



**Constellation Energy**

Nine Mile Point Nuclear Station

P.O. Box 63  
Lycoming, NY 13093

November 17, 2005  
NMP1L 1996

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

SUBJECT: Nine Mile Point Units 1 and 2  
Docket Nos. 50-220 and 50-410  
Facility Operating License Nos. DPR-63 and NPF-69

Amended License Renewal Application – Superseding Tables for Clarifications to  
the Nine Mile Point Nuclear Station Amended License Renewal Application  
(TAC Nos. MC3272 and MC3273)

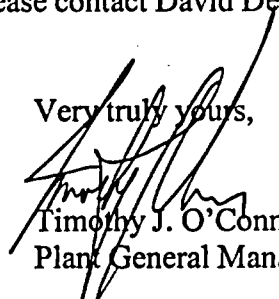
Gentlemen:

By letter dated July 14, 2005, Nine Mile Point Nuclear Station, LLC (NMPNS) submitted an Amended License Renewal Application (ALRA) for the operating licenses of Nine Mile Point Units 1 and 2.

By letter dated September 15, 2005, NMPNS provided responses to Requests for Additional Information (RAIs) and a table of clarifications to the ALRA in a section-by-section format. Based on a request by the NRC staff, the clarifications have been regrouped and presented by topical area. Where appropriate, additional information supporting the basis for the clarifications has been added. Attachment A supersedes in its entirety the tabular clarification of information in the September 15, 2005 letter. The responses to the RAI in the September 15, 2005, letter remain unaffected. Attachment B identifies new and revised commitments in this letter.

If you have any questions about this submittal, please contact David Dellario, NMPNS License Renewal Project Manager, at (315) 349-7141.

Very truly yours,

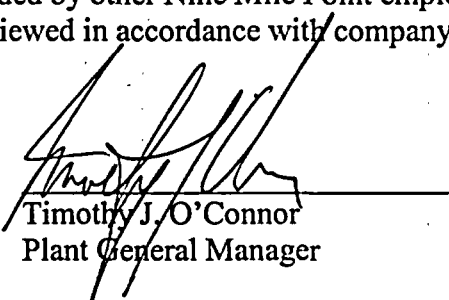
  
Timothy J. O'Connor  
Plant General Manager

TJO/JJD/sac

A107

STATE OF NEW YORK :  
 : TO WIT:  
COUNTY OF OSWEGO :

I, Timothy J. O'Connor, being duly sworn, state that I am Plant General Manager, and that I am duly authorized to execute and file this information on behalf of Nine Mile Point Nuclear Station, LLC. To the best of my knowledge and belief, the statements contained in this submittal are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information provided by other Nine Mile Point employees and/or consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.

  
Timothy J. O'Connor  
Plant General Manager

Subscribed and sworn before me, a Notary Public in and for the State of New York and County of Oswego, this 17<sup>th</sup> day of November, 2005.

WITNESS my Hand and Notarial Seal:

**TONYA L. JONES**  
Notary Public in the State of New York  
Oswego County Reg. No. 01JO6083354  
My Commission Expires 11/12/06

  
Notary Public

My Commission Expires:

11/12/2006  
Date

Attachment A: Superseding Tables for Clarifications to the Nine Mile Point Nuclear Station  
Amended License Renewal Application  
Attachment B: New and Revised Commitments

cc: Mr. S. J. Collins, NRC Regional Administrator, Region I  
Mr. L. M. Cline, NRC Senior Resident Inspector  
Mr. T. G. Colburn, Senior Project Manager, NRR  
Mr. N. B. Le, License Renewal Project Manager, NRR  
Mr. J. P. Spath, NYSERDA

# ATTACHMENT A to NMP1L 1996

IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)				
Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
1	Aging management of spent fuel racks in the Nine Mile Point, Unit 1 (NMP1), spent fuel pool (SFP).	T 2.4.A.4-1	For the spent fuel racks, add the Component Types "Boraflex in Treated Water" and "Boral in Treated Water," each with the Intended Function (IF) of "Absorbs Neutrons" (AN).	The basis for this change and the indicated ALRA revisions is to be consistent with the Generic Aging Lessons Learned (GALL) Report and to address discussions held during the license renewal audit; therefore, AERMs for "Boral in Treated Water" are added.
		T 3.3.1.A	Item 3.3.1.A-10 - Replace the Discussion with the following: "Consistent with NUREG-1801, except the Water Chemistry Control (WCC) Program and the One Time Inspection (OTI) Programs are credited for aging management."	
		S 3.5.2.A.4	Add the OTI Program to the aging management program (AMP) Section.	
		T 3.5.2.A-4	For "Boral in Treated Water," revise this line Item to add the Aging Effect Requiring Management items (AERMs) of "Loss of Material" (LOM) and "Reduction of Neutron Absorbing Capacity," the AMPs of OTI and WCC, the NUREG-1801, Volume 2, Item of VII.A2.1-b, the Table 1 Item of 3.3.1.A-10, and a Note of E.	

# IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
2	Aging management of spent fuel racks in the Nine Mile Point, Unit 2 (NMP2), spent fuel pool.	T 2.4.B.7-1	For the spent fuel racks, add the Component Type "Boral in Treated Water" (TW) with the IF of AN.	The basis for this change and the indicated ALRA revisions is the recent Nine Mile Point Nuclear Station, LLC (NMPNS) management decision to have all Boraflex removed from the NMP2 SFP prior to entry into the NMP2 PEO. Due to the timing, the ALRA did not reflect this decision. Additionally, aging management of Boral in the SFP was aligned with the GALL consistent with NMP1, as discussed in the previous issue.
		T 3.3.1.B	Item 3.3.1.B-10 - Replace the Discussion with the following: "Consistent with NUREG-1801, except the WCC and OTI Programs are credited for aging management."	
			Item 3.3.1.B-12 - Replace the Discussion with the following: "Prior to entry into the Period of Extended Operation (PEO), the current NMP2 spent fuel rack design that utilizes Boraflex for reactivity control will be replaced by a design that utilizes Boral for that function. Therefore, Boraflex is not within scope of license renewal (WSLR) and the Boraflex Monitoring Program (BMP) is not credited for NMP2."	
		S 3.5.2.B.7	Replace Boraflex with Boral in the Materials Section.	
			Remove the BMP from the AMP Section and add the OTI Program.	
		T 3.5.2.B-7	Remove the "Boraflex in Treated Water" line items from NMP2 Table 3.5.2.B-7. There will be no Boraflex WSLR in the NMP2 spent fuel pool during the PEO.	
			Add a new line item for "Boral in Treated Water" with the IF of AN, the Material of Boral, the environment of TW<140°F, Gamma Irradiation, the AERMs of LOM and "Reduction of Neutron Absorbing Capacity," the AMPs of OTI and WCC, the NUREG-1801, Volume 2, GALL Item of VII.A2.1-b, the Table 1 Item of 3.3.1.B-10, and Notes of E, 8.	
			Add new Note 8 to the end of the 3.5.2 Tables as follows: "The current NMP2 spent fuel rack design utilizes Boraflex for neutron absorption; however, prior to entry into the PEO, these racks will be replaced with a new design that utilizes Boral for this function."	
		S A2.4	Add a new commitment as follows: Commitment: Prior to the Period of Extended Operation for NMP2, the spent fuel rack design that currently utilizes Boraflex for reactivity control in the spent fuel pool will be replaced by a design that utilizes Boral for this function. Source: ALRA Table 3.3.1.B, Item 3.3.1.B-12 and ALRA Table 3.5.2.B-7. Schedule: Prior to Period of Extended Operation.	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
3	Aging management of the NMP1 containment spray heat exchanger cooling water components	S 3.2.2.A.1	Add "Loss of Heat Transfer" to the AERM Section.	For consistency with the "Open Cycle Cooling Water System" (OCCW) Program described in GALL Section XI.M20, these changes are made. The cooling water for the Containment Spray System is its own OCCW System; however, it is not normally wetted. The components are, therefore, not in a Raw Water environment. They are normally in a moist air environment.
		T 3.2.1.A	Revise the Discussion column for Item 3.2.1.A-12 to delete the existing text and replace with the statement "Consistent with NUREG-1801."	
		T 3.2.2.A-1	For the heat exchangers with a Material of carbon steel (CS), revise the AMP to OCCW, the NUREG-1801, Volume 2, Item to V.D2.4-a, the Table 1 Item to 3.2.1.A-12 and the Note to A, 27.	
			For the heat exchangers with a Material of stainless steel, add an AERM of "Loss of Heat Transfer" with an AMP of OCCW, the NUREG-1801, Volume 2, Item to V.D2.4-b, the Table 1 Item to 3.2.1.A-12 and the Note to A, 27.	
4	Presence of WASS NSR components in the NMP1 Emergency Cooling (EC) System	T 3.2.2.A-3	For the heat exchangers with a Material of stainless steel and an AERM of LOM, revise the AMP to OCCW, the NUREG-1801, Volume 2, Item to V.D2.4-a, the Table 1 Item to 3.2.1.A-12 and the Note to A, 27.	A review of the system drawing and the piping classes of the NSR portions of the system has resulted in the determination that all of the "NSR Piping and Fittings and Valves" are fabricated of CS instead of WASS.
			Delete the "Wrought Austenitic Stainless Steel (WASS) Piping and Fittings" line items with the IFs of "Leakage Boundary (Spatial)" (LBS)/ "Structural Integrity (Attached)" (SIA). It has been determined that there is no non-safety-related (NSR) WASS piping in this system.  Delete the WASS Valves line items with the IFs of LBS/SIA. It has been determined that there are no NSR WASS valves in this system.	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
5	Aging management of the NMP2 residual heat removal (RHR) pump seal coolers	S 3.2.2.B.5	In the Environments Section, add "Demineralized Untreated Water" (DUW). In the AMP Section, add the "Closed Cycle Cooling Water" (CCCW) Program.	The RHR pump seal coolers are cooled by the Reactor Building Closed Loop Cooling (RBCLC) System. The Service Water System provides manual backup cooling to these components. The normal environment for the inside of the WASS tubes is, therefore, the DUW of the RBCLC System.
		T 3.2.1.B	Revise the Discussion column for Item 3.2.1.B-13 to delete the existing text and replace with the statement "Consistent with NUREG-1801."	
		T 3.2.2.B-5	For the WASS heat exchanger components on page 3.2-99, replace the "Raw Water, Low Flow" environment with DUW; delete the row with the AERM of "Loss of Heat Transfer;" for the row with the AERM of "Loss of Material," revise the AMP to CCCW, NUREG-1801 Volume 2 Item to V.D2.4-c, and Table 1 Item to 3.2.1.B-13.	
6	Aging Management of the TBCLC System for NMP1 and NMP2	T 3.3.1.B	Item 3.3.1.B-15 - In the Discussion, delete the last bullet referring to Turbine Building Closed Loop Cooling (TBCLC) System heat exchangers.	<p>The change in Environments for the NMP1 TBCLC System was to make it consistent with the NMP1 RBCLC System environment since both systems share a common supply source.</p> <p>The discussions relative to the CCCW System and Program in GALL Sections VII.C2 and XI.M21, respectively, apply to the CCCW System that provides cooling to reactor plant-related heat loads (this is the RBCLC System at NMPNS). Such systems undergo special surveillance testing, etc. due to their heat loads. The TBCLC System does not have any such heat loads within the scope of the system and does not, therefore, need to be subjected to the same kind of surveillance rigor as the RBCLC System.</p>
		S 3.3.2.A.22	Change the Environment listing of TW<140°F to DUW. Change the AMP listing of CCCW Program to the Preventive Maintenance (PM) Program and add the WCC Program.	
		T 3.3.2.A-22	For all Component Types except "Bolting," "External Surfaces," and "Copper Alloy Valves," change the Environment to DUW, the AMP to PM and WCC Programs, the NUREG-1801, Volume 2, and Table 1 Items to blank, and the Notes to J.	
		S 3.3.2.B.40	Change the AMP listing of CCCW Program to the PM Program and add the WCC program.	
		T 3.3.2.B-40	Change the AMP for all applicable TBCLC System components from the CCCW Program to the PM Program and the WCC Program. Change the NUREG-1801, Volume 2, and Table 1 Items to blank and Notes to J for the same components.	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
7	Aging management of the NMP1 Circulating Water System components	S 3.3.2.A.1	Replace the PM Program with the OCCW Program in the AMP Section.	Since the system CS external surfaces are already monitored by the Systems Walkdown Program, the application of the PM Program was redundant, so it is being removed. For the Circulating Water Gates, Piping and Fittings, Pumps, Traveling Screens and Rakes, and Valves, the change from the PM Program to the OCCW Program was made for GALL consistency.
		T 3.3.1.A	Revise the Discussion column of Item 3.3.1.A-17 to delete the first sentence of the second paragraph regarding the NMP1 Circulation Water System crediting the PM Program.	
		T 3.3.2.A-1	Delete the PM AMP for "CS External Surfaces."	
			Change AMP for the Circulating Water Gates to the OCCW Program from the PM Program and change Note to C, 8.	
			Change AMP for the "Piping and Fittings" to the OCCW Program from the PM Program and change Note to A.	
			Change AMP for the Pumps to the OCCW Program from the PM Program and change Note to A for both the OCCW and Selective Leaching Programs.	
			Change the AMP for "Traveling Screens and Rakes" to the OCCW Program from the PM Program and change Note E, 8 for CS and WASS to Note C, 8.	
8	Aging management of the NMP1 and NMP2 fire hydrants	S 3.3.2.A.8	Add the Buried Piping and Tanks Inspection Program to the AMP Section.	It was determined that the barrel of the GCI fire hydrants is partially buried.
		T 3.3.2.A-8	Add an External Surfaces item for "Gray Cast Iron (GCI) in Soil, Above the Water Table" environment with the AERM of LOM, the AMP of Buried Piping and Tanks Inspection Program, the GALL Item of VII.C2.1-b, the Type 1 Table Item of 3.3.1.A-18, and Note F.	
		T 3.3.2.B-13	Add an External Surfaces item for GCI in Soil, Above the Water Table environment with LOM, the AMP of Buried Piping and Tanks Inspection Program, GALL Item VII.C1.1-b, Type 1 Table Item of 3.3.1.B-18, and Note F.	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
9	Non-applicability of FAC to the NMP1 Radwaste and Electric Boiler Systems	S 3.3.2.A.14	Delete the Flow Accelerated Corrosion (FAC) Program from the AMP Listing.	It was determined from the FAC Program basis documentation that the applicable portions of the Radwaste and Electric Boiler Systems experience FAC susceptible conditions <2% of the time. Per NSAC 202L, with this usage, these systems do not warrant inclusion in the program.
		S 3.3.2.A.24	Delete the FAC Program from the AMP Section.	
		T 3.3.2.A-14	Remove the FAC Program AMP line items for LOM of Piping and Fittings. For Valves crediting the FAC Program, change the AMP to OTI and WCC, the GALL Item to VIII.C.2-b, the Table 1 Item to 3.4.1.A-02, and the Note to B.	
		T 3.3.2.A-24	Change line items for LOM credited by the FAC Program for Piping and Fittings and Valves to credit the OTI and WCC Programs, GALL Items VIII.C.1-b (for piping) and VIII.C.2-b (for valves), the Table 1 Item to 3.4.1.A-02, and Notes to B.	
10	Aging management of NMP1 and NMP2 Copper Alloy ( $\leq 5\%$ Zn) components in a DUW environment	S 3.3.2.A.22	Add the OTI Program to the AMP Section.	It was determined that to be consistent with other like material/environment applications in the ALRA, these changes were needed.
		T 3.3.2.A-22	For the Copper Alloy ( $\leq 5\%$ Zn) Valve in a TW<140°F environment, change to a DUW environment, change the AERM from None to LOM, the AMP from None to the OTI Program, and the Note from None to H.	
		T 3.3.2.A-2	For the Copper Alloy ( $\leq 5\%$ Zn) Valve in a DUW environment, change the AERM from None to LOM, the AMP from None to OTI Program, and the Note from None to H.	
		T 3.3.2.A-15	For the Copper Alloy ( $\leq 5\%$ Zn) Filter/Strainers and Valves in a DUW environment, change the AERM from None to LOM, the AMP from None to the OTI Program, and the Note from None to H.	
		T 3.3.2.A-17	For the Copper Alloy ( $\leq 5\%$ Zn) Heat Exchanger in a DUW environment, change the AERM from None to LOM, the AMP from None to the OTI Program, and the Note from None to H.	
		T 3.3.2.B-11	For the Copper Alloy ( $\leq 5\%$ Zn) Piping and Fittings and Valves in a DUW environment, change the AERM from None to LOM, the AMP from None to the OTI Program, and the Note from None to H.	
		T 3.3.2.B-38	For the Copper Alloy ( $\leq 5\%$ Zn) Piping and Fittings in a DUW environment, change the AERM from None to LOM, the AMP from None to the OTI Program, and the Note from None to H.	



## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
11	Aging management of NMP1 Compressed Air System Cold Worked Red Brass tubing external surfaces	T 3.3.2.A-3	Change the AMP for the Cold Worked Red Brass External Surfaces from the Systems Walkdown Program to the Compressed Air Monitoring Program.	To be consistent with the enhancement identified for the NMP1 Compressed Air Monitoring Program (ALRA Section A1.1.14) to develop a new activity to manage stress corrosion cracking. The Systems Walkdown Program does not manage this aging mechanism.
12	Aging management of components in the NMP1 Emergency Diesel Generator (EDG) and RBCLC Systems	T 3.3.1.A	Revise the Discussion column of Item 3.3.1.A-15, first sentence, to state: "Consistent with NUREG-1801." Delete the existing phrase "with exceptions (see Appendix B.2.1.11)."	The removal of the BWR Reactor Water Cleanup Program is to correct an oversight from the ALRA submittal.  The remaining changes were made based on the consistency of the NMPNS CCCW Program with GALL Program XI.M21. The identified components are in CCW Systems, which are managed for aging by the CCCW Program.
		S 3.3.2.A.7	Under the Aging Management Programs heading, delete the WCC Program bulleted item.	
		T 3.3.2.A-7	For WASS heat exchangers in a TW<140°F environment (2 entries), change the AMP to CCCW Program, the NUREG-1801, Volume 2, Item to VII.C2.2-a, the Table 1 Item to 3.3.1.A-15, and the Notes to C, 6.	
			For WASS valves in a TW<140°F environment, change the AMP to CCCW Program, the NUREG-1801, Volume 2, Item to VII.C2.2-a, the Table 1 Item to 3.3.1.A-15, and the Note to A.	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
12 (continued)		S 3.3.2.A.15	Under the Aging Management Programs heading, delete the BWR Reactor Water Cleanup System Program bulleted item.	
		T 3.3.2.A-15	For heat exchangers that credit the CCCW Program and the OTI Program (3 entries), delete the OTI Program.	
			For heat exchangers that credit only the OTI Program, add the WCC Program.	
			For WASS heat exchangers in a DUW environment, change the AMP to Closed-Cycle Cooling Water System Program, the NUREG-1801, Volume 2, Item and Table 1 Item to blank, and the Note to J.	
			For WASS orifices in a DUW environment, change the AMP to CCCW Program, the NUREG-1801, Volume 2, Item and Table 1 Item to blank, and the Note to G.	
			For WASS temperature elements in a DUW environment, change the AMP to CCCW Program, the NUREG-1801, Volume 2, Item and Table 1 Item to blank, and the Note to G.	
			For WASS valves in a DUW environment (2 entries), change the AMP to CCCW Program, the NUREG-1801, Volume 2, Item and Table 1 Item to blank, and the Note to G.	
13	Aging management of NMP1 and NMP2 Turbine Building (TB) Heating, Ventilation and Air Conditioning (HVAC) System fiberglass components	T 3.3.2.A-23	For Table 3.3.2.A-23, change the AERM for Fiberglass External Surfaces from None to Cracking and Loss of Strength, the AMP from None to PM Program, and Note from None to J.	The credited activities in the PM Program address both the internal and external portions of these fiberglass components.
		T 3.3.2.B-23	For Table 3.3.2.B-23, change the AERM for Fiberglass External Surfaces from None to Cracking and Loss of Strength, the AMP form None to PM Program, and Note from None to J.	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
14	Aging management of NMP2 Control Building Chilled Water System WASS flow elements and valves	S 3.3.2.B.8	Add the Bolting Integrity Program and remove the OTI and WCC Programs from the AMP Section.	These changes are made for GALL consistency since all of the cooling water components in this system are included in the CCCW Program.
		T 3.3.1.B	Revise the Discussion column for Item 3.3.1.B-15, first bullet to state, "Control Building Chilled Water System components in a treated water environment."	
		T 3.3.2.B-8	For WASS flow elements and valves in TW<140°F, change the OTI and WCC Programs to the CCCW Program. The flow elements and valves should be assigned the NUREG-1801, Volume 2, Item VII.C2.2-a, the Table 1 Item 3.3.1.B-15, and the Notes should be C and A for the flow elements and valves, respectively.	
15	Aging management of the NMP2 Fire Water System sprinklers	T 3.3.1.B	Revise the Discussion column for Item 3.3.1.B-19, last bullet to include carbon steel sprinklers in an internal air environment.	This change is made for GALL consistency. The Fire Protection Program was inadvertently credited for aging management of the sprinklers instead of the Fire Water Program.
		T 3.3.2.B-13	Change the AMP for sprinklers from the Fire Protection Program to the Fire Water Program.	
16	Aging management of NMP2 Hot Water Heating System piping and fittings and valves	T 3.3.2.B-17	For the Component Type "Piping and Fittings," the entries for the last three columns are changed to VIII.E.1-b, 3.4.1.B-02, and B, respectively. For the Component Type "Valves," the entries for the last three columns are changed to VIII.E.2-b, 3.4.1.B-02, and B, respectively.	The indicated changes are to bring these items into consistency with the GALL.
17	Aging management of NMP2 Circulating Water System flow elements	T 2.3.3.B.34-1	Add Component Type of Flow Element, with an IF of LBS.	During post-ALRA reviews of the associated Integrated Plant Assessment (IPA) documents, it was discovered that the Flow Element Component Type was inadvertently omitted for the NMP2 Circulating Water System.
		S 3.3.2.B.34	Under the Materials heading, add WASS.	
		T 3.3.2.B-34	Add a new row with a Component Type of Flow Element, IF of LBS, Material of WASS, Environment of Raw Water, AERM of LOM, AMP of OCCW, NUREG-1801, Volume 2, Item of VII. C3.2-a, Table 1 Item of 3.3.1.B-17, and Notes of C, 11.	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
18	Addition of an enhancement to the Boraflex Monitoring Program for NMP1	S A1.1.5	Add an additional enhancement to establish monitoring and trending instructions for in-situ test results, silica levels, and coupon results.	This enhancement was added to further align NMP1 with the GALL, in that it assures that activities associated with the BMP use monitoring and trending of data wherever possible. This provides additional assurance that the shutdown margin in the SFP is maintained.
		S A1.4	Revise the Commitment for the BMP (Item 16), to add an additional enhancement to establish monitoring and trending instructions for in-situ test results, silica levels, and coupon results.	
		S B2.1.12	Add an additional enhancement to establish monitoring and trending instructions for in-situ test results, silica levels, and coupon results for the Program Element of Monitoring and Trending.	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
19	Management of fracture toughness of NMP1 and NMP2 Cast Austenitic Stainless Steel (CASS) components with the BWR Vessel Internals Program (BWRVIP)	S A1.1.12	Clarify that the program activities include effects on fracture toughness due to neutron fluence and thermal embrittlement. Replace the last bullet on page A1-6 with the following: "Enhance the program to evaluate component susceptibility to loss of fracture toughness. Assessments and inspections will be performed, as necessary to ensure that intended functions are not impacted by the aging effect."	NMPNS credits the BWRVIP for managing the aging of CASS. The text was added to address loss of fracture toughness as an aging effect for CASS.
		S A1.4	Replace the Commitment in Item 37 with the following (the Source and Schedule remain the same): "Enhance the program to evaluate component susceptibility to loss of fracture toughness. Assessments and inspections will be performed, as necessary, to ensure that intended functions are not impacted by the aging effect."	
		S A2.1.13	Clarify that the program activities include effects on fracture toughness due to neutron fluence and thermal embrittlement. Replace the last bullet on page A2-6 with the following: "Enhance the program to evaluate component susceptibility to loss of fracture toughness. Assessments and inspections will be performed, as necessary to ensure that intended functions are not impacted by the aging effect."	
		S A2.4	Replace the Commitment in Item 35 with the following (the Source and Schedule remain the same): "Enhance the program to evaluate component susceptibility to loss of fracture toughness. Assessments and inspections will be performed, as necessary, to ensure that intended functions are not impacted by the aging effect."	
		S B2.1.8	Under the "Parameters Monitored/Inspected" Program Element, replace the text of the current bullet with the following: "Enhance the program to evaluate component susceptibility to loss of fracture toughness. Assessments and inspections will be performed, as necessary, to ensure that intended functions are not impacted by the aging effect."	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
20	Addition of an enhancement for inspection frequency of NMP1 and NMP2 halon/CO <sub>2</sub> fire suppression components in the Fire Protection Program	S A1.1.17	Add an additional enhancement to change Halon and Carbon Dioxide functional test frequencies to semi-annual.	This enhancement is required to be consistent with the GALL, which requires that a periodic functional test and inspection be performed at least once every six months on the halon/CO <sub>2</sub> fire suppression systems.
		S A2.1.17	Add an additional enhancement to change Halon and Carbon Dioxide functional test frequencies to semi-annual.	
		S B2.1.16	Add an additional enhancement to change Halon and Carbon Dioxide functional test frequencies to semi-annual for the Program Element of Detection of Aging Effects.	
		S A1.4	Commitment #19 – Add and enhancement to revise Halon and Carbon Dioxide Functional test frequencies to semi-annual.	
		S A2.4	Commitment #17 – Add and enhancement to revise Halon and Carbon Dioxide Functional test frequencies to semi-annual.	
21	Addition of an enhancement for new NMP1 and NMP2 procedures and PM tasks for Fire Water System sprinkler heads	S A1.1.18	Add an enhancement to develop new procedures and PM tasks to implement sprinkler head replacement and/or inspections.	This enhancement is required to be consistent with the latest industry and regulatory precedence which stipulates that sprinkler heads be inspected before the end of the 50-year sprinkler head service life and at 10-year intervals thereafter during the PEO.
		S A2.1.18	Add an enhancement to develop new procedures and PM tasks to implement sprinkler head replacement and/or inspections.	
		S B2.1.17	Add an enhancement to develop new procedures and PM tasks to implement sprinkler head replacement and/or inspections under the Program Description.	
		S A1.4	Commitment #20 – Add an enhancement to develop new procedures and PM tasks to implement sprinkler head replacements and/or inspections to meet National Fire Protection Association (NFPA) 25, "Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," Section 5.3.1 (2003 Edition) requirements.	
		S A2.4	Commitment #18 - Add an enhancement to develop new procedures and PM tasks to implement sprinkler head replacements and/or inspections to meet NFPA 25, Section 5.3.1 (2003 Edition) requirements.	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
22	Revision of the enhancements for the NMP1 and NMP2 Fuel Oil Chemistry Program	S A1.1.20	<p>Delete an extraneous enhancement for microbiological organism tests. (Basis #5)</p> <p>Remove the diesel fire pump fuel oil day tank from the enhancement for periodic inspections, and add an exception for such inspections due to size and configuration. (Basis #4)</p> <p>Add an enhancement for periodic opening of the diesel fire pump fuel oil day tank drain. (Basis #4)</p> <p>Add an exception to performing internal inspections of any fuel oil day tank. (Basis #3)</p> <p>Add an enhancement for quarterly trending of water and sediment. (Basis #1)</p> <p>Add an enhancement for removal of water, if found. (Basis #1)</p>	<ol style="list-style-type: none"> <li>1. Additional enhancements for trending water and sediment, as well as requiring water removal were necessary to be consistent with the GALL.</li> <li>2. Updated "Program Elements Affected" to reflect the appropriate attributes applicable to the exception taken to periodically sample the diesel fuel oil day tanks.</li> <li>3. An additional exception was taken for performing internal inspections of any fuel oil day tank since, after enhancement, all such tanks will be routinely drained; thereby removing any contaminants from the tank that would provide an aging mechanism.</li> <li>4. NMPNS deleted the enhancement to perform periodic internal inspections on the diesel fire pump fuel oil day tank in favor of taking the appropriate exception and substituting another enhancement for periodically draining the tank to remove contaminants.</li> <li>5. Deleted extraneous enhancements for microbiological organism tests for NMP1. This activity was already included in the program prior to submission of the July 14, 2005 ALRA.</li> </ol>
		S A2.1.20	<p>Add an enhancement for quarterly trending of water and sediment. (Basis #1)</p> <p>Add an enhancement for removal of water, if found. (Basis #1)</p> <p>Add an exception to performing internal inspections of any fuel oil day tank. (Basis #3)</p>	
		S B2.1.18	<p>Delete an extraneous enhancement for microbiological organism tests. (NMP1 only - Basis #5)</p> <p>Remove diesel fire pump fuel oil day tank from enhancement for periodic inspections, and add an exception for such inspections due to size and configuration. (NMP1 only - Basis #4).</p> <p>Add an enhancement for quarterly trending of water and sediment. (NMP1&amp;2 - Basis #1).</p> <p>Under "Detection of Aging Effects", add an exception to performing internal inspections of any fuel oil day tank. (NMP1&amp;2 - Basis #3)</p> <p>Add an enhancement for periodic opening of the diesel fire pump fuel oil day tank drain. (NMP1 only - Basis #4).</p> <p>Add an enhancement for removal of water, if found (NMP1&amp;2 - Basis #1).</p> <p>In "Exceptions to NUREG 1801," under "Program Elements Affected," add "Parameters Monitored and Inspected," to the exception taken to "Monitoring and Trending." (NMP1&amp;2 - Basis #2).</p>	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
22 (continued)		S A1.4	Commitment #21 – Delete the extraneous enhancement for microbiological organism tests. (Basis #5) Remove the diesel fire pump fuel oil day tank from the enhancement for periodic inspection. (Basis #4) Add an enhancement for quarterly trending of water and sediment. (Basis #1) Add an enhancement for periodic opening of the diesel fire pump fuel oil day tank drain. (Basis #4) Add an enhancement for removal of water, if found. (Basis #1)	
		S A2.4	Commitment #19 – Add an enhancement for quarterly trending of water and sediment. (Basis #1) Add an enhancement for removal of water, if found. (Basis #1)	
23	Expansion of the NMP1 and NMP2 Overhead Heavy Load and Light Load Handling System Program enhancement	S A1.1.22	Expand the existing enhancement to cover all inspections, rather than just “pre-lift.”	This revision removes the qualifier on the enhancement that limited it to “pre-lift” inspections only. To align the program more closely to the GALL, NMPNS recognized that the existing enhancement should be broadened to include corrosion inspections in all activities credited for aging management of cranes. It arose from a review of the Program’s implementing document that revealed that all procedures, including those not associated with “pre-lift” activities, require enhancement in this regard.
		S A2.1.22	Expand the existing enhancement to cover all inspections, rather than just “pre-lift.”	
		S B2.1.13	Expand the existing enhancement to cover all inspections, rather than just “pre-lift.”	
		S A1.4	Commitment #17 - Expand the existing enhancement to cover all inspections, rather than just “pre-lift.”	
		S A2.4	Commitment #16 - Expand the existing enhancement to cover all inspections, rather than just “pre-lift.”	



## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
24	Addition of an enhancement to establish acceptance criteria for the NMP1 and NMP2 Non-Segregated Bus Inspection Program	S A1.1.27	Add an enhancement to develop acceptance criteria for inspections and testing, their support and insulation systems, and the low range ohmic checks of connections.	This enhancement was required to meet the acceptance criteria contained in the most recent industry and regulatory license renewal guidance. This guidance states that bolted connections must be below the maximum allowed temperature or low resistance value.
		S A2.1.27	Add an enhancement to develop acceptance criteria for inspections and testing, their support and insulation systems, and the low range ohmic checks of connections.	
		S B2.1.34	Add an enhancement to develop acceptance criteria for inspections and testing, their support and insulation systems, and the low range ohmic checks of connections under the Program Element of Acceptance Criteria.	
		S A1.4	Commitment #31 – Add an enhancement for program documents to define acceptance criteria for inspection of the bus ducts, their support and insulation systems, and the low range ohmic checks of connections.	
		S A2.4	Commitment #29 – Add an enhancement for program documents to define acceptance criteria for inspection of the bus ducts, their support and insulation systems, and the low range ohmic checks of connections.	
25	Expansion of the scope NMP1 and NMP2 Open-Cycle Cooling Water Program and expansion of an enhancement	S A1.1.29	Expand the scope discussion of the program to clarify that it includes internal portions of NSR segments of the circulating water and service water systems which are WSLR per the 10 CFR 54.4(a)(2). It also manages all aging effects for components subject to the scope of recommendations for GL 89-13.	The program also manages the aging of internal portions of the circulating water system which are connected to the service water system and NSR portions of interfacing systems such as service water, which are WSLR per the 10 CFR 54.4(a)(2) scoping criterion. Also included are both the internal and external surfaces of components subject to the scope of recommendations for GL 89-13 per GALL, Revision 0, Section XI.M20. The components were added to the OCCW Program for GALL consistency.  The enhancements listed in the ALRA are also applicable to the additional program elements listed.
		S A2.1.29	Expand the scope discussion of the program to clarify that it includes internal portions of NSR segments of the circulating water and service water systems which are WSLR per the 10 CFR 54.4(a)(2). It also manages all aging effects for components subject to the scope of recommendations for GL 89-13.	
		S B2.1.10	Expand the scope discussion of the program to clarify that it includes internal portions of NSR segments of the circulating water and service water systems which are WSLR per the 10 CFR 54.4(a)(2). It also manages all aging effects for components subject to the scope of recommendations for GL 89-13.  In the enhancements under "Program Elements Affected,, add "Program Description," "Preventative Actions," and "Monitoring and Trending," to the enhancements listed for "Scope of Program."	

## IDENTIFIED CHANGES TO THE AMENDED LICENSE RENEWAL APPLICATION (ALRA)

Change No.	Description	Section (S) or Table (T)	ALRA Change	Basis for Change
26	Add an exception to the NMP1 and NMP2 Bolting Integrity Program	S A1.1.38	Add an exception to GALL Report Program XI.M18 for its reference to the 95-96 Addenda of the ASME Code.	The program described in NUREG 1801, Section XI.M18, under "Detection of Aging Effects," cites ASME Section XI requirements covered in the 1995 Edition through the 1996 Addenda. The Code of Record for NMP1 and NMP2 is the 1989 Code with no Addenda, so this is an exception to GALL.
		S A2.1.37	Add an exception to GALL Report Program XI.M18 for its reference to the 95-96 Addenda of the ASME Code.	
		S B2.1.36	Add an exception to GALL Report Program XI.M18 for its reference to the 95-96 Addenda of the ASME Code.	
27	Expand an existing exception to the Protective Coating Monitoring and Maintenance Program	S B2.1.38	Add an exception affecting "Parameters Monitored and Inspected," "Detection of Aging Effects," "Monitoring and Trending," and "Acceptance Criteria," that explains that ASTM D 5163-05a will be used in lieu of ASTM D 5163-96, as specified in NUREG-1801.	The program described in NUREG 1801, Section XI.S8, under "Detection of Aging Effects" and "Monitoring and Trending," cites ASTM D 5163-96. NMPNS takes exception to this in that the later version that superseded it, ASTM D 5163-05a, will be used in the NMPNS program.
28	Clarify the Scope of the Open Cycle Cooling Water Program	S A1.1.29 and S B2.1.10	Delete the second sentence of the "Program Description," and replace it with the following two sentences: "For NMP1, this includes portions of the Service Water (SW) System, the Emergency SW System, shell side of the RBCLC heat exchangers, the EDG Cooling Water System, Containment Spray Raw Water System, and portions of the Circulating Water System. Also included are other components WSLR wetted by the SW System that are credited in the aging management review."	The changes more clearly and concisely describe the scope of the OCCW Program for NMP1.

## ATTACHMENT B to NMP1L 1996

The following table identifies those actions committed to by Nine Mile Point Nuclear Station, LLC, in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

Revisions to existing Amended License Renewal Application (ALRA) commitments are shown with *italics* and ~~strikethroughs~~.

ALRA Section	ALRA Commitment #	Commitment Text	New or Revised	Due Date
A1.4	16	The Boraflex Monitoring Program will be enhanced to (1) Require periodic neutron attenuation testing and measurement of boron areal density to confirm the correlation of the conditions of test coupons to those of Boraflex racks that remain in use during the period of extended operation; <i>and (2) Establish monitoring and trending instructions for in-situ test results, silica levels, and coupon results.</i>	Revised	Prior to Nine Mile Point, Unit 1 (NMP1) Period of Extended Operation (PEO)
A1.4	17	Revise applicable procedures related to the Crane Inspection Program to add specific direction for performance of <del>pre-lift</del> corrosion inspections, with acceptance criteria, for certain hoist lifting assembly components.	Revised	Prior to NMP1 PEO

<b>ALRA Section</b>	<b>ALRA Commitment #</b>	<b>Commitment Text</b>	<b>New or Revised</b>	<b>Due Date</b>
A1.4	19	Enhance the Fire Protection Program to (1) Incorporate periodic visual inspections of piping and fittings located in a non-water environment such as Halon and Carbon Dioxide fire suppression systems components, to detect evidence of corrosion and any system mechanical damage that could affect its intended function; (2) Expand the scope of periodic functional tests of the diesel-driven fire pump to include inspection of engine exhaust system components to verify that loss of material is managed; (3) Perform an engineering evaluation to determine the plant specific inspection periodicity of fire doors; <i>and (4) Revise Halon and Carbon Dioxide Functional test frequencies to semi-annual.</i>	Revised	Prior to NMP1 PEO

ALRA Section	ALRA Commitment #	Commitment Text	New or Revised	Due Date
A1.4	20	<p>Enhance the Fire Water System Program by revising applicable existing procedures to (1) Incorporate inspections to detect and manage loss of material due to corrosion into existing periodic test procedures; (2) Specify periodic component inspections to verify that loss of material is being managed; (3) Add procedural guidance for performing visual inspections to monitor internal corrosion and detect biofouling; (4) Add requirements to periodically check the water-based fire protection systems for microbiological contamination; (5) Measure fire protection system piping wall thickness using non-intrusive techniques (e.g., volumetric testing) to detect loss of material due to corrosion; (6) Establish an appropriate means of recording, evaluating, reviewing, and trending the results of visual inspections and volumetric testing; and (7) Define acceptance criteria for visual inspections and volumetric testing; and (8) <i>Develop new procedures and PM tasks to implement sprinkler head replacements and/or inspections to meet National Fire Protection Association (NFPA) 25, "Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," Section 5.3.1 (2003 Edition) requirements.</i></p>	Revised	Prior to NMP1 PEO

ALRA Section	ALRA Commitment #	Commitment Text	New or Revised	Due Date
A 1.4	21	Enhance the Fuel Oil Chemistry Program to (1) <del>Incorporate periodic tests for microbiological organisms</del> <i>Establish a requirement to perform quarterly trending of water and sediment</i> ; (2) Provide guidelines for the appropriate use of biocides, corrosion inhibitors, and/or fuel stabilizers to maintain fuel oil quality; (3) Add requirements to periodically inspect the interior surfaces of the emergency diesel fuel oil <i>storage</i> tanks and <del>diesel fire pump fuel oil day tank</del> for evidence of significant degradation, including a specific requirement that the tank bottom thickness be determined (4) Add a requirement for quarterly trending of particulate contamination analysis results; and (5) Ensure acceptance criteria are specified in the implementing procedures for the applicable indications of potential degradation; (6) <i>Establish a requirement for periodic opening of the diesel fire pump fuel oil day tank drain</i> ; and (7) <i>Establish a requirement to remove water, if found.</i>	Revised	Prior to NMP1 PEO

ALRA Section	ALRA Commitment #	Commitment Text	New or Revised	Due Date
A1.4	31	Enhance the Non-Segregated Bus Inspection Program to (1) Expand visual inspections of the bus ducts, their supports and insulation systems; <del>—Also,</del> (2) Create new provisions will be made to perform either periodic low range resistance checks of the bus ducts or torque checks of a statistical sample of accessible bolted connections; and (3) Define acceptance criteria for inspection of the bus ducts, their support and insulation systems, and the low range ohmic checks of connections.	Revised	Prior to NMP1 PEO
A1.4	37	Enhance the program to evaluate component susceptibility to loss of fracture toughness. Assessments and inspections will be performed, as necessary to ensure that intended functions are not impacted by the aging effect. Maintenance procedure for inspection of the Orificed Fuel Support casting will be enhanced to include a sample VT-1 inspection of the casting and EVT-1 inspection if any evidence of impact or mishandling is identified.	Revised	Prior to NMP1 PEO
A2.4	16	Revise applicable procedures related to the Crane Inspection Program to add specific direction for performance of pre-lift corrosion inspections, with acceptance criteria, for certain hoist lifting assembly components.	Revised	Prior to Nine Mile Point, Unit 2 (NMP2) PEO

ALRA Section	ALRA Commitment #	Commitment Text	New or Revised	Due Date
A2.4	17	Enhance the Fire Protection Program to (1) Incorporate periodic visual inspections of piping and fittings located in a non-water environment such as Halon and Carbon Dioxide fire suppression systems components, to detect evidence of corrosion and any system mechanical damage that could affect its intended function; (2) Expand the scope of periodic functional tests of the diesel-driven fire pump to include inspection of engine exhaust system components to verify that loss of material is managed; <del>and</del> (3) Perform an engineering evaluation to determine the plant specific inspection periodicity of fire doors; <i>and (4) Revise Halon and Carbon Dioxide Functional test frequencies to semi-annual.</i>	Revised	Prior to NMP2 PEO



ALRA Section	ALRA Commitment #	Commitment Text	New or Revised	Due Date
A2.4	18	<p>Enhance the Fire Water System Program by revising applicable existing procedures to (1) Incorporate inspections to detect and manage loss of material due to corrosion into existing periodic test procedures; (2) Specify periodic component inspections to verify that loss of material is being managed; (3) Add procedural guidance for performing visual inspections to monitor internal corrosion and detect biofouling; (4) Add requirements to periodically check the water-based fire protection systems for microbiological contamination; (5) Measure fire protection system piping wall thickness using non-intrusive techniques (e.g., volumetric testing) to detect loss of material due to corrosion; (6) Establish an appropriate means of recording, evaluating, reviewing, and trending the results of visual inspections and volumetric testing; <del>and</del> (7) Define acceptance criteria for visual inspections and volumetric testing; <i>and (8) Develop new procedures and PM tasks to implement sprinkler head replacements and/or inspections to meet National Fire Protection Association (NFPA) 25, "Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," Section 5.3.1 (2003 Edition) requirements.</i></p>	Revised	Prior to NMP2 PEO

ALRA Section	ALRA Commitment #	Commitment Text	New or Revised	Due Date
A2.4	19	Enhance the Fuel Oil Chemistry Program to (1) Provide guidelines for the appropriate use of biocides, corrosion inhibitors, and/or fuel stabilizers to maintain fuel oil quality; (2) Add a requirement to sample the diesel fuel oil storage tanks for water and sediment at least quarterly per the ASTM standard; (3) Add requirements to periodically inspect the interior surfaces of the fuel oil <i>storage</i> tanks for evidence of significant degradation, including a specific requirement that the tank bottom thickness be determined; (4) Add a requirement for quarterly trending of particulate contamination analysis results; and (5) Ensure acceptance criteria are specified in the implementing procedures for the applicable indications of potential degradation; (6) <i>Establish a requirement to perform quarterly trending of water and sediment; and (7) Establish a requirement to remove water, if found.</i>	Revised	Prior to NMP2 PEO
A2.4	29	Enhance the Non-Segregated Bus Inspection Program to (1) Expand visual inspections of the bus ducts, their supports and insulation systems; <del>Also,</del> (2) <i>Create new provisions will be made to perform either periodic low range resistance checks of the bus ducts or torque checks of a statistical sample of accessible bolted connections; and (3) Define acceptance criteria for inspection of the bus ducts, their support and insulation systems, and the low range ohmic checks of connections.</i>	Revised	Prior to NMP2 PEO

ALRA Section	ALRA Commitment #	Commitment Text	New or Revised	Due Date
A2.4	35	<i>Enhance the program to evaluate component susceptibility to loss of fracture toughness. Assessments and inspections will be performed, as necessary to ensure that intended functions are not impacted by the aging effect. Maintenance procedure for inspection of the Orificed Fuel Support casting will be enhanced to include a sample VT-1 inspection of the casting and EVT-1 inspection if any evidence of impact or mishandling is identified.</i>	Revised	Prior to NMP2 PEO
A2.4	36	The spent fuel rack design that currently utilizes Boraflex for reactivity control in the spent fuel pool will be replaced by a design that utilizes Boral for this function.	New	Prior to NMP2 PEO