NEXTera ENERGY SEABROOK

January 20, 2012

SBK-L-12001
Docket No. 50-443

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852

Seabrook Station
Response to Request for Additional Information
NextEra Energy Seabrook License Renewal Application
Request for Additional Information - Set 18, RAI B.1.4-2 and B.1.4-3

References:

1. NextEra Energy Seabrook, LLC letter SBK-L-10077, "Seabrook Station Application for Renewed Operating License," May 25, 2010. (Accession Number ML101590099)

2. NRC Letter "Request for Additional Information for the Review of the Seabrook Station License Renewal Application"– Request for Additional Information Set 18," December 12, 2011. (Accession Number ML11341A162)

3. NextEra Energy Seabrook, LLC letter SBK-L-11133, "Seabrook Station Response to Request for Additional Information NextEra Energy Seabrook License Renewal Application – Set 14 RAI B.1.4-1," June 24, 2011. (Accession Number ML11178A236)

4. NextEra Energy Seabrook, LLC letter SBK-L-11173, "First Annual Update to the Seabrook Station License Renewal Application," August 25, 2011. (Accession Number ML11241A142)

In Reference 1, NextEra Energy Seabrook, LLC (NextEra) submitted an application for a renewed facility operating license for Seabrook Station Unit 1 in accordance with the Code of Federal Regulations, Title 10, Parts 50, 51, and 54.

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In Reference 2, the NRC requested additional information regarding the ongoing Operating Experience Review Program in order to complete its review of the License Renewal Application (LRA). The requests are a follow-up to operating experience review information provided in References 3 and 4. Enclosure 1 contains NextEra's response to Set 18 (Reference 2), RAIs B.1.4-2 and B.1.4-3 and associated changes made to the LRA. For clarity, NextEra's LRA changes are provided with deleted text highlighted by strikethroughs and inserted text highlighted by bold italics.

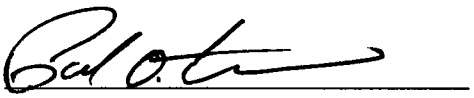
As discussed with the staff, a response to RAI B.2.1.11-2 will be provided under separate cover. Regulatory commitment #66 is being deleted via this letter and reflected in the revised LRA Appendix A – Final Safety Report Supplement Table A.3, License Renewal Commitment List, contained in Enclosure 2. There are no other new or revised commitments in this letter.

If there are any questions or additional information is needed, please contact Mr. Richard R. Cliche, License Renewal Project Manager, at (603) 773-7003.

If you have any questions regarding this correspondence, please contact Mr. Michael O'Keefe, Licensing Manager, at (603) 773-7745.

Sincerely,

NextEra Energy Seabrook, LLC.



Paul O. Freeman
Site Vice President

Enclosures:

Enclosure 1- Response to Request for Additional Information Seabrook Station License Renewal Application Set 18, RAIs B.1.4-2 and B.1.4-3 and Associated LRA Changes.

Enclosure 2- LRA Appendix A – Final Safety Report Supplement Table A.3, License Renewal Commitment List, updated to reflect the license renewal commitment changes made in NextEra Seabrook correspondence to date.

cc:

W.M. Dean,	NRC Region I Administrator
J. G. Lamb,	NRC Project Manager, Project Directorate I-2
W. J. Raymond,	NRC Resident Inspector
R. A. Plasse Jr.,	NRC Project Manager, License Renewal
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NEXTera ENERGY SEABROOK

I, Paul O. Freeman, Site Vice President of NextEra Energy Seabrook, LLC hereby affirm that the information and statements contained within are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

Sworn and Subscribed

Before me this

20 day of January, 2012

Paul O. Freeman

Site Vice President

Shirley Sweeney

Notary Public

SHIRLEY SWEENEY
MY COMMISSION EXPIRES NOV. 18, 2014
NOTARY PUBLIC
NEW HAMPSHIRE

Enclosure 1 to SBK-L-12001

Response to Request for Additional Information
Seabrook Station License Renewal Application
Set 18, RAIs B.1.4-2 and B.1.4-3
and Associated LRA Changes

Request for Additional Information (RAI) B.1.4-2:

Background

In request for additional information (RAI) B.1.4-1, issued on May 23, 2011, the staff asked the applicant to describe the programmatic activities that will be used to continually identify aging issues, evaluate them, and, as necessary, enhance the aging management programs (AMPs) or develop new AMPs for license renewal. In its response dated June 24, 2011, the applicant described how it considers operating experience under its current operating experience review process and corrective action program. In addition, the applicant stated that it will enhance the operating experience review process and provide additional training.

Issue

The applicant's response provides a general description of how it considers operating experience on an ongoing basis; however, it does not directly address several areas in RAI B.1.4-1 on which the staff requested information. Further, it does not provide specific information on how the operating experience review activities address issues related to aging. The staff identified the following issues with the response:

(a) The applicant did not fully describe the sources of plant-specific operating experience information that it monitors on an ongoing basis. Additional details are needed to determine whether the applicant will consider an adequate scope of information from which to identify potential operating experience related to aging.

(b) The staff requested that the applicant indicate which NRC guidance documents and generic communications require monitoring. The applicant did not indicate whether it considers NRC guidance documents and generic communications to be sources of operating experience information.

(c) The applicant did not describe its criteria for identifying and categorizing operating experience items as related to aging.

(d) The applicant stated that it will provide additional training; however, it did not describe the details of this training with respect to aging issues nor did it indicate whether the training will be provided to those plant personnel responsible for screening, assigning, evaluating, and submitting operating experience items.

(e) The applicant did not describe how evaluations of operating experience related to aging consider the potentially affected plant

- systems, structures, and components,
- materials,
- environments,
- aging effects,
- aging mechanisms, and
- AMPs.

(f) The applicant did not describe how it will consider as operating experience the results of the inspections, tests, analyses, etc., conducted through implementation of the AMPs.

(g) The applicant stated that necessary changes to aging management programs would be tracked and implemented via the corrective action program. The applicant did not, however, describe the records of operating experience evaluations, how it retains those records, or how it ensures that such documents will be auditable and retrievable for NRC inspection and oversight purposes.

(h) The applicant did not describe timeframes for evaluating operating experience issues under the operating experience review process and corrective action program. Also, it did not state how it determines the relative significance of the operating experience issues. It is therefore unclear whether the operating experience evaluations will be completed in a timely manner or whether they will be appropriately prioritized.

(i) The applicant stated that the corrective action program is used for degraded conditions related to the qualification or functional capability of systems, structures, and components, and is the primary source of internal operating experience. It is not clear whether use of the corrective action program is appropriate to obtain operating experience information related to aging. For example, it is not clear whether the corrective action program applies to all in-scope structures and components; their materials, environments, aging effects, and aging mechanisms; the AMPs credited for managing the effects of aging; and the activities under those AMPs.

(j) The applicant did not describe criteria for considering when AMPs should be modified or new AMPs developed due to operating experience.

(k) The applicant stated that the operating experience review process provides for the sharing of lessons learned with other utilities; however, the applicant did not provide criteria for reporting its plant-specific operating experience on age-related degradation to the industry.

(l) As requested, the applicant stated that the operating experience review process is procedurally controlled. The applicant did not, however, state whether these controls provide for a formal review and approval process and periodic audits by the applicant.

(m) The applicant stated that it will enhance the operating experience review process and provide additional training to process owners to include reviews of plant-specific and industry operating experience in order to confirm the effectiveness of the license renewal AMPs and to determine the need for programs to be enhanced or the need to develop new AMPs. The applicant further stated that necessary changes to AMPs would be tracked and implemented via the corrective action program. The applicant did not, however, state whether the creation of new programs would also be implemented through the corrective action program.

(n) The applicant committed to enhance its current station operating experience review process within ten years prior to entering the period of extended operation. This implementation schedule would result in a period of time when the applicant would not use the enhanced operating experience review process to confirm the effectiveness of the license renewal AMPs, determine the need for programs to be enhanced, or the need to develop new AMPs.

Request

For the operating experience review process and corrective action program, provide a response to each item below.

(a) Describe the sources of plant-specific operating experience that are monitored on an ongoing basis to identify potential aging issues.

(b) Indicate whether guidance documents are considered as a source of operating experience information. If they are considered as a potential source, provide a plan for considering the content of guidance documents, such as the GALL Report as operating experience applicable to aging management. If they are not a potential source, justify why they should not be considered as operating experience.

(c) Describe how operating experience issues will be identified and categorized as related to aging. If an identification code is used, provide its definition or the criteria for its application. Also, describe how age-related operating experience will be trended.

(d) Describe the training requirements and justify the level of training on aging issues for those plant personnel responsible for screening, assigning, evaluating, and submitting operating experience. Also, provide the periodicity of the training and describe how it will account for personnel turnover.

(e) Describe how evaluations of operating experience issues related to aging will consider the following:

- systems, structures, or components
- materials
- environments
- aging effects
- aging mechanisms
- AMPs

(f) Describe how the results of the AMP inspections, tests, analyses, etc. will be considered as operating experience, both when they meet and do not meet the applicable acceptance criteria.

(g) Describe the operating experience evaluation records with respect to what is considered for aging. Indicate whether these records are maintained in auditable and retrievable form.

(h) Provide details on the timeframes for evaluating operating experience and justify why they provide for timely evaluations. Also, describe how the relative significance of operating experience items is determined so that their review can be prioritized appropriately.

(i) Justify why use of the corrective action program is appropriate for capturing operating experience related to aging management.

(j) Describe the criteria for considering when AMPs should be modified or new AMPs developed due to operating experience.

(k) Provide criteria used for reporting plant-specific operating experience on age-related degradation to the industry.

(I) Indicate whether the operating experience review process is subject to a formal review and approval process and whether it is subject to periodic audits to ensure its effectiveness.

(m) Clarify whether the creation of new programs will implemented through the corrective action program.

(n) Justify why use of the operating experience review process is adequate, without enhancement until within ten years prior to entering the period of extended operation, to ensure the AMPs are effective to manage the aging effects for which they are credited, or to enhance the programs or develop new programs when the review of operating experience indicates that the programs may not be effective.

For any additional enhancements identified as necessary based on the response to the above items, provide and justify the implementation schedule for incorporating the enhancements into the existing programmatic operating experience review activities.

NextEra Energy Seabrook Response

General:

NextEra Energy Seabrook presently maintains an operating experience program as part of its current licensing basis. In addition, aging related license renewal operating experience is being evaluated by trained license renewal application project personnel and factored into the existing operating experience program. NextEra fleet renewed license procedures governing review of aging related operating experience are already in place for implementation upon receipt of the renewed license. To insure a complete transition to the renewed license fleet procedures, several enhancements pertaining to programmatic requirements, trend codes and training are being internally tracked to be completed during implementation of the renewed license.

NextEra Energy Seabrook presently maintains an asset management system and action tracking/corrective action program, which are being and will continue to be utilized in the evaluation and processing of license renewal aging related operating experience.

The following are responses to the specific requests:

(a) Describe the sources of plant-specific operating experience that are monitored on an ongoing basis to identify potential aging issues.

Response:

The corrective action program is the primary source of plant-specific operating experience. NextEra maintains a corrective action program for condition identification, screening, evaluation and corrective action. The current NextEra renewed license program procedure states that consideration of operating experience is a requirement of the aging management review process and could result in changes to aging management programs.

The corrective action program is implemented to promptly identify, control, document, classify, and correct conditions adverse to quality. In addition, for significant conditions adverse to quality, the program provides for cause evaluation and corrective actions to prevent recurrence. Provisions are also made to ensure that corrective actions for significant conditions adverse to quality are completed as intended, in a timely manner, and are not inadvertently nullified by subsequent actions. Results of evaluations of conditions adverse to quality are analyzed to identify trends. Adverse trends are documented and entered into the corrective action program. The corrective action program implements the requirements of 10 CFR 50 Appendix B, Criterion XVI. As such, the corrective action program is used to monitor both plant-specific operating experience and industry operating experience that is relevant to Seabrook Station.

The corrective action program is entered when a plant-specific potential aging issue is identified. A degraded condition is one in which the qualification of a Structure, System or Component (SSC) or its functional capability is potentially reduced. Examples of degraded conditions are failures, malfunctions, deficiencies, deviations, and defective material and equipment. Examples of conditions that can reduce the capability of a system are aging, erosion, corrosion, improper operation or maintenance.

Plant specific potential aging issues can be discovered via numerous sources such as system walkdowns, development of system health reports, maintenance rule implementation, operator rounds, maintenance activities or other test and inspection activities. Implementation of AMPs will provide another source of plant-specific operating experience.

(b) Indicate whether guidance documents are considered as a source of operating experience information. If they are considered as a potential source, provide a plan for considering the content of guidance documents, such as the GALL Report. as operating experience applicable to aging management. If they are not a potential source, justify why they should not be considered as operating experience.

Response:

Guidance documents are considered as a source of operating experience information at Seabrook Station. NextEra policy and procedures provide guidance for these activities and list a wide variety of sources and documents which are reviewed for operating experience. These include but are not limited to: (1) NRC Generic Communications; (2) INPO, Industry, and Owner's Group communications; (3) NEI, EPRI, and Vendor Reports; and (4) internal NextEra Energy fleet operating experience. These documents are some of the primary guidance documents of operating experience external to Seabrook Station. In addition, existing NextEra renewed license procedures state that it is essential that the aging management programs be consistent with or discuss exceptions to, NUREG-1801, "Generic Aging Lessons Learned (GALL) Report", and that revisions of NUREG-1801 are reviewed and considered as part of the site's operating experience review program.

NextEra has initiated an action to clarify that operating experience, as it affects aging management programs, will be incorporated into the station operating experience program.

(c) Describe how operating experience issues will be identified and categorized as related to aging. If an identification code is used, provide its definition or the criteria for its application. Also, describe how age-related operating experience will be trended.

Response:

NextEra has initiated an action to develop a trend code to be applied within the corrective action program to track and facilitate trending of age related degradation issues and operating experience. The code will be defined and specific to allow consistent application and assignment by plant personnel. Trend codes currently utilized are based on INPO guidance which promotes consistency throughout the industry. NextEra is working with the industry License Renewal Implementation working group in the development of additional trend codes applicable to license renewal.

Current NextEra procedures address corrective action program performance monitoring and trending. Under the renewed license program, this will also be applied to aging related operating experience. Aging related trend results will be evaluated for impact on the respective aging management programs.

(d) Describe the training requirements and justify the level of training on aging issues for those plant personnel responsible for screening, assigning, evaluating, and submitting operating experience. Also, provide the periodicity of the training and describe how it will account for personnel turnover.

Response:

NextEra Seabrook currently maintains a procedurally controlled operating experience review process, "NUREG 0737 Task I.C.5 Procedures for Feedback of Operating Experience to Plant Staff," as discussed in UFSAR Section 1.9.1.

NextEra has initiated an action within the corrective action program to clarify the type and periodicity of training and accounting for personnel turnover, for those plant personnel responsible for screening, assigning, evaluating, and submitting aging related operating experience. A systematic approach to training and qualification development methodology, as defined in the NextEra training program, will be used. NextEra change management procedures require that a training assessment and needs analysis be done for major process changes such as renewed license implementation. The training assessment will determine periodicity and training needs of plant personnel responsible for screening, assigning, evaluating and submitting operating experience.

(e) Describe how evaluations of operating experience issues related to aging will consider the following:

- systems, structures, or components,
- materials,
- environments,
- aging effects,
- aging mechanisms, and
- AMPs

Response:

Systems, structures, components, materials, environments, aging effects, aging mechanisms and AMPs are attributes which were used in the preparation of the LRA and will continue to be fundamental to the integrated plant assessment methodology of operating experience. These attributes in the integrated plant assessment process are essential in training of license renewal application project personnel, and will continue to be so upon implementation of the renewed license. The evaluation of operating experience issues considers these attributes in determining the need to modify, enhance or develop new aging management programs.

(f) Describe how the results of the AMP inspections, tests, analyses, etc. will be considered as operating experience, both when they meet and do not meet the applicable acceptance criteria.

Response:

Results of inspections, tests, analyses, and other similar activities are entered into the asset management system, both when they meet and do not meet the applicable acceptance criteria. The NextEra asset management system is the central location for documenting results of work activities, including AMP inspections, tests, analyses, adverse conditions, operating experience reviews, program changes, etc. This central asset management system allows NextEra to consider the results of the inspections, tests, and analyses conducted through implementation of the AMPs as operating experience. Any need for an enhanced or

new AMP, or specific action will be evaluated and aging management programs will be revised accordingly, via the action tracking/corrective action program, which is a subset of the asset management system.

Current NextEra renewed license procedures require aging management program owners to review relevant operating experience and to revise their respective AMPs to reflect relevant plant and industry operating experience, technology changes, and revisions to applicable codes and standards.

(g) Describe the operating experience evaluation records with respect to what is considered for aging. Indicate whether these records are maintained in auditable and retrievable form.

Response:

Aging related operating experience records are maintained the same way as the current licensing basis operating experience records are maintained, i.e. in accordance with the existing NextEra procedure which states that evaluations and corrective actions associated with the operating experience program are tracked and maintained in the action tracking/corrective action program. These records are maintained in an auditable and retrievable form.

(h) Provide details on the timeframes for evaluating operating experience and justify why they provide for timely evaluations. Also, describe how the relative significance of operating experience items is determined so that their review can be prioritized appropriately.

Response:

In accordance with existing NextEra procedures, operating experience is processed routinely and entered into the action tracking/corrective action program. All evaluations require completion within 60 days or less. Operating experience related to aging will be processed similarly, and any necessary corrective action completion dates would be based on the significance and risk of the condition identified and determined based on NextEra's 10CFR Part 50 Appendix B corrective action program.

(i) Justify why use of the corrective action program is appropriate for capturing operating experience related to aging management.

Response:

The current NextEra operating experience process utilizes the action tracking/corrective action program, which contains the necessary attributes to ensure that operating experience related to aging management is captured, evaluated and acted upon. The corrective action program is Seabrook Station's approved 10CFR50 Appendix B program for identifying conditions adverse to quality and insuring necessary actions are taken.

(j) Describe the criteria for considering when AMPs should be modified or new AMPs developed due to operating experience.

Response:

AMPs are modified or new AMPs developed when, after a review of systems, structures, or components, materials, environments, aging effects or aging mechanisms described in operating experience, NextEra determines existing AMPs are deficient. Current NextEra renewed license procedures require AMP owners to revise their respective AMPs to reflect relevant plant and industry operating experience, technology changes, and revisions to applicable codes and standards.

(k) Provide criteria used for reporting plant-specific operating experience on age-related degradation to the industry.

Response:

Operating experience concerning aging related degradation will be reported to the industry using the same criteria and processes as non-aging related issues. The current NextEra procedure for sharing operating experience with the industry cites the following as the minimum criteria for reporting using the INPO Nuclear Network.

- Important to Nuclear, Public, and Personnel Safety, including events of direct consequences or with high potential of consequence under slightly different circumstances.
- Important to Generation Capability
- Important to Operating Plant Construction or Modification Quality
- Events with Important Generic Implications (for example, training and accreditation, material issues, testing, and emergency planning)
- Events for which a comprehensive root cause investigation was performed and for which lessons learned would be beneficial to know had the event occurred at another station
- Actual classified emergencies
- Events required to be reported in INPO SOER/IER Level 1 recommendations

As stated in the existing NextEra operating experience procedure, operating experience entries should be posted on the INPO Nuclear Network within 50 days of the event.

(l) Indicate whether the operating experience review process is subject to a formal review and approval process and whether it is subject to periodic audits to ensure its effectiveness.

Response:

Current NextEra procedures incorporate a review process and include provisions for performing self-assessments on a routine basis, using INPO guidelines for operating experience program effectiveness. In addition, Nuclear Oversight has routinely evaluated the operating experience program. At present time, the operating experience program

evaluation is an element of the biennial corrective action program audit. INPO also examines the site operating experience program during the periodic evaluation visits.

(m) Clarify whether the creation of new programs will [be] implemented through the corrective action program.

Response:

Creation of new aging management programs will be implemented through the corrective action program, as that is the Station's 10CFR50 Appendix B program for identifying conditions and ensuring necessary actions are taken.

(n) Justify why use of the operating experience review process is adequate, without enhancement until within ten years prior to entering the period of extended operation, to ensure the AMPs are effective to manage the aging effects for which they are credited, or to enhance the programs or develop new programs when the review of operating experience indicates that the programs may not be effective.

Response:

As part of the NextEra license renewal application project, operating experience is currently screened by personnel trained in the requirements of license renewal scoping, screening, and aging management reviews (aging effects and mechanisms) and appropriate corrective action/enhancements initiated within action tracking. NextEra aging management program owners will ensure relevant operating experience is reviewed and factored into aging management programs prior to implementation.

The existing NextEra operating experience program contains the essential elements to evaluate operating experience as it relates to aging. NextEra has initiated several actions to reconcile the existing operating experience and corrective action programs with NextEra renewed license procedures.

Based on the initiation of these enhancements within the NextEra action tracking/corrective action program, for items (b), (c) and (d) above, Commitment #66 is no longer necessary and is being withdrawn.

Commitment #66 is modified as follows:

66	~~Operating Experience Reviews~~	~~Enhance the current station operating experience review process implemented in response to NUREG-0737 Task I.C.5 Procedures for Feedback of Operating Experience to Plant Staff (UFSAR §1.9.1) to include future reviews of plant specific and industry operating experience in order to confirm the effectiveness of the license renewal aging management programs and to determine the need for programs to be enhanced or the need to develop new aging management programs.~~ ***Not used. [Withdrawn in Letter SBK-L-12001].***	~~N/A~~	~~Within ten years entering the period of extended operation~~.

(*) For any additional enhancements identified as necessary based on the response to the above items, provide and justify the implementation schedule for incorporating the enhancements into the existing programmatic operating experience review activities.

Response:

There are three enhancements cited above in items (b), (c) and (d) which include updating of an operating experience procedure, development of an aging trend code and training. These actions will be completed as part of the renewed license implementation.

Request for Additional Information (RAI) B.1.4-3:

Background

In RAI B.1.4-1, the staff asked the applicant to provide, in accordance with 10 CFR 54.21 (d), an updated final safety analysis report (UFSAR) supplement summary description of the programmatic activities for the ongoing review of operating experience. By letter dated August 25, 2011, the applicant provided this description:

> The existing Corrective Action Program and the Operating Experience Program ensure, through the continual review of both plant-specific and industry operating experience, that the license renewal aging management programs are effective to manage the aging effects for which they are credited. The programs are either enhanced or new programs are developed when the review of operating experience indicates that the programs may not be effective. For each aging management program, operating experience is reviewed on a continuing basis.

Issue

As described in the issue section of RAI B.1.4-2 above, the applicant described generally how it intends to consider operating experience on an ongoing basis; however, it did not provide specific information on how its operating experience review activities address issues related to aging. Similarly, the above entry for UFSAR supplement also lacks detail on how aging is considered in the ongoing operating experience reviews.

Request

Consistent with the response to RAI B.1.4-2, provide additional details in the UFSAR supplement on how the ongoing operating experience review activities address issues specific to aging. Include in the UFSAR supplement the implementation schedule for these activities.

NextEra Energy Seabrook Response

As stated in the response to RAI B.1.4-2, operating experience reviews of aging related issues are already being implemented, with several internal actions generated to track refinements pertaining to the operating experience program, trend codes and training. As such, Commitment # 66 is no longer required. No other implementation activity schedules need to be added to the UFSAR.

The LRA Appendix A, Section A.1.6 which was added by reference 4, has been revised as follows:

A.1.6 Operating Experience

> The existing Corrective Action Program and the Operating Experience Program ensure, through the continual review of both plant-specific and industry operating experience, that the license renewal aging management programs are effective to manage the aging effects for which they are credited. The programs are either enhanced or new programs are developed

when the review of operating experience indicates that the programs may not be effective. For each aging management program operating experience is reviewed on a continuing basis. ***Plant personnel responsible for screening, assigning, evaluating and submitting operating experience are trained to identify and evaluate aging related issues. Evaluation of aging related issues considers potentially affected plant systems, structures, components, materials, environments, aging effects, aging mechanisms and Aging Management Programs.***

Aging related program changes, results of inspection activities and evaluation of relevant internal and external operating experience are tracked by the NextEra action tracking/corrective action program.

The operating experience reviews will include evaluation of applicable NUREGS, ISGs, etc., such as future revisions of NUREG-1801, "Generic Aging Lessons Learned (GALL) Report". Programmatic features such as training of personnel, trending, record retention, self-assessments, etc., will be in accordance with the existing NextEra corrective action and operating experience programs.

Enclosure 2 to SBK-L-12001

LRA Appendix A - Final Safety Report Supplement

Table A.3 License Renewal Commitment List

A.3 LICENSE RENEWAL COMMITMENT LIST

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
1.	PWR Vessel Internals	An inspection plan for Reactor Vessel Internals will be submitted for NRC review and approval.	A.2.1.7	Program to be implemented prior to the period of extended operation. Inspection plan to be submitted to NRC not later than 2 years after receipt of the renewed license or not less than 24 months prior to the period of extended operation, whichever comes first.
2.	Closed-Cycle Cooling Water	Enhance the program to include visual inspection for cracking, loss of material and fouling when the in-scope systems are opened for maintenance.	A.2.1.12	Prior to the period of extended operation
3.	Inspection of Overhead Heavy Load and Light Load (Related to Refueling) Handling Systems	Enhance the program to monitor general corrosion on the crane and trolley structural components and the effects of wear on the rails in the rail system.	A.2.1.13	Prior to the period of extended operation
4.	Inspection of Overhead Heavy Load and Light Load (Related to Refueling) Handling Systems	Enhance the program to list additional cranes for monitoring.	A.2.1.13	Prior to the period of extended operation
5.	Compressed Air Monitoring	Enhance the program to include an annual air quality test requirement for the Diesel Generator compressed air sub system.	A.2.1.14	Prior to the period of extended operation
6.	Fire Protection	Enhance the program to perform visual inspection of penetration seals by a fire protection qualified inspector.	A.2.1.15	Prior to the period of extended operation.

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
7.	Fire Protection	Enhance the program to add inspection requirements such as spalling, and loss of material caused by freeze-thaw, chemical attack, and reaction with aggregates by qualified inspector.	A.2.1.15	Prior to the period of extended operation.
8.	Fire Protection	Enhance the program to include the performance of visual inspection of fire-rated doors by a fire protection qualified inspector.	A.2.1.15	Prior to the period of extended operation.
9.	Fire Water System	Enhance the program to include NFPA 25 guidance for "where sprinklers have been in place for 50 years, they shall be replaced or representative samples from one or more sample areas shall be submitted to a recognized testing laboratory for field service testing".	A.2.1.16	Prior to the period of extended operation.
10.	Fire Water System	Enhance the program to include the performance of periodic flow testing of the fire water system in accordance with the guidance of NFPA 25.	A.2.1.16	Prior to the period of extended operation.
11.	Fire Water System	Enhance the program to include the performance of periodic visual or volumetric inspection of the internal surface of the fire protection system upon each entry to the system for routine or corrective maintenance. These inspections will be documented and trended to determine if a representative number of inspections have been performed prior to the period of extended operation. If a representative number of inspections have not been performed prior to the period of extended operation, focused inspections will be conducted. These inspections will be performed within ten years prior to the period of extended operation.	A.2.1.16	Within ten years prior to the period of extended operation.
12.	Aboveground Steel Tanks	Enhance the program to include components and aging effects required by the Aboveground Steel Tanks.	A.2.1.17	Prior to the period of extended operation.
13.	Aboveground Steel Tanks	Enhance the program to include an ultrasonic inspection and evaluation of the internal bottom surface of the two Fire Protection Water Storage Tanks.	A.2.1.17	Within ten years prior to the period of extended operation.

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
14.	Fuel Oil Chemistry	Enhance program to add requirements to 1) sample and analyze new fuel deliveries for biodiesel prior to offloading to the Auxiliary Boiler fuel oil storage tank and 2) periodically sample stored fuel in the Auxiliary Boiler fuel oil storage tank.	A.2.1.18	Prior to the period of extended operation.
15.	Fuel Oil Chemistry	Enhance the program to add requirements to check for the presence of water in the Auxiliary Boiler fuel oil storage tank at least once per quarter and to remove water as necessary.	A.2.1.18	Prior to the period of extended operation.
16.	Fuel Oil Chemistry	Enhance the program to require draining, cleaning and inspection of the diesel fire pump fuel oil day tanks on a frequency of at least once every ten years.	A.2.1.18	Prior to the period of extended operation.
17.	Fuel Oil Chemistry	Enhance the program to require ultrasonic thickness measurement of the tank bottom during the 10-year draining, cleaning and inspection of the Diesel Generator fuel oil storage tanks, Diesel Generator fuel oil day tanks, diesel fire pump fuel oil day tanks and auxiliary boiler fuel oil storage tank.	A.2.1.18	Prior to the period of extended operation.
18.	Reactor Vessel Surveillance	Enhance the program to specify that all pulled and tested capsules, unless discarded before August 31, 2000, are placed in storage.	A.2.1.19	Prior to the period of extended operation.
19.	Reactor Vessel Surveillance	Enhance the program to specify that if plant operations exceed the limitations or bounds defined by the Reactor Vessel Surveillance Program, such as operating at a lower cold leg temperature or higher fluence, the impact of plant operation changes on the extent of Reactor Vessel embrittlement will be evaluated and the NRC will be notified.	A.2.1.19	Prior to the period of extended operation.

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
20.	Reactor Vessel Surveillance	Enhance the program as necessary to ensure the appropriate withdrawal schedule for capsules remaining in the vessel such that one capsule will be withdrawn at an outage in which the capsule receives a neutron fluence that meets the schedule requirements of 10 CFR 50 Appendix H and ASTM E185-82 and that bounds the 60-year fluence, and the remaining capsule(s) will be removed from the vessel unless determined to provide meaningful metallurgical data.	A.2.1.19	Prior to the period of extended operation.
21.	Reactor Vessel Surveillance	Enhance the program to ensure that any capsule removed, without the intent to test it, is stored in a manner which maintains it in a condition which would permit its future use, including during the period of extended operation.	A.2.1.19	Prior to the period of extended operation.
22.	One-Time Inspection	Implement the One Time Inspection Program.	A.2.1.20	Within ten years prior to the period of extended operation.
23.	Selective Leaching of Materials	Implement the Selective Leaching of Materials Program. The program will include a one-time inspection of selected components where selective leaching has not been identified and periodic inspections of selected components where selective leaching has been identified.	A.2.1.21	Within five years prior to the period of extended operation.
24.	Buried Piping And Tanks Inspection	Implement the Buried Piping And Tanks Inspection Program.	A.2.1.22	Within ten years prior to entering the period of extended operation
25.	One-Time Inspection of ASME Code Class 1 Small Bore-Piping	Implement the One-Time Inspection of ASME Code Class 1 Small Bore-Piping Program.	A.2.1.23	Within ten years prior to the period of extended operation.

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
26.	External Surfaces Monitoring	Enhance the program to specifically address the scope of the program, relevant degradation mechanisms and effects of interest, the refueling outage inspection frequency, the inspections of opportunity for possible corrosion under insulation, the training requirements for inspectors and the required periodic reviews to determine program effectiveness.	A.2.1.24	Prior to the period of extended operation.
27.	Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components	Implement the Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components Program.	A.2.1.25	Prior to the period of extended operation.
28.	Lubricating Oil Analysis	Enhance the program to add required equipment, lube oil analysis required, sampling frequency, and periodic oil changes.	A.2.1.26	Prior to the period of extended operation.
29.	Lubricating Oil Analysis	Enhance the program to sample the oil for the Reactor Coolant pump oil collection tanks.	A.2.1.26	Prior to the period of extended operation.
30.	Lubricating Oil Analysis	Enhance the program to require the performance of a one-time ultrasonic thickness measurement of the lower portion of the Reactor Coolant pump oil collection tanks prior to the period of extended operation.	A.2.1.26	Prior to the period of extended operation.
31.	ASME Section XI, Subsection IWL	Enhance procedure to include the definition of "Responsible Engineer".	A.2.1.28	Prior to the period of extended operation.
32.	Structures Monitoring Program	Enhance procedure to add the aging effects, additional locations, inspection frequency and ultrasonic test requirements.	A.2.1.31	Prior to the period of extended operation.
33.	Structures Monitoring Program	Enhance procedure to include inspection of opportunity when planning excavation work that would expose inaccessible concrete.	A.2.1.31	Prior to the period of extended operation.

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
34.	Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements	Implement the Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements program.	A.2.1.32	Prior to the period of extended operation.
35.	Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Used in Instrumentation Circuits	Implement the Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Used in Instrumentation Circuits program.	A.2.1.33	Prior to the period of extended operation.
36.	Inaccessible Power Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements	Implement the Inaccessible Power Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements program.	A.2.1.34	Prior to the period of extended operation.
37.	Metal Enclosed Bus	Implement the Metal Enclosed Bus program.	A.2.1.35	Prior to the period of extended operation.
38.	Fuse Holders	Implement the Fuse Holders program.	A.2.1.36	Prior to the period of extended operation.
39.	Electrical Cable Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements	Implement the Electrical Cable Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements program.	A.2.1.37	Prior to the period of extended operation.
40.	345 KV SF_6 Bus	Implement the 345 KV SF_6 Bus program.	A.2.2.1	Prior to the period of extended operation.

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
41.	Metal Fatigue of Reactor Coolant Pressure Boundary	Enhance the program to include additional transients beyond those defined in the Technical Specifications and UFSAR.	A.2.3.1	Prior to the period of extended operation.
42.	Metal Fatigue of Reactor Coolant Pressure Boundary	Enhance the program to implement a software program, to count transients to monitor cumulative usage on selected components.	A.2.3.1	Prior to the period of extended operation.
43.	Pressure – Temperature Limits, including Low Temperature Overpressure Protection Limits	Seabrook Station will submit updates to the P-T curves and LTOP limits to the NRC at the appropriate time to comply with 10 CFR 50 Appendix G.	A.2.4.1.4	The updated analyses will be submitted at the appropriate time to comply with 10 CFR 50 Appendix G, Fracture Toughness Requirements.
44.	Environmentally-Assisted Fatigue Analyses (TLAA)	NextEra Seabrook will perform a review of design basis ASME Class 1 component fatigue evaluations to determine whether the NUREG/CR-6260-based components that have been evaluated for the effects of the reactor coolant environment on fatigue usage are the limiting components for the Seabrook plant configuration. If more limiting components are identified, the most limiting component will be evaluated for the effects of the reactor coolant environment on fatigue usage. If the limiting location identified consists of nickel alloy, the environmentally-assisted fatigue calculation for nickel alloy will be performed using the rules of NUREG/CR-6909. (1) Consistent with the Metal Fatigue of Reactor Coolant Pressure Boundary Program Seabrook Station will update the fatigue usage calculations using refined fatigue analyses, if necessary, to determine acceptable CUFs (i.e., less than 1.0) when accounting for the effects of the reactor water environment. This includes applying the appropriate F_{en} factors to valid CUFs determined from an existing fatigue analysis valid for the period of extended operation or from an analysis using an NRC-approved version of the ASME code or NRC-approved alternative (e.g., NRC-approved code case). (2) If acceptable CUFs cannot be demonstrated for all the selected locations, then additional plant-specific locations will be evaluated. For the additional plant-specific locations, if CUF,	A.2.4.2.3	At least two years prior to entering the period of extended operation.

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
		including environmental effects is greater than 1.0, then Corrective Actions will be initiated, in accordance with the Metal Fatigue of Reactor Coolant Pressure Boundary Program, B.2.3.1. Corrective Actions will include inspection, repair, or replacement of the affected locations before exceeding a CUF of 1.0 or the effects of fatigue will be managed by an inspection program that has been reviewed and approved by the NRC (e.g., periodic non-destructive examination of the affected locations at inspection intervals to be determined by a method accepted by the NRC).		
45.	Number Not Used			
46.	Protective Coating Monitoring and Maintenance	Enhance the program by designating and qualifying an Inspector Coordinator and an Inspection Results Evaluator.	A.2.1.38	Prior to the period of extended operation
47.	Protective Coating Monitoring and Maintenance	Enhance the program by including, "Instruments and Equipment needed for inspection may include, but not be limited to, flashlight, spotlights, marker pen, mirror, measuring tape, magnifier, binoculars, camera with or without wide angle lens, and self sealing polyethylene sample bags."	A.2.1.38	Prior to the period of extended operation
48.	Protective Coating Monitoring and Maintenance	Enhance the program to include a review of the previous two monitoring reports.	A.2.1.38	Prior to the period of extended operation
49.	Protective Coating Monitoring and Maintenance	Enhance the program to require that the inspection report is to be evaluated by the responsible evaluation personnel, who is to prepare a summary of findings and recommendations for future surveillance or repair.	A.2.1.38	Prior to the period of extended operation
50.	ASME Section XI, Subsection IWE	Perform UT testing of the containment liner plate in the vicinity of the moisture barrier for loss of material.	A.2.1.27	Within the next two refueling outages, OR15 or OR16, and repeated at intervals of no more than five refueling outages
51.	Number Not Used			

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
52.	ASME Section XI, Subsection IWL	Implement measures to maintain the exterior surface of the Containment Structure, from elevation -30 feet to +20 feet, in a dewatered state.	A.2.1.28	By 2013
53.	Reactor Head Closure Studs	Replace the spare reactor head closure stud(s) manufactured from the bar that has a yield strength > 150 ksi with ones that do not exceed 150 ksi.	A.2.1.3	Prior to the period of extended operation.
54.	Steam Generator Tube Integrity	Unless an alternate repair criteria changing the ASME code boundary is permanently approved by the NRC, or the Seabrook Station steam generators are changed to eliminate PWSCC-susceptible tube-to-tubesheet welds, submit a plant-specific aging management program to manage the potential aging effect of cracking due to PWSCC at least twenty-four months prior to entering the Period of Extended Operation.	A.2.1.10	Program to be submitted to NRC at least 24 months prior to the period of extended operation.
55.	Steam Generator Tube Integrity	Seabrook will perform an inspection of each steam generator to assess the condition of the divider plate assembly.	A.2.1.10	Prior to entering the period of extended operation
56.	Closed-Cycle Cooling Water System	Revise the station program documents to reflect the EPRI Guideline operating ranges and Action Level values for hydrazine and sulfates.	A.2.1.12	Prior to entering the period of extended operation.
57.	Closed-Cycle Cooling Water System	Revise the station program documents to reflect the EPRI Guideline operating ranges and Action Level values for Diesel Generator Cooling Water Jacket pH.	A.2.1.12	Prior to entering the period of extended operation.
58.	Fuel Oil Chemistry	Update Technical Requirement Program 5.1, (Diesel Fuel Oil Testing Program) ASTM standards to ASTM D2709-96 and ASTM D4057-95 required by the GALL XI.M30 Rev 1	A.2.1.18	Prior to the period of extended operation.
59.	Nickel Alloy Nozzles and Penetrations	The Nickel Alloy Aging Nozzles and Penetrations program will implement applicable Bulletins, Generic Letters, and staff accepted industry guidelines.	A.2.2.3	Prior to the period of extended operation.
60.	Buried Piping and Tanks Inspection	Implement the design change replacing the buried Auxiliary Boiler supply piping with a pipe-within-pipe configuration with leak indication capability.	A.2.1.22	Prior to entering the period of extended operation.
61.	Compressed Air Monitoring Program	Replace the flexible hoses associated with the Diesel Generator air compressors on a frequency of every 10 years.	A.2.1.14	Within ten years prior to entering the period of extended operation.
62.	Water Chemistry	Enhance the program to include a statement that sampling frequencies are increased when chemistry action levels are	A.2.1.2	Prior to entering the period of extended operation.

No.	PROGRAM or TOPIC	COMMITMENT	UFSAR LOCATION	SCHEDULE
		exceeded.		
63.	Flow Induced Erosion	Ensure that the quarterly CVCS Charging Pump testing is continued during the PEO. Additionally, add a precaution to the test procedure to state that an increase in the CVCS Charging Pump mini flow above the acceptance criteria may be indicative of erosion of the mini flow orifice as described in LER 50-275/94-023.	N/A	Prior to the period of extended operation
64.	Buried Piping and Tanks Inspection	Soil analysis shall be performed prior to entering the period of extended operation to determine the corrosivity of the soil in the vicinity of non-cathodically protected steel pipe within the scope of this program. If the initial analysis shows the soil to be non-corrosive, this analysis will be re-performed every ten years thereafter.	A.2.1.22	Prior to entering the period of extended operation.
65.	Flux Thimble Tube	Implement measures to ensure that the movable incore detectors are not returned to service during the period of extended operation.	N/A	Prior to entering the period of extended operation
66.	~~Operating Experience Reviews~~	~~Enhance the current station operating experience review process implemented in response to NUREG 0737 Task I.C.5 Procedures for Feedback of Operating Experience to Plant Staff (UFSAR □1.9.1) to include future reviews of plant specific and industry operating experience in order to confirm the effectiveness of the license renewal aging management programs and to determine the need for programs to be enhanced or the need to develop new aging management programs.~~ ***Not used. [Withdrawn in Letter SBK-L-12001].***	~~N/A~~	~~Within ten years prior to entering the period of extended operation.~~
67.	Structures Monitoring Program	Perform one shallow core bore in an area that was continuously wetted from borated water to be examined for concrete degradation and also expose rebar to detect any degradation such as loss of material.	A.2.1.31	No later than December 31, 2015
68.	Structures Monitoring Program	Perform sampling at the leakoff collection points for chlorides, sulfates, pH and iron once every three months.	A.2.1.31	Starting January 2014