry	Unit 1	12/20/2013 NUREG-1843 Issued 01/2006, 04/2006 (Supp) ML060120453, ML061220272(Supp)	04-12 05-03 05-13
	Unit 2	06/28/2014 NUREG-1843 Issued 01/2006, 04/2006 (Supp) ML060120453, ML061220272(Supp)	04-12 05-03 05-13
	Unit 3	07/02/2016 NUREG-1843 Issued 01/2006, 04/2006 (Supp) ML060120453, ML061220272(Supp)	04-12 05-03 05-13
Brunswick	Unit 1	09/08/2016 NUREG-1856 Issued 06/2006 ML061730123, ML061730129	05-08
	Unit 2	12/27/2014 NUREG-1856 Issued 06/2006 ML061730123, ML061730129	05-08
Calvert Cliffs	Unit 1	07/31/2014 NUREG-1705 Issued 12/1999 ML063620322	99-02 99-04 99-12
	Unit 2	08/13/2016 NUREG-1705 Issued 12/1999 ML063620322	99-02 99-04 99-12
Catawba	Unit 1	12/06/2024 NUREG-1772 Issued 03/2003 (Appendix D) ML030850251	02-05 02-06

	Unit 2	02/24/2026 NUREG-1772 Issued 03/2003 (Appendix D) ML030850251	02-05 02-06
D. C. Cook	Unit 1	10/25/2014 NUREG-1831 Issued 05/2005 ML052230442	04-03 04-13
	Unit 2	12/23/2017 NUREG-1831 Issued 05/2005 ML052230442	04-03 04-13
Dresden	Unit 2	12/22/2009 NUREG-1796 Issued 10/2004 ML042050507	03-04 03-10 04-05 04-07
	Unit 3	01/12/2011 NUREG-1796 Issued 10/2004 ML042050507	03-04 03-10 04-05 04-07
Fort Calhoun		08/09/2013 NUREG-1782 Issued 07/2003 ML032481209	02-07 03-03
Ginna		09/18/2009 NUREG-1786 Issued 05/2004 ML040640687	03-08 03-10
Hatch	Unit 1	08/06/2014 NUREG-1803 Issued 10/2001 ML012820121	00-09 00-10
	Unit 2	06/13/2018 NUREG-1803 Issued 10/2001 ML012820121	00-09 00-10
Joseph M. Farley	Unit 1	06/25/2017 NUREG-1825 Issued 03/2005 ML050630571	04-09 05-11
	Unit 2	03/21/2021 NUREG-1825 Issued 03/2005 ML050630571	04-09 05-11
McGuire	Unit 1	06/12/2021 NUREG-1772 Issued 03/2003 (Appendix D) ML030850251	02-05 02-06

	Unit 2	03/03/2023 NUREG-1772 Issued 03/2003 (Appendix D) ML030850251	02-05 02-06
Millstone	Unit 2	07/31/2015 NUREG-1838 Issued 08/2005 ML053270483 (Vol. 1), ML053290180 (Vol. 2)	04-09 04-10
	Unit 3	11/25/2025 NUREG-1838 Issued 08/2005 ML053270483 (Vol. 1), ML053290180 (Vol. 2)	04-09 04-10
Monticello		09/08/2010 NUREG-1865 Issued 10/2006 ML063050414	06-06
Nine Mile Point	Unit 1	08/22/2009 NUREG-1900 Issued 09/2006 ML061460313	05-11
	Unit 2	10/31/2026 NUREG-1900 Issued 09/2006 ML061460313	05-11
North Anna	Unit 1	04/01/2018 NUREG-1766 Issued 12/2002 (Appendix D) ML030160853, ML030160804, ML030160825, ML030160848	02-06 02-09
	Unit 2	08/21/2020 NUREG-1766 Issued 12/2002 (Appendix D) ML030160853, ML030160804, ML030160825, ML030160848	02-06 02-09
Oconee	Unit 1	02/06/2013 NUREG-1723 Issued 03/2000 ML003695154	99-11 99-12 00-03
	Unit 2	10/06/2013 NUREG-1723 Issued 03/2000 ML003695154	99-11 99-12 00-03
	Unit 3	07/19/2014 NUREG-1723 Issued 03/2000 ML003695154	99-11 99-12 00-03
Palisades (Note 5)		03/24/2011 NUREG-1871 Issued 01/2007 ML070600578	05-09

Peach Bottom	Unit 2	08/08/2013 NUREG-1769 Issued 03/2003 (Appendix D) ML030300673	02-09 02-10 02-12
	Unit 3	07/02/2014 NUREG-1769 Issued 03/2003 (Appendix D) ML030300673	02-09 02-10 02-12
Point Beach	Unit 1	10/05/2010 NUREG-1839 Issued 12/2005 ML053420134, ML053420137	05-05 05-15
	Unit 2	03/08/2013 NUREG-1839 Issued 12/2005 ML053420134, ML053420137	05-05 05-15
Quad Cities	Unit 1	12/14/2012 NUREG-1796 Issued 10/2004 ML042050507	03-04 03-14 04-03 04-06
	Unit 2	12/14/2012 NUREG-1796 Issued 10/2004 ML042050507	03-04 03-14 04-03 04-06
Robinson	Unit 2	07/31/2010 NUREG-1785 Issued 03/2004 ML040200981	03-08 03-09 03-11
St. Lucie	Unit 1	03/01/2016 NUREG-1779 Issued 07/2003 (Appendix D) ML031890043	02-07 03-03
	Unit 2	04/06/2023 NUREG-1779 Issued 07/2003 (Appendix D) ML031890043	02-07 03-03
Summer		08/06/2022 NUREG-1787 Issued 03/2004 ML040300170	03-07 03-08 03-09
Surry	Unit 1	05/25/2012 NUREG-1766 Issued 12/2002 (Appendix D) ML030160853	02-06 02-09
	Unit 2	01/29/2013 NUREG-1766 Issued 12/2002 (Appendix D) ML030160853	02-06 02-09

Turkey Point	Unit 3	<p style="text-align: center;">07/19/2012 NUREG-1759 Issued 04/2002 NUREG-1759, Supp. 1, Issued 05/2002 ML021280496, ML021280532, ML021560094</p>	<p style="text-align: center;">01-09 01-11</p>
	Unit 4	<p style="text-align: center;">04/10/2013 NUREG-1759 Issued 04/2002 NUREG-1759, Supp. 1, Issued 05/2002 ML021280496, ML021280532, ML021560094</p>	<p style="text-align: center;">01-09 01-11</p>

ATTACHMENT 3

Revision History For 71003

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	02/15/08 08-008	Revision history reviewed for the last four years. IP 71003 has been revised to address the concern that the previous IP as written was too broad and that it did not focus on the needed inspection activities.	N/A	N/A	N/A