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Date: 4/26/2006 2:39:48 PM
Subject: Printout of the VYNPS LRA Question Responses

To NRC Project Team Members:

Attached is a printout of the VY responses to the Project Team AMP questions. This was printed on Friday (4/21) before we left the plant site. This is for your use as you draft the evaluation paragraphs for your AMP write-ups. If you have any questions, please let me know.
Regards,

Mike

CC: Colleen Amoruso <camoruso@infosyslabs.com>, <tpfiester@islinc.com>

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VYNPS AMP Questions.zip

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Options

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Message is eligible for Junk Mail handling

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VY LRA - All Items

Item	Request	Response	Lead	Support	Status	Inspector:
1	A-K-01 Please explain where the commitments for the various AMP enhancements to bring the particular AMP in conformance to the GALL Report recommendations are made? How are these commitments tracked to closure?	The LRA, Appendix B identifies the commitments for AMP enhancements. Consistent with how other NRC commitments are tracked VYs will enter the commitments associated with License Renewal into PCRS corrective action database as Work Tracking (WT) items. We will do this when requested by the LR Project Manager who has a tracking item to define how all planned actions are tracked.	J im Devincintis		Accepted	Mike Morgan
2	B.1.1-L-01 Program Description Item - The GALL states, "Gray cast iron, which is included under the definition of steel, is also subject to a loss of material due to selective leaching, which is an aging effect managed under Chapter XI.M33, 'Selective Leaching of Materials.'" The LRA states, "This program includes (a) preventive measures to mitigate corrosion and (b) inspections to manage effects of corrosion on the pressure-retaining capability of buried carbon steel, stainless steel, and gray cast iron components." Are gray cast iron components included in the VYNPS selective leaching program?	Yes, gray cast iron components subject to aging management review are included in the VYNPS selective leaching program. Reference LRA Section B.1.25 and Table 3.3.2-8. [LAP 4/12/06]	Steve Vekasy	Lori Potts	Accepted	Lintz, Mark
3	B.1.1-L-02 Program Description Item - The LRA states, "A focused inspection will be performed within the first 10 years of the period of extended operation...." What is the extent of the focused inspection at the start of the period of extended operation? Modified Question: Program Description Item -The LRA states, "A focused inspection will be performed within the first 10 years of extended operation... " On what areas will the "focused inspection" be focused?	If a focused inspection is required during the first 10 years of the period of extended operation, it will be conducted in accordance with the criteria of NUREG-1801, Section XI.M34, Buried Piping and Tanks Inspection. [LAP 4/12/06] In section 4 of XI.M34 it states that any credited inspection should be performed in areas with the highest likelihood of corrosion problems, and in areas with a history of corrosion problems. This defines the focused inspection that will be performed at VYNPS which will also include buried piping that has experienced external corrosion problems and areas that have conditions such as exposure to groundwater that could increase the likelihood of corrosion of buried piping.	Steve Vekasy	Lori Potts	Open	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
4	B.1.1-L-03 Scope of Program Element - The GALL Report states, "The program relies on preventive measures such as coating, wrapping and periodic inspection for loss of material caused by corrosion of the external surface of buried steel piping and tanks." The LRA states, "The VYNPS program does not inspect tanks. There are no buried steel tanks subject to aging management review." What is the basis for including piping but excluding tanks?	The basis for exclusion of tanks from the Buried Piping Inspection Program is that none of the metal tanks subject to aging management review are buried. Therefore, aging of tanks is managed by other programs. Reference LRA Sections 3.2.2.2.9 and 3.4.2.2.5, and Section 3.3 Tables (The only buried tank in the auxiliary systems is fiberglass.) [LAP 4/12/06] These were discussed in interview. When were responses written?	Steve Vekasy	Ivy, Ted	Accepted	Lintz, Mark
5	B.1.1-L-04 Parameters Monitored/Inspected Element - The GALL Report states, "Coatings and wrappings are inspected by visual techniques." The LRA states, "Guidance for performing examinations of buried piping will be enhanced to specify that coating degradation and corrosion are attributes to be evaluated." What is the VYNPS commitment number associated with this enhancement? . Buried piping is visually examined for evidence of corrosion damage or coating defects." A review of PP 7030, Section 4.3, does not identify the parameters that pertain to corrosion damage or coating defects. Is this the guidance that VY intends to enhance?	This is commitment #1 Vermont Yankee will enhance PP 7030, Structures Monitoring Program Procedure, to provide additional guidelines for inspections of buried pipe and underground structures. Attributes to be considered will include: 1. improved definition of the scope of underground piping inspections 2. define the condition of coatings to be inspected, including adhesion and discontinuities. 3. define the need to inspect piping underneath failed coatings 4. provide acceptance criteria, including removal of rust and an evaluation of remaining wall thickness against the minimum wall thickness requirements 5. provide instructions to notify Engineering for an inspection of any underground structures unearthed during excavation of piping. See the master license renewal commitment list for tracking of this commitment.	Steve Vekasy	Ivy, Ted	Open	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
6	B.1.1-L-05 Detection of Aging Effects Element - The GALL Report states, "Inspections substituted for inspections requiring excavation solely for the purpose of inspection. Methods such as phased array UT technology provide indication of wall thickness for buried piping without excavation. Use of such methods to identify the effects of aging is preferable to excavation for visual inspection, which could result in damage to coatings or wrappings." How are buried components that cannot be examined by UT, due to, e.g., either material or size, examined?	Buried components are inspected when excavated during maintenance. The exception merely states that alternate methods may be used to inspect buried components. Reference LRA Section B.1.1. [LAP 4/12/06]	Steve Vekasy	Ivy, Ted	Accepted	Lintz, Mark
7	B.1.2-P-1 Exceptions granted under the current license are not assumed to apply to period of extended operation. Please confirm that the excepted weld is outside the scope of license renewal. Also, explain why it need not be inspected at least once in each inspection interval.	B.1.2-P-1 Exceptions granted under the current license are not assumed to apply to period of extended operation. Please confirm that the excepted weld is outside the scope of license renewal. As indicated in LRA Tables 3.3.2-13-5 and 3.3.2-13-36, the excepted welded connection is subject to aging management review for potential spatial interaction in accordance with 10 CFR 50.54 (a)(2). As stated in LRA Section B.1.2, exception Note 1, the welded connection need not be inspected at least once in each inspection interval because it is in a section of piping that is Safety Class 0 and has no license renewal function in accordance with 10 CFR 54.4 (a)(1) or (a)(3). [LAP 4/16/06]	Dave King	Finnin, Ron&Potts,L	Closed	Patterson, Malcol

Item	Request	Response	Lead	Support	Status	Inspector:
8	B.1.7-H-01 BWRVIP utilities have made a commitment that the NRC will be notified by a BWRVIP licensee of their decision to not fully implement a BWRVIP report, as approved by the NRC staff, within 45 days of the report approval. Please clarify the exceptions for not fully implementing BWRVIP report by VYNPS. Did VYNPS define any new cases of not fully implementing BWRVIP in the VYNPS LRA?	The BWR Vessel Internals Program includes provisions to notify the NRC if VYNPS does not implement a BWRVIP recommendation. Exceptions to the NUREG-1801 programs that invoke specific BWRVIP reports are identified in Appendix B of the LRA. Reference LRA Section B.1.7 and LRPD-02 (AMPER) Section 4.7. [LAP 4/12/06]. The IVVI program procedure is ENN-DC-135, and current revision includes the requirements of BWRVIP 94 Revision 1. VY has prepared a technical justification to defer the jet pump beam examinations to align with the refueling outage schedule as allowed by BWRVIP-94 (Revision in place at time of deviation). The BWRVIP requirements are based on 24 month cycles while VY is on a 18 month cycle. The UT examinations of the Jet Pump beams are scheduled for the next refueling outage RFO 26 (2007). BWRVIP 94 Revision 1, Section 3.5 provides guidance on the reporting requirements. A BWRVIP letter dated 12/20/2005 requires implementation by 8/1/2006. This is also addressed in the latest revision of ENN-DC-135.	Larry Lukens	Finnin, Ron & Potts,	Closed	Hsu, Robert

Item	Request	Response	Lead	Support	Status	Inspector:
9	<p>B.1.7-H-02 In the VYNPS LRA, pages B-28 & C-5, an exception to BWRVIP-25 is taken. UT & Enhanced VT-1 examinations are used to detect cracking and verify the integrity of a critical number of rim hold-down bolts. VT-3 examination is used to detect general condition. Please provide further justification for the aging management of the cracking, since VT-3 cannot detect cracking. If EVT-1 cannot be performed, please provide alternative for review and approval.</p>	<p>This exception came from TJ-2004-01 in PP 7027. BWRVIP owner to address question. [LAP 4/12/06] The BWR Core Plate Inspection and Flaw Evaluation Guideline (BWRVIP-25) recommend a UT or EVT-1 examinations of core plate rim hold-down bolts for all plants that have not intalled core plate wedges. These bolts are the only location in the core plate requiring inspection. Utilities have determined the EVT-1 examinations are extremely difficult to perform and are of limited value. The Inspection committee of the BWRVIP has attempted to develop a UT technique, and has had limited success. However, the UT examination can only be performed on a limited number of existing bolt configurations and delivery hardware for the inspection equipment has not been developed. A screening tool presented to the BWRVIP Assessment Committee shows that VY has sufficient preload through 60 years of operating life to ensure the bolting will not be degraded and remain functional.</p> <p>VY will either install core plate wedges or complete an analysis, including TLAA, to support continued inspection in accordance with BWRVIP- 25.</p> <p>This is commitment # 29.</p>	Larry Lukens	Finnin, Ron & Potts,	Accepted	Hsu, Robert
10	<p>B.1.7-H-03 In the VYNPS LRA, page B-29, the applicant identified a VT-3 examination as a baseline. The baseline inspection described in BWRVIP is the first inspection that satisfies the guidelines in BWRVIP. Since VT-3 does not satisfy the BWRVIP guidelines, the inspection cited does not provide a baseline. Please explain how the BWRVIP guideline will be met.</p>	<p>Same as previous question. [LAP 4/12/06] This question ties into the above and the same answer would apply, i.e. the BWRVIP is working developing an inspection method.</p>	Larry Lukens	Finnin, Ron & Potts,	Closed	Hsu, Robert

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11	B.1.7-H-04 In the VYNPS LRA, page B-27, (BWRVIP-76) Recent industry experience indicates that partial through-wall cracks from the inside diameter are possible. (They have been detected at Plant Hatch.) How will cracking initiated from the inside surface of VYNPS's core shroud welds H1, H2, and H3 be managed?	Portions of the Core Shroud horizontal welds H1, H2 and H3 are scheduled for UT examination in RFO-26 (2007). The shroud tie rod repair was installed to replace the structural integrity of the shroud horizontal welds. The tie rod repair does not replace vertical welds and relies on the H2/H3 support ring blocks to transfer loads to the tie rod radial seismic supports. Because of interferences the support ring block welds and vertical welds inside surface between H1 and H2 cannot be inspected. Portions of horizontal welds H1, H2, and H3 can be inspected in lieu of these welds and as such are characterized as "design reliant". Analysis performed by the shroud repair designer MPR Associates has determined the minimum design reliant weld lengths for H1, H2, and H3 required to ensure the tie rod repair and shroud functions as designed. This is consistent with the BWRVIP-76 requirement that the shroud tie rod repair designer provide the inspection requirements	Larry Lukens	Finnin, Ron & Potts,	Accepted	Hsu, Robert
12	B.1.7-H-05 In the VYNPS LRA, page B-28 (BWRVIP-18 and BWRVIP-41) BWRVIP-18 states that inspection technique development needed for the thermal sleeve welds is being addressed by the BWRVIP inspection committee as a high priority item (since 1996). The Final License Renewal SER for BWRVIP-41 states that aging management review of the nozzle thermal sleeve (jet pump inaccessible welds) will be provided by individual applicants. Please provide plant-specific justification/commitment to demonstrate that these inaccessible welds will be adequately managed during the period of extended operation.	Deferral of inspection of the inaccessible welds is justified based on the following: The hidden jet pump welds are far enough into the nozzle that failure at these welds would not result in the thermal sleeve disengaging from the nozzle before the riser contacted the shroud. If the jet pump thermal sleeve or riser piping severed, it would be detected through jet pump monitoring, which alarms if the riser pipe moves more than 10% while at or above a core flow of 42 Mib/hr. . Reference LRA page B-30. [LAP 4/12/06]. The response still does not address the inspection requirement. Further discussion required. (KRH)	Larry Lukens	Finnin, Ron & Potts,	Open	Hsu, Robert

Item	Request	Response	Lead	Support	Status	Inspector:
13	B.1.7-H-06 In the VYNPS LRA, page B-28 (BWRVIP-41) The VYNPS LRA states that flaws were identified through UT examinations. Please provide detailed inspection evaluation, scope expansion and corrective action information for the staff's review.	TE-2003-0021 from Appendix C of PP 7027 will be provided during on-site audit. References used to prepare TE-2003-0021 will be available for on-site review upon request. [LAP 4/11/06] Flaw evaluations were performed for the jet pump diffuser welds, jet pump riser welds, and the core spray collar welds. The jet pump riser flaw evaluation calculation number is VYC-2400. The core spray collar weld flaw evaluation report number is VY-RPT-05-00015 and should be available in Curator/Merlin. 100% of the JP diffuser welds were inspected by UT in RFO 21 (1999). The flawed diffuser welds were reinspected by UT in RFO 23 (2002) with little change in flaw sizes. 26 of 30 JP riser welds were UT inspected in RFO 20 (1998) and 4 welds were inspected by VT-1 with cleaning. The flawed riser welds were reinspected by UT in RFO 22 (2001) with no crack growth on 2 welds and two previous indications were determined to be due to UT transducer liftoff. 100 % of the core spray collar welds were examined by UT in 1996. The flawed collar welds were reinspected by UT in RFO 22 (2001) with no change in flaw sizes. The flawed Jet Pump diffuser/riser welds and the Core Spray collar welds are scheduled to be inspected by UT during RFO 26 (2007). Future re-inspections will be performed in accordance with BWRVIP requirements.	Larry Lukens	Finnin, Ron & Potts,	Closed	Hsu, Robert
14	B.1.7-H-07 In the VYNPS LRA, page B-31 (BWRVIP-26) The VYNPS LRA states that an inspection will be performed for the first 12 years of the period of extended operation (PEO). Please clarify what inspections (if any) will be performed for the remaining PEO.	The BWR Vessel Internals Program at VYNPS is consistent with the program described in NUREG-1801, Section XI.M9, BWR Vessel Internals with the exceptions and enhancement noted in LRA Section B.1.7. As stated in NUREG-1801, the extent of the examination and its frequency will be based on a ten percent sample of the total population, which includes all grid beam and beam-to-beam crevice slots. [LAP 4/12/06]	Larry Lukens	Finnin, Ron & Potts,	Accepted	Hsu, Robert

<i>Item</i>	<i>Request</i>	<i>Response</i>	<i>Lead</i>	<i>Support</i>	<i>Status</i>	<i>Inspector:</i>
15	<p>B.1.8-L-01 Operating Experience Element - The LRA states, "A QA audit in 2001 revealed latent noncompliance with station administrative and Appendix J implementing procedures." Please clarify the meaning of "latent" in this context.</p> <p>Added: Scope of Program item. Are any other examinations/tests performed, in addition to the integrated leakage rate and the local leakage rate tests?</p>	<p>The term latent in this context means: not currently affecting program effectiveness, but with the potential for affecting program effectiveness if not corrected. While technical details were followed, administrative details within procedures were not always followed. This procedural noncompliance, if not corrected, could have diminished the effectiveness of the program. Reference Audit Report VY-2001-26. [LAP 4/12/06]</p> <p>There are no additional tests or examinations are performed under the Containment Leak Rate Program. As a support to the Type A testing, examinations of the accessible interior and exterior surfaces of the containment system are conducted in accordance with the Containment Inservice Inspection Program at the periodicity specified in RG 1.163.</p> <p>Revised Response: The term latent in this context means: not currently affecting program effectiveness, but with the potential for affecting program effectiveness if not corrected. While technical details were followed, administrative processes, associated with test record retention, were implemented outside the established requirements. This procedural noncompliance, if not corrected, could have diminished the effectiveness of the program. Reference Audit Report VT-2001-26 (FTU 4/19/06)</p>	Ted Underkoffler	Ahrabli, Reza	Accepted	Lintz, Mark

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16	B.1.9-K-01 Please demonstrate that the guidelines provided in D2276 are consistent with or more stringent than the guidelines provided in D6217 to justify the use of D2276 only.	ASTM D 2276 provides guidance on determining particulate contamination using a field monitor. It provides for rapid assessment of changes in contamination level without the time delay required for rigorous laboratory procedures. It also provides a laboratory filtration method using a 0.8 micron filter. ASTM D 6217 provides guidance on determining particulate contamination by sample filtration at an off-site laboratory. The acceptance criterion of D 2276 is 10 mg/liter while that of D 6217 is 24 mg/liter. Therefore, D 2276 is more stringent than D 6217. Since ASTM D2276 is an accepted method of determining particulates and is a method recommended by ASTM D975, to which VYNPS is committed by Technical Specifications, the D 2276 method is used at VYNPS. [LAP 4/18/06]	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike
17	B.1.9-K-02 Are the guidelines provided in D4057 addressed in this program? If not, please justify excluding this standard as an exception to the GALL Report recommendations.	As stated in the program description in LRA Section B.1.9, sampling and analysis activities are in accordance with technical specifications on fuel oil purity and the guidelines of ASTM standards D4057-88 and D975-02 (or later revisions of these standards). Reference LRA Section B.1.9, Program Description. [LAP 4/12/06]	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike
18	B.1.9-K-03 Please indicate what additives, if any, are provided by the fuel oil supplier. Please provide a copy of a recent fuel oil procurement specification or supplier declaration which indicates what fuel oil additives are included as well as any tests that may have been performed by the fuel oil supplier or by VYNPS.	Vermont Yankee purchases un-dyed, low sulfur #2 diesel fuel for use in safety-related systems. Additives are not used by Vermont Yankee or the fuel supplier. The diesel fuel currently comes from Ultramar (a Canadian refinery) to a local supplier. The refinery blends fuel to meet a given specification and may use some additives such as cetane enhancers. Refinery use of additives is not described in their specification and is outside the control of the end user. Biocides have never been added to the onsite fuel supply. [Rick Gerdus 4/18/06]	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike

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19	B.1.9-K-04 Please provide the technical justification for not adding fuel oil additives.	<p>As stated in LRA Section B.1.9, exception note 2, plant operating experience has not indicated a need for additives. Reference LRA Section B.1.9, exception note 2. [LAP 4/12/06]</p> <p>Fuel additives are generally required for three reasons. These are to maintain the stability of the fuel oil, change the properties of the fuel oil (e.g. increase the ignition quality) or to prevent bacterial or mold growth in the fuel oil. The addition of biocides may degrade some of the other fuel oil properties such as increasing the filterable solids loading.</p> <p>For the past 10 years, Vermont Yankee has been buying high quality fuel oil from Ultramar in Canada. Our deliveries are timed to the arrival of new rail cars in Vermont from this refinery. We specify very high quality fuel oil and ensure that it and the delivery trucks do not contain any contaminants. Monthly analyses of diesel fuel oil from the top, middle and bottom of the Main Fuel Oil Storage Tank have not produced any indications of fuel oil deterioration or the presence of water or sediment. Since mold and bacteria grow in the water fuel oil interface, we have no need for biocides.</p> <p>There have been no diesel performance issues associated with the quality of the diesel fuel oil. Thus there is no need for fuel oil additives.</p>	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike

Item	Request	Response	Lead	Support	Status	Inspector:
20	B.1.9-K-05 Please describe what parameters are monitored or inspected and indicate what guidance is used for fuel oil sampling. Please provide a copy of a representative plant procedure for fuel oil sampling.	The Diesel Fuel Monitoring Program monitors fuel quality and levels of water in the fuel oil. ASTM D4057-88 (or a later revision of this standard), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, is used for guidance on oil sampling. Safety-related diesel fuel oil is analyzed according to ASTM D975-02 (or a later revision of this standard). ASTM D1796 is used to check for water and sediment. Determination of particulates is according to ASTM Standard D2276. Reference LRPD-02 (AMPER) Section 4.9. Exceptions to NUREG-1801 Section XI.M30 parameters monitored/inspected are described in LRA Section B.1.9. Procedure OP-4613 is available for on-site review in the program basis document. [LAP 4/12/06]	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike
21	B.1.9-K-06 Is multi-level sampling used to detect the presence of contaminants in the fuel oil and, if not, please provide the technical justification for the approach used at the plant?	As stated in LRA Section B.1.9, the Diesel Fuel Monitoring Program is consistent with NUREG-1801, Section XI.M30 for the detection of aging effects attribute. As described in NUREG-1801, periodic multi-level sampling is used to provide assurance that fuel oil contaminants are below unacceptable levels. Reference LRA Section B.1.9 and LRPD-02 (AMPER) Section 4.9. [LAP 4/12/06]	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike

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22	B.1.9-K-07 Are the interior surfaces of the fuel oil tanks visually inspected and, if so, provide a copy of a representative plant procedure used for the tank inspection?	<p>As stated in LRA Section B.1.9, the Diesel Fuel Monitoring Program is consistent with NUREG-1801, Section XI.M30 for the detection of aging effects attribute. As described in NUREG-1801, the fuel oil storage tank is periodically drained, cleaned and visually inspected to detect potential degradation. Reference LRA Section B.1.9 and LRPD-02 (AMPER) Section 4.9. PM Activity 3 of PM Basis M118 is available for on-site review in the program basis document. [LAP 4/12/06]</p> <p>The diesel day tanks are 800 gallon tanks located above ground and adjacent to the emergency diesels in separate rooms. The design of the tanks does not provide access for cleaning. The fuel oil for these tanks is supplied from the Main Fuel Oil Storage Tank. The suction for the transfer pumps is located 4" off of the bottom of the tank. Chemistry samples both the Main Tank and the Day tanks from the bottom of the tanks. Any water or sediment in the Main Storage Tank would be detected prior to it being transferred to the Day Tanks.</p> <p>Each of the emergency diesels is run for 4 hours monthly with each diesel using approximately 200 gallons of fuel oil per hour. This ensures that the fuel oil is turned over every month and that there are no stability issues. There have been no indications of water and sediment in the quarterly analyses from these tanks. Since Vermont Yankee is sampling from the bottom of these tanks, and if we are not detecting problems with the fuel oil, there is no reason to drain and clean the tanks.</p> <p>The John Deere diesel is run under load monthly for 1 hour. The diesel uses 10 gallons per hour and the surveillance requires verification of auto feed. The fire pump diesel is operated during monthly and quarterly surveillance tests. Thus the fuel in the metal tanks associated with the John Deere and fire pump diesels is turned over frequently.</p>	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike

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23	B.1.9-K-08 Are UT measurements conducted on the fuel oil tank bottoms? How often are these measurements taken and provide a copy of a representative plant procedure which governs these measurements?	A 1996 ultrasonic thickness measurement of the fuel oil storage tank bottom surface revealed no significant degradation. The Diesel Fuel Monitoring Program includes an enhancement to perform UT measurements of the fuel oil storage tank bottom surface every 10 years during the period of extended operation. Reference LRA Section B.1.9. WO 94-08951, with the results of the 1996 UT measurement, is available for on-site review in the program basis document. [LAP 4/12/06]	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike
24	B.1.9-K-09 How often is the fuel oil in the tanks sampled? Is this data trended and what criteria is used to initiate corrective actions?	The Diesel Fuel Monitoring Program is consistent with NUREG-1801, Section XI.M30 for the monitoring and trending attribute. As described in NUREG-1801, monitoring (sampling) and trending occurs at least quarterly, and in accordance with plant technical specifications (monthly). Reference LRA Section B.1.9 and technical specification 4.10.C.2. Filterable solids acceptance criterion is = 10 mg/l. Water and sediment acceptance criterion is = 0.05%, UT acceptance criterion will be = 60% Tnom. Reference LRA Section B.1.9 and LRPD-02 (AMPER) Section 4.9. [LAP 4/12/06]	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike
25	B.1.9-K-10 Have there been any component failures related to the quality of the fuel oil which led to the loss of intended function?	The review of plant operating experience did not reveal any component failures related to the quality of the fuel oil which led to the loss of intended function. Reference LRA Section B.1.9 and LRPD-05 (OE Report). [LAP 4/12/06]	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike

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26	<p>B.1.10-N-01</p> <p>The results of the EQ of electrical equipment in LRA Section 4.4. indicate equipment identified in the TLAA. The important attributes of a re-analysis are the analytical methods, the data collection, the reduction methods, the underlying assumptions, the acceptance criteria, and corrective actions. Provide information on these important attributes of re-analysis of an aging evaluation of electrical equipment identified in the TLAA to extend the qualification under 10 CFR 50.49(e)</p>	<p>:__VYNPS may perform reanalysis of an aging evaluation in order to extend the qualification of electrical components under 10 CFR 50.49€ on a routine basis as part of the plant's EQ program. Important attributes for the reanalysis of an aging evaluation include analytical methods, data collection and reduction methods, underlying assumptions, acceptance criteria, and corrective actions.</p> <p>VYNPS may apply this reanalysis program to EQ components now qualified for the current operating term.</p> <p>A reanalysis program, which meets the conditions defined in the GALL report for important attributes, is an acceptable AMP for license renewal under option 10 CFR 54.21(c)(1)(iii).</p>	Al Haumann	Stroud, Mike	Accepted	Nguyen, Duc
27	<p>B.1.10-N-02</p> <p>GALL X.E1, Environment Qualification (EQ) of Electric Components, under "Parameter Monitored/Inspected" states that EQ component qualified life is not based on condition or performance monitoring. However, pursuant to Regulatory Guide 1.89, Rev. 1, such monitoring programs are an acceptable basis to modify a qualified life through analysis. Monitoring or inspection of certain environmental conditions or component parameters may be used to ensure that the component is within the bounds of its qualified basis, or as a means to modify the qualified life. Provide a detailed description of a monitoring program to modify the qualified life of EQ components through re-analysis and how the actual operating environment is determined.</p>	<p>The EQ program (10 CFR 50.49) does not require environmental monitoring, because the EQ components are qualified based on conservative bounding plant environments.</p> <p>The VYNPS EQ program, consistent with GALL X.E1, ensures that the components covered by the program are replaced at the end of the qualified life or the qualified life is modified by analysis in accordance with the applicable regulations governing the program.</p>	Al Haumann	Stroud, Mike	Accepted	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
28	B.1.10-N-03 Discuss operating experience of the existing EQ program. Show where an existing program has succeeded and where it has failed in identifying aging degradation in a timely manner.	<p>The EQ program is a qualification program that assures SSCs are replaced prior to exceeding qualified life beyond which unacceptable aging degradation may occur. The review of OE identified no conditions in which the program failed to identify unacceptable aging degradation. License Event Report (LER) 97-20 notified the NRC staff of significant program deficiencies including non-conservative analytical methods. Supplementary and confirmatory analyses were completed because conditions in the EQ analyses were determined to be non-conservative.</p> <p>This OE demonstrates that the corrective action process is used to document program deficiencies and track corrective actions when necessary.</p> <p>QA audits in 2000 and 2002 identified deficiencies related to maintenance and content of program documentation. A 2004 QA audit and engineering program health report determined the program is effective and being administered and maintained in a manner that meets regulatory requirements and commitments. Revised: 4/20/06 MDS</p>	Al Haumann	Stroud, Mike	Accepted	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
29	B.1.11-P-1 Please clarify the basis for excluding the impact of environmental factors for critical locations during the period of extended operation.	<p>The impact of environmental factors on fatigue at critical locations during the period of extended operation will be addressed as stated in the following commitment.</p> <p>Prior to entering the period of extended operation, for each of the seven location that may exceed a CUF of 1.0 when considering environmental effects, VYNPS will implement one or more of the following: (1) further refinement of the fatigue analyses to lower the predicted CUFs to less than 1.0; (2) management of fatigue at the affected locations 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 acceptable to the NRC); (3) repair or replacement of the affected locations. Should VYNPS select the option to manage environmental-assisted fatigue during the period of extended operation, details of the aging management program such as scope, qualification, method, and frequency will be provided to the NRC prior to the period of extended operation. Reference LRA Section 4.3.3. [LAP 4/12/06]</p> <p>(See License Renewal Commitment No. 27)</p>	Jim Fitzpatrick	Finnin, Ron & Potts,	Accepted	Patterson, Malcol

Item	Request	Response	Lead	Support	Status	Inspector:
30	B.1.12.1-L-01 Program Description Item - The GALL states, "The AMP also includes periodic inspection and testing of the halon/carbon dioxide (CO2) fire suppression system." The LRA does not address the halon/carbon dioxide (CO2) fire suppression system. On what basis does the LRA not address the halon/carbon dioxide (CO2) fire suppression system?	The Halon 1301 suppression system provides fire suppression only for the computer room. There are no Appendix A, SER commitments or Appendix R commitments requiring the Halon 1301 suppression system. Therefore, it is not subject to aging management review. Aging effects for components in the CO2 system are managed by the System Walkdown Program. Reference LRA Section B.1.12.1, exception note 1; LRA Table 3.3.2-9; and AMRM-17 (Aging Management Review of the Fire Protection - Water System). [LAP 4/12/06] VY will perform CO2 system walkdowns every 6 months starting no later than the period of extended operation.	Larry Lukens	Ivy, Ted	Open	Lintz, Mark
31	B.1.12.1-L-02 Scope of Program Element - The GALL states, "The AMP also includes management of the aging effects on the intended function of the halon/CO2 fire suppression system." The LRA states, "This program is not necessary to manage aging effects for halon fire protection system components." What program will manage aging effects on halon system components?	The computer room fire suppression is provided by a Halon 1301 suppression system. There are no Appendix A, SER commitments or Appendix R commitments requiring the Halon 1301 suppression system. Therefore, it is not subject to aging management review. Reference AMRM-17 (Aging Management Review of the Fire Protection - Water System). [LAP 4/12/06]	Larry Lukens	Ivy, Ted	Accepted	Lintz, Mark
32	B.1.12.1-L-03 The LRA states "the Halon 1301 suppression system is not subject to aging management review. Aging effects for components in the CO2 system are managed by the System Walkdown Program." Explain rational for why the Halon 1301 suppression system is not subject to review.	The computer room fire suppression is provided by a Halon 1301 suppression system. There are no Appendix A, SER commitments or Appendix R commitments requiring the Halon 1301 suppression system. Therefore, it is not subject to aging management review. Reference AMRM-17 (Aging Management Review of the Fire Protection - Water System). [LAP 4/12/06]	Larry Lukens	Ivy, Ted	Accepted	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
33	B.1.12.1-L-04 Parameters Monitored/Inspected Element - The GALL Report states, "The diesel-driven fire pump is under observation during performance tests such as flow and discharge tests, sequential starting capability tests, and controller function tests for detection of any degradation of the fuel supply line." The LRA states, "Procedures will be enhanced to state that the diesel engine sub-systems (including the fuel supply line) shall be observed while the pump is running." Is there a VYNPS commitment number associated with this enhancement?	Need a commitment to revise the procedure to examine the fuel line. This is commitment # 9.	Larry Lukens	Ivy, Ted	Open	Lintz, Mark
34	B.1.12.1-L-05 Detection of Aging Effects Element - The GALL Report states, "Visual inspection by fire protection qualified inspectors of approximately 10% of each type of seal in walkdowns is performed at least once every refueling cycle." The LRA states, "The NUREG-1801 program states that 10% of each type of penetration seal should be visually inspected at least once every refueling outage. The VYNPS program specifies inspection of approximately 25% of the seals (regardless of seal type) each operating cycle, with all accessible fire barrier penetration seals being inspected at least once every four (4) operating cycles. Since aging effects are typically manifested over several years, this variation in inspection frequency is insignificant." How are inaccessible seals addressed?	The environment to which inaccessible seals are exposed is very similar, if not the same, as the environment for accessible seals such that the condition of accessible seals is representative of the condition of inaccessible seals. [TSI 4/13/06]	Larry Lukens	Ivy, Ted	Accepted	Lintz, Mark
35	B.1.12.1-L-06 Acceptance Criteria Element - The GALL states, "Inspection results are acceptable if there are no visual indications (outside those allowed by approved penetration seal configurations) of cracking, separation of seals from walls and components, separation of layers of material, or ruptures or punctures of seals; no visual indications of concrete cracking, spalling and loss of material of fire barrier walls, ceilings, and floors; no visual indications of missing parts, holes, and wear and no deficiencies in the functional tests of fire doors." The LRA states, "Acceptance criteria will be enhanced to verify no significant corrosion." How much corrosion is considered "significant?" What actions are taken, either with or without "significant corrosion"? Is there a VYNPS commitment number associated with this enhancement?	Need a commitment to revise acceptance criteria. Any recordable indication is extended into the corrective action program for evaluation. This is commitment # 8.	Larry Lukens	Ivy, Ted	Open	Lintz, Mark

<i>Item</i>	<i>Request</i>	<i>Response</i>	<i>Lead</i>	<i>Support</i>	<i>Status</i>	<i>Inspector:</i>
36	B.1.12.2-L-01 Program Description Item - The GALL states, "This aging management program (AMP) applies to water-based fire protection systems that consist of sprinklers, nozzles, fittings, valves, hydrants, hose stations, standpipes, water storage tanks, and aboveground and underground piping and components that are tested in accordance with the applicable National Fire Protection Association (NFPA) codes and standards." The LRA states, "This aging management program applies to water-based fire protection systems that consist of sprinklers, nozzles, fittings, valves, hydrants, hose stations, standpipes, and aboveground and underground piping and components that are tested in accordance with applicable National Fire Protection Association (NFPA) codes and standards." Does VYNPS have fire water storage tanks?	No, VYNPS does not have fire water storage tanks. Reference UFSAR Section 10.11. [LAP 4/12/06]	Larry Lukens	Ivy, Ted	Accepted	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
37	B.1.12.2-L-02 Program Description Item - The GALL states, "The fire protection system piping is to be subjected to required flow testing in accordance with guidance in NFPA 25 to verify design pressure or evaluated for wall thickness (e.g., non-intrusive volumetric testing or plant maintenance visual inspections) to ensure that aging effects are managed and that wall thickness is within acceptable limits. These inspections are performed before the end of the current operating term and at plant-specific intervals thereafter during the period of extended operation. The plant-specific inspection intervals are to be determined by engineering evaluation of the fire protection piping to ensure that degradation will be detected before the loss of intended function. The purpose of the full flow testing and wall thickness evaluations is to ensure that corrosion, MIC, or biofouling is managed such that the system function is maintained." The LRA does not address this item. How does VYNPS intend to address these NFPA and GALL recommendations?	<p>This paragraph comes from NUREG-1801, Section XI.M27 program description. The recommendation for flow testing is included in the NUREG-1801 technical basis for the parameters monitored/inspected attribute. As stated in LRA Section B>1.12.2, the VYNPS Fire Water System Program is consistent with this attribute. Every fire main segment is full flow tested using the guidelines of NFPA 25 at least once every 3 years. Reference LRPD-02 (AMPER) Section 4.12.2.</p> <p>The recommendation for wall thinning monitoring is included in the NUREG-1801 technical basis for the detection of aging effects attribute. As indicated in LRA Section B.1.12.2, the Fire Water System program includes an enhancement to this attribute to perform wall thickness evaluations of fire protection piping using non-intrusive techniques (e.g., volumetric testing) to identify evidence of loss of material due to corrosion. These inspections will be performed before the end of the current operating term and at intervals thereafter. Results of the initial evaluations will be used to determine the appropriate inspection interval. [LAP 4/16/06]</p> <p>Commitment # 11</p>	Larry Lukens	Ivy, Ted	Open	Lintz, Mark
38	B.1.12.2-L-03 Detection of Aging Effects Element - The GALL Report states, "Fire hydrant hose hydrostatic tests, gasket inspections, and fire hydrant flow tests, performed annually, ensure that fire hydrants can perform their intended function and provide opportunities for degradation to be detected before a loss of intended function can occur." The LRA states, "NUREG-1801 specifies annual fire hydrant hose hydrostatic tests. Under the VYNPS program, hydrostatic test of outside hoses occurs once per 24 months; and hydrostatic test of inside hoses occurs once per 3 years." Provide justification for relaxing the test frequency.	<p>Per NUREG-1800, Table 2.1-3, fire hoses are consumables not subject to aging management review. Therefore, the exception to the Fire Water System program related to fire hydrant hose hydrostatic tests is not necessary. [LAP 4/12/06] An aging management program is not required to address components that are not subject to aging management review. [ABC 4/13/06]</p> <p>Agree to annual.</p>	Larry Lukens	Ivy, Ted	Accepted	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
39	B.1.12.2-L-04 Detection of Aging Effects Element - The GALL states, "Fire hydrant hose hydrostatic tests, gasket inspections, and fire hydrant flow tests, performed annually, ensure that fire hydrants can perform their intended function and provide opportunities for degradation to be detected before a loss of intended function can occur." The LRA states, "NUREG-1801 specifies annual gasket inspections. Under the VYNPS program, visual inspection, re-racking and replacement of gaskets in couplings is to occur at least once per 18 months." Provide justification for relaxing the test frequency.	Since aging effects are typically manifested over several years, differences in inspection and testing frequencies are insignificant. The review of operating experience did not reveal age-related failures of fire water system components that led to loss of intended function. Reference LRA Section B.1.12.2, exception note 1 and LRPD-05 (OE Report). [LAP 4/12/06]	Larry Lukens	Ivy, Ted	Open	Lintz, Mark
40	B.1.12.2-L-05 Detection of Aging Effects Element - The GALL states, "Fire hydrant hose hydrostatic tests, gasket inspections, and fire hydrant flow tests, performed annually, ensure that fire hydrants can perform their intended function and provide opportunities for degradation to be detected before a loss of intended function can occur." The LRA states, "NUREG-1801 specifies annual fire hydrant flow tests. Under the VYNPS program, verification of operability and no flow blockage occurs at least once every 3 years." Provide justification for relaxing the test frequency.	As stated in LRA Section B.1.12.2, exception note 1, since aging effects are typically manifested over several years, differences in inspection and testing frequencies are insignificant. The review of operating experience did not reveal age-related failures of fire water system components that led to loss of intended function. Reference LRPD-05 (OE Report). [LAP 4/16/06] Agree to annual.	Larry Lukens	Ivy, Ted	Open	Lintz, Mark

<i>Item</i>	<i>Request</i>	<i>Response</i>	<i>Lead</i>	<i>Support</i>	<i>Status</i>	<i>Inspector:</i>
41	<p>B.1.12.2-L-06 Detection of Aging Effects Element - The GALL Report states, "Fire protection system testing is performed to assure that the system functions by maintaining required operating pressures. Wall thickness evaluations of fire protection piping are performed on system components using non-intrusive techniques (e.g., volumetric testing) to identify evidence of loss of material due to corrosion. These inspections are performed before the end of the current operating term and at plant-specific intervals thereafter during the period of extended operation." The VYNPS LRA identified the following enhancement, "Wall thickness evaluations of fire protection piping will be performed on system components using non-intrusive techniques (e.g., volumetric testing) to identify evidence of loss of material due to corrosion. These inspections will be performed before the end of the current operating term and at intervals thereafter during the period of extended operation. Results of the initial evaluations will be used to determine the appropriate inspection interval to ensure aging effects are identified prior to loss of intended function." What is the VYNPS commitment number associated with this enhancement?</p>	This is commitment #11.	Larry Lukens - John	Cox, Alan	Open	Lintz, Mark

<i>Item</i>	<i>Request</i>	<i>Response</i>	<i>Lead</i>	<i>Support</i>	<i>Status</i>	<i>Inspector:</i>
42	B.1.15.1-W-01 Provide drawings for the sand pocket region of the Drywell. Provide drawings for the refueling bellows detailing how they are stored, installed, connected and sealed. Provide procedures for how the refueling bellows are used. Provide drawings of the Drywell showing the gap and fill material between the secondary concrete shield wall from the refueling bellows/cavity seal connection down to the sand pocket region. Provide the VYNPS response to Generic Letter 87-05.	<p>Portions of drawings G-191150, G-191277, & G-191481 have been provided to the NRC for the Sand pocket region of the Drywell; Refueling Bellows assemblies, and the General Arrangement of the Reactor Building including the Primary Containment.</p> <p>The Refueling Bellows (to RPV) and the Drywell to Reactor Cavity Seal assemblies are permanently installed by full penetrant welds. The bellows allow the Refueling Cavity to be flooded during refueling operations to allow for spent fuel transfer to the Spent Fuel Pool for storage. No procedures are required for the operation of the bellow assemblies since they are static. Operation of the drain line isolation valves are controlled by plant operating procedures used for flood-up and drain-down of the cavity.</p> <p>There is no fill material in the gap located between the Drywell Shell and the Secondary Concrete Shield.</p> <p>VYNPS response to GL 87-05 has been provided to the NRC.</p>	Ted Underkoffler	Ahrabli, Reza	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
43	<p>B.1.15.1-W-02</p> <p>It is stated in the VYNPS UFSAR that all interior and exterior drywell surfaces which are exposed to the atmosphere are protected from corrosion by application of a corrosion resistant coating material. However, in the VYNPS LRA it is stated that VYNPS does not rely on protective coating to manage the effects of aging. The VYNPS LRA Appendix B does not have a Protective Coating Monitoring and Maintenance Program section. However, there is a GALL AMP XI.S8 called Protective Coating Monitoring and Maintenance Program which states the following: Proper maintenance of protective coatings inside containment (defined as Service Level I) is essential to ensure operability of post-accident safety systems that rely on water recycled through the containment sump/drain system. Explain why VYNPS does not have a Service Level I Protective Coating Monitoring and Maintenance Program to prevent coating failure that could adversely affect the operation of post-accident fluid systems and thereby impair safe shutdown. Provide a copy of the VYNPS response to GL 98-04 and discuss if VYNPS considers the maintenance programs described acceptable coatings AMPs for license renewal.</p>	<p>VY does have a service level I coating program, however it is not relied on for managing the aging effects for licensing renewal.</p> <p>The VY UFSAR states: "No material within primary containment will fail by decomposition or corrosion and affect vital systems." The examination of the coated surfaces is performed as a part of the Containment Inservice Inspection Program (IWE) to assure that the paint and base metal has not degraded (TS Section 4.7.A). VY has an active and effective Service Level I Coatings Program to prevent degradation to the primary containment structure.</p> <p>VY response to GL 98-04 includes our commitment to EPRI TR-109937 "Guideline on Nuclear Safety-Related Coatings (renumbered 1003102). The GL also discusses the impact of debris loading on the ECCS strainers. These strainers were designed to accept 100% of the coatings within the LOCA zone of influence. The approach velocity of materials entrained in the torus water is extremely low due to the sizing of the ECCS strainers. Conservative design assumptions ensures VY compliance with 10CFR50.46(b)(5).</p> <p>A copy of VY response to GL 98-04 has been provided.</p> <p>[FTU 4/20/06]</p>	Ted Underkoffler	Ahrabli, Reza & Pott	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
44	B.1.15.1-W-03 Explain why the Containment Inservice Inspection Program is a plant-specific program instead of a ASME Section XI, subsection IWE program with exceptions. Explain why the scope of the Containment Inservice Inspection Program does not include containment seals, gaskets and pressure retaining bolts. Explain under what VYNPS AMPs the inspection of these components are performed. It is stated in the VYNPS LRA that the Containment Inservice Inspection Program is an existing program. Explain if this program has been in compliance with ASME Section XI, subsection IWE since the final rulemaking to require IWE inspections was made by the NRC in 1996. Provide a copy of the VYNPS notification of commitment to IWE inspections.	<p>Entergy chose to describe the Inservice Inspection and Containment Inservice Inspection Programs as plant-specific programs rather than comparing to the corresponding NUREG-1801 programs because the NUREG-1801 programs contain many ASME Section XI table and section numbers which change with different versions of the code. Because of this, comparison with the NUREG-1801 programs generates many exceptions and explanations which detract from the objective of the comparison. What is really needed is that VYNPS follow the version of ASME Section XI that is approved for use at VYNPS and accepted by law in 10CFR50.55(a). As this is the case, the Inservice Inspection and Containment Inservice Inspection Programs are presented as plant-specific programs so they can be judged on their own merit without the distraction of numerous explanations of code revision. [LAP 4/13/06]</p> <p>The Containment Inservice Inspection Program does not include containment seals or gaskets because they have been removed from the scope of Subsection IWE in the 1998 Edition of ASME Section XI with 2000 Addenda. These components are inspected under the Structures Monitoring Program as indicated in Table 3.5.2.1 of the LRA. [LAP 4/13/06] Pressure retaining bolts are considered and included as integral part of the structural components. [AA]</p> <p>The Containment Inspection Program does not include containment seals or gaskets because they have been removed from the scope of Subsection IWE in the 1998 Edition of ASME Section XI with 2000 Addenda. These components are seal tested under the Containment Leak Rate Program. Pressure retaining bolts are considered and included as Containment Inservice Inspection Program. (FTU 4/20/06)</p> <p>VY has been in compliance</p>	Ted Underkoffler	Ahrabli, Reza	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
45	<p>B.1.15.1-W-04 Explain how inspections are performed in the torus suppression pool above and below the waterline. Explain historically what inspection findings have lead to the need for augmented inspections. Explain if any augmented inspections are currently being performed. The LRA states that VYNPS uses inspection program B for containment inservice inspection. Provide the inspection interval dates through the current license and also through a possible license extension period.</p>	<p>with 10CFR50.55a (b)(2)(vi) and (b)(2)(ix) since at least September 9, 2001. No notification of commitment to the IWE examinations was required by 10CFR50.55a. In 2003, VY submitted a notification of the intent to use ASME Section XI -1998 Edition with 2000 Addenda as the Code of Record for all ISI programs. A copy of the submittal has been provided. [FTU 4/20/06]</p> <p>Examinations are performed in accordance with the Code of Record which requires that all accessible interior and exterior surfaces areas be examined. In 1998, the interior surface, slightly above and fully below the water line, was stripped and coated. During RFO-24 (2004), the Suppression Pool exterior surface was General Visual examined. Though normally inaccessible, the Suppression Pool interior was made accessible and the surface above the water-line was General Visual examined. During the General Visual examination of the interior surface, the water clarity permitted observation of nearly 100% of the submerged surface area. Three small areas (at the water line) in BAY 3 were identified to have a loss of coating and primer. These areas were UT (ultrasonic tested) from the exterior, in 2" gridded areas. No result approached the nominal wall thickness of 0.533" with the lowest reading being 0.597." Based on the results, these areas were excluded from augmented examination. In RFO-27 (2008), the VT-3 of the wetted areas is presently planned to be executed by divers without dewatering the Suppression Pool. The current examination schedule is contained in Program Bases Document (4.14.2) in the PP 7024 tables. The projected schedule through the possible license extension period will be developed in accordance with the Code in effect but should be 6 inspection periods in 20 years. [FTU 4/20/06]</p>	Ted Underkoffler	Ahrabli, Reza	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
46	<p>B.1.15.1-W-05</p> <p>VYNPS lists several Containment Inservice Inspection findings under operating experience for AMP B.1.15.1 in the LRA. Explain why the operating experience discusses the drywell moisture barrier when the inspection of it does not appear to be in the scope of the VYNPS Containment Inservice Inspection Program. Provide the documentation for any containment inspection findings from the most recent RFO if beyond 24. Explain if water leakage has ever been discovered between the drywell and concrete secondary shield wall or in the sand pocket area. Explain what VYNPS does to inspect for water leakage in these two areas or to verify that loss of material is not occurring on the backside of the Drywell. Provide the documentation for the RFO 24 issues identified by QA surveillance that are discussed in the operating experience. Provide the latest engineering system health report for the containment inservice inspection program.</p>	<p>Reference to drywell moisture barrier in section B.1.15.1, operating experience is intended to provide relative location of the inspection area only. Drywell moisture barrier is inspected under structures monitoring program (B.1.27.2). (Site to provide the rest, including QA surveillance report referenced in RFO 24 containment inservice inspection report).</p> <p>Revised Response:</p> <p>Drywell moisture barrier is examined under the Containment Inservice Inspection Program. Table IWE-2500-1 Item E1.30 of ASME Section XI-1998 Edition with 2000 Addenda is contained in the Program Bases Document (4.14.2) in the PP 7024 tables. The Program Based Document (4.14.2) in Section B.1.15.1.10, describes the area examined and replaced during RFO-21 (2001). LRA Table 3.5.2.6 shows the drywell moisture barrier to be inspected under the structural monitoring program; this will be changed to the Containment Inservice Inspection Program. IWE examinations during RFO-25 (2005) produced no findings.</p> <p>In 1991, an Auxiliary Operator (AO) observed water running from a crack in the Drywell pedestal concrete onto the Torus Room floor. The investigation revealed leakage from a steam valve was condensing on and traveling along the Primary Containment Air Conditioning piping to the Drywell shell. From the Drywell shell, the water found a crack or cold-joint which directed it to the Torus Room floor. To ensure the Drywell shell integrity, the sand-cushion drains were examined and found to be functional; the exterior</p>	Ted Underkoffler		Closed	Woodfield, Jon
47	<p>B.1.16-P-1</p> <p>Please identify the standard(s) to which instrument air is maintained, and document this commitment in Appendix A if appropriate.</p>	<p>Commitment # 28 ensures that instrument air is maintained in accordance with ISA S7.3.</p>	Jay Anvari		Accepted	Patterson, Malcol

Item	Request	Response	Lead	Support	Status	Inspector:
48	B.1.17-N-01 GALL XI.E3 under "Detection of Aging Effects" recommends that the inspection for water collection should be performed based on actual plant experience with water accumulation in the manhole. However, the inspection frequency should be at least once every two years. VYNPS AMP B.1.17 under the same attribute requires inspection for water collection in cable manholes and conduit occurs at least once every two years. Explain how actual plant experience is considered in the manhole inspection frequency to be consistent with GALL's XI.E3.	VYNPS inspection for water accumulation in manholes is conducted by a plant procedure. An engineering evaluation will be used per EN-LI-102 to document and determine the plant experience that is considered in manhole inspection frequency. An action plan and corrective actions will be used to modify the inspection frequency._	Al Haumann		Open	Nguyen, Duc
49	B.1.17-N-02 In AMP B.1.17 under the "Operating Experience" element, you have stated that the "Non-EQ Inaccessible Medium-Voltage Cable Program" at VYNPS is a new program for which there is no operating experience. GALL XI.E3 under the same element states that operating experience has shown that cross linked polyethylene (XLPE) or high molecular weight polyethylene (HMWPE) insulation materials are most susceptible to water tree formation. The formation and growth of water trees varies directly with operating voltage. Water treeing is much less prevalent in 4kV cables than those operated at 13 or 33kV. Also, minimizing exposure to moisture minimizes the potential for the development of water treeing. As additional operating experience is obtained, lessons learned can be used to adjust the program, as needed. NUREG-1800, Rev. 1, Appendix A, Branch Technical Position RLSB-1 states that an applicant may have to commit to providing operating experience in the future for new programs to confirm their effectiveness. Describe how operating experience is captured at VYNPS to confirm program effectiveness or how it is to be used to adjust the program as needed.	Operating Experience at VYNPS is controlled by procedure EN-OP-100, Operating Experience Program. The program includes the following components: Operating Experience – Information received from various industry sources that describe events, issues, equipment failures, that may represent opportunities to apply lessons learned to avoid negative consequences or to recreate positive experiences as applicable. Internal Operating Experience – Operating experience that originates as a condition report or request from plant personnel which warrants consideration for possible Entergy-wide distribution. Internal OE can originate from any Entergy plant or headquarters. Impact Evaluation – Analysis of an OE event or problem that requires additional information and research to determine impact or potential impact, as it relates to plant condition and/or configuration. Impact evaluations are typically documented with a condition report. Condition report action items and corrective actions are used to confirm program effectiveness and to modify the program as needed. _	Al Haumann	Lori Potts	Accepted	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
50	B.1.17-N-03 As stated in FSAR Section 8.3.3 (Page 8.3-5 of 8), the underground power lines - which run from the adjacent Vernon Hydroelectric Station to station switchgear - have been designated as the Station Backout alternate ac source. Thus; they are used to meet Station Blackout requirements 10 CFR 50.63. Are these cables included in the scope of AMP B.1.17? If not, provide an explanation.	Yes, the underground power lines that run from Vernon Dam to VYNPS safety buses, are included in program B.1.17.	Al Haumann	Stroud, Mike	Open	Nguyen, Duc
51	B.1.18-N-01 In AMP B.1.18, you have stated that for neutron flux monitoring system cables that are disconnected during instrument calibration, testing is performed at least once every 10 years . GALL XI.E2 recommends that the test frequency shall be determined by the applicant based on engineering evaluation, but the test frequency shall be at least once every ten years. Explain how engineering evaluation is considered in the test frequency; in order to be consistent with GALL XI.E2.	:__An engineering evaluation will be performed per EN-LI-102 to document and determine the plant experience that is considered for neutron flux monitoring system cables that are disconnected during instrument calibration in inspection frequency. An action plan and corrective actions will be used to modify the inspection frequency.__	Al Haumann	Lori Potts	Open	Nguyen, Duc
52	B.1.18-N-02 Confirm that the test includes both cables and connections.	Yes, the B.1.18 program includes both cables and connections for the instrument circuits that are in scope for license renewal.	Al Haumann	Stroud, Mike	Closed	Nguyen, Duc
53	B.1.19-N-01 In AMP B.1.19 you have stated that the a representative sample of accessible insulated cables and connections, within the scope of license renewal, will be visually inspected for cable and connection jacket surface anomalies such as embrittlement, discoloration, cracking or surface contamination. The technical basis for sampling will be determined using EPRI document TR-109619, "Guideline for the Management of Adverse Localized Equipment Environments". Explain the technical basis for cable sampling.	The VY AMP B.1.19 program description will be changed to read as follows: This program addresses cables and connections at plants whose configuration is such that most cables and connections installed in adverse localized environments are accessible. This program can be thought of as a sampling program. Selected cables and connections from accessible areas will be inspected and represent, with reasonable assurance, all cables and connections in the adverse localized environments. If an unacceptable condition or situation is identified for a cable or connection in the inspection sample, a determination will be made as to whether the same condition or situation is applicable to other accessible cables or connections. The sample size will be increased based on an evaluation per EN-LI-102 – Corrective Action Process.	Al Haumann	Stroud, Mike	Accepted	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
54	<p>B1.19-N-02</p> <p>In AMP B.1.19 under the "Operating Experience" element, you have stated that the Non-EQ Insulated Cables and Connection Program at VYNPS is a new program for which there is no operating experience. GALL XI.E1 under same element states that operating experience has shown that adverse localized environments caused by heat or radiation for electrical cables and connections may exist next to or above (within three feet of) steam generators, pressurizers or hot process pipes, such as feedwater lines. These adverse localized environments have been found to cause degradation of the insulating materials on electrical cables and connections that is visually observable, such as color changes or surface cracking. NUREG-1800, Rev. 1, Appendix A, Branch Technical Position RLSB-1 under operating experience states that an applicant may have to commit to providing operating experience in the future for a new program to confirm its effectiveness. Describe how operating experience will be captured by VYNPS.</p>	<p>Operating Experience at VYNPS is controlled by procedure EN-OP-100, Operating Experience Program. The program includes the following components:</p> <p>Operating Experience – Information received from various industry sources that describe events, issues, equipment failures, that may represent opportunities to apply lessons learned to avoid negative consequences or to recreate positive experiences as applicable.</p> <p>Internal Operating Experience – Operating experience that originates as a condition report or request from plant personnel which warrants consideration for possible Entergy-wide distribution. Internal OE can originate from any Entergy plant or headquarters.</p> <p>Impact Evaluation – Analysis of an OE event or problem that requires additional information and research to determine impact or potential impact, as it relates to plant condition and/or configuration. Impact evaluations are typically documented with a condition report. Condition report action items and corrective actions are used to confirm program effectiveness and to modify the program as needed.</p>	Al Haumann	Stroud, Mike	Accepted	Nguyen, Duc
55	<p>B.1.20-K-01</p> <p>For those components that do not have regular oil changes, please provide the basis for Note 1 (not determining the flash point for the sampled oil).</p>	<p>As stated in LRA Section B.1.20, exception note 1, flash point is not determined for sampled oil because analyses of filter residue or particle count, viscosity, total acid/base (neutralization number), water content, and metals content provide sufficient information to verify the oil does not contain water or contaminants that would permit the onset of aging effects. [LAP 4/16/06]</p> <p>Added Response: Fuel dilution is measured on EDG lube oil, rather than determining flash point.</p>	Ron Scherman	Lori Potts	Accepted	Kennedy, Mike

Item	Request	Response	Lead	Support	Status	Inspector:
56	B.1.20-K-02 How are the alert levels or action limits established? How is the data trended and what criteria are used to determine if the trends are unusual?	As indicated in LRA Section B.1.20, the Oil Analysis Program is consistent with NUREG-1801, Section XI.M39 for the acceptance criteria attribute. As recommended in NUREG-1801, action limits were established in accordance with industry standard ISO 4406 and manufacturer's recommendations. See DP 0213 (available for on-site review in the program basis document) for trending and criteria. [LAP 4/16/06]	Ron Scherman	Lori Potts	Accepted	Kennedy, Mike
57	B.1.21-K-01 Please provide a table outlining the inspection methods used for each aging effect and parameter monitored or inspected. This should be consistent with the table provided in GALL Report AMP XI.M32. If not, provide a justification for any exceptions to this table.	Attachment 2 of LRPD-02 (AMPER), which is available for on-site review in the program basis document, is a table similar to the table provided in the GALL report. Attachment 2 identifies the inspection method and parameters monitored for applicable aging effects. As indicated in LRA Section B.1.21, Attachment 2 of LRPD-02 (AMPER) is consistent with the table provided in NUREG-1801, Section XI.M32. [LAP 4/16/06]	Hoffman / Lach	Lori Potts	Open	Kennedy, Mike
58	B.1.21-K-02 The table provided in the program description in section B.1.21 indicates that the one-time inspection activity will confirm that the loss of fracture toughness is not occurring or is so insignificant that an aging management program is not warranted. What inspection method is used to detect this aging effect and what parameter is monitored?	Combinations of nondestructive examinations including visual, ultrasonic, and surface techniques will monitor cracking of CASS valve bodies in piping <4" NPS to confirm that reduction of fracture toughness is not occurring or is so insignificant that an aging management program is not warranted. Reference Attachment 2 of LRPD-02 (AMPER). [LAP 4/12/06]	Hoffman / Lach	Finnin, Ron	Accepted	Kennedy, Mike

Item	Request	Response	Lead	Support	Status	Inspector:
59	B.1.21-K-03 What is Vermont Yankee's operating experience with Class 1 piping less than 4 inches NPS in terms of cracking?	The review of plant operating experience (1998 to 2005) did not reveal instances of cracking of Class I piping less than 4"NPS. Site to confirm and address experience prior to 1998. [LAP 4/13/06] In the early years of plant operation Vermont Yankee (VY) experienced occurrences of intergranular stress corrosion cracking (IGSCC) in some stainless steel piping systems. In the period of approximately 1980 through 1986 VY embarked on a major IGSCC mitigation program, replacing the susceptible stainless steel piping with IGSCC resistant materials. Since then there have been no instances of IGSCC or other pipe cracking events at VY. See report "YAEC-1247, Rev. 1" and Letter FVY 88-62.	Hoffman / Lach	Finnin, Ron & Potts,	Accepted	Kennedy, Mike
60	B.1.22-M-01 As stated by the applicant, "...prior to the period of extended operation, program activity implementing documents will be enhanced as necessary to assure that the effects of aging will be managed...." The applicant is asked to provide a listing of which specific PSPM plant implementing documents will be enhanced and why such an enhancement is necessary for each implementing document.	This information is included in Attachment 3 of LRPD-02 (AMPER) which is available for on-site review in the program basis document. [LAP 4/13/06]	Rich Rusin	Ivy, Ted	Accepted	Mike Morgan
61	B.1.22-M-02 In the statement for the "operating experience" element of the AMP, the applicant, notes that "...the material condition of cranes was consistent with inspection acceptance criteria..", and "...ECCS corner room recirculation units had no significant corrosion..". By the appearance of these statements in the "operating experience" of the PSPM, is the staff to understand that thepplicant intends to use the applicant's PSPM AMP in lieu of the GALL-recommended programs - XI.M23, "Inspection of Overhead Heavy Load and Light Load (Related to Refueling) Handling Systems", and XI.M38, "Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components"- during the period of extended operation?	Yes. Reference LRA Table B-2 and Section B.1.22 Program Description. [LAP 4/16/06]	Rich Rusin	Lori Potts	Accepted	Mike Morgan

Item	Request	Response	Lead	Support	Status	Inspector:
62	B.1.23-M-01 As noted in the GALL, [Section XI.M3, Element Number four (4) - "Detection of Aging Effects"]; GALL-recommended programs use visual, surface, and volumetric examinations, to indicate the presence of surface discontinuities/flaws and other discontinuities/flaws throughout the volume of material. The applicant's proposed exception states that cracking initiates on the outside surfaces of the bolts/studs, and by meeting acceptance standards of IVB-3515, this "surface-type" examination will "...provide at least the sensitivity of flaw detection that an end shot ultrasonic examination provides on bolts/studs...". The applicant is asked to provide further evidence that such a "qualified surface examination" provides the stated level of sensitivity with the thoroughness of other GALL-recommended programs.	VY meets the 1998 edition through 2000 addenda of the ASME Section XI Code, Sub Section IWB 2500-1 Examination Category B-G-1, "Pressure Retaining Bolting Greater than 2" in Diameter" Items BG .20 and BG .30 which specifies a surface or volumetric examination method.	Dave King	Finnin, Ron	Closed	Rowley, Jonathan
63	B.1.23-M-02 Some replacement stud bolts use a manganese phosphate surface treatment in combination MoS2 to prevent bolt degradation due to corrosion or hydrogen embrittlement. The applicant's AMP notes that Vermont Yankee's existing program includes preventive measures, such as "appropriate materials", to mitigate cracking and loss of material. GALL Section XI.M2, [Element Number two (2) - "Preventive Actions"] states that the use of this type of surface treatment is acceptable and effective. Does the applicant use similar bolting with a similar type of surface treatment?	As stated in LRA Section B.1.23, the Reactor Head Closure Studs Program is consistent with NUREG-1801, XI.M3 for the preventive actions attribute. As described in NUREG-1801, threaded surfaces of studs, nuts and washers have a phosphate coating to act as a rust inhibitor and lubricant. Also, a stable lubricant compatible with the bolting and vessel materials is applied to the stud threads, the mating surfaces of the washers and the nut threads during assembly. Reference LRPD-02 (AMPER) Section 4.18. [LAP 4/16/06]	Dave King	Finnin, Ron	Closed	Rowley, Jonathan
64	B.1.23-M-03 As noted in GALL, Section XI.M3, [Element Number ten (10) - "Operating Experience"]; GALL-recommended programs should have provisions regarding inspection techniques and evaluation. The applicant states, in its explanation of their existing program, that "...recent (2002 and 2004) visual and ultrasonic inspections...revealed no recordable indications..". The applicant is asked to compare examinations performed in 2002 and 2004 with the "exception-stated" examination technique proposed for future examinations and to provide to the staff the results of this comparison.	Relief Request ISI-03 duration began on September 1, 2003, so the 2004 examinations were visual only. The 2002 examinations included visual and ultrasonic inspections. Reference ISI-03, PP 7015, Rev. 05, LPC00 and 2002 RPV stud inspection results. [LAP 4/16/06]	Dave King	Finnin, Ron	Closed	Rowley, Jonathan

Item	Request	Response	Lead	Support	Status	Inspector:
65	B.1.26-W-01 Provide examples of VYNPS plant procedures used to implement the requirements of GL 89-13/Service Water Integrity AMP for routine inspection and maintenance of the service water systems. Include examples of actual visual and NDE testing. Explain any differences between the GL 89-13 program scope and the Service Water Integrity Program scope for license renewal.	<p>Procedures OP 5265, Service Water Component Inspection and Acceptance Criteria; PP 7021, Service Water Program; and PP 7601, Service Water Chemical Treatment and Monitoring Program are available for on-site review in the program basis document.</p> <p>As stated in LRA Section B.1.26, the Service Water Integrity Program is consistent with NUREG-1801, XI.M20 for the scope of program attribute. Therefore, there are no differences between the GL 89-13 program scope and the Service Water Integrity Program scope for license renewal. [LAP 4/16/06]</p>	Harry Breite	Ivy, Ted	Closed	Woodfield, Jon
66	B.1.26-W-02 Provide the original (or current if pipe has been replaced) material and lining specification for the buried piping which is part of the service water system, including the alternate cooling system.	<p>Provided a copy of the original site piping specification QC-10 which shows the piping for the service water and alternate cooling water systems piping is carbon steel material and are not coated.</p>	Harry Breite	Ivy, Ted	Closed	Woodfield, Jon
67	B.1.26-W-03 VYNPS takes exception to GALL AMP XI.M20 element 2 by stating that not all VYNPS service water system components are lined or coated. Components are lined or coated only where necessary to protect the underlying metal surfaces. Provide an itemized list of the piping in the service water system where it is lined or coated to protect the underlying metal surfaces. Provide the type of lining or coating for each item on the list.	<p>Linings and coatings are not credited. Piping that is lined or coated will be inspected with the same techniques used for unlined piping. Itemized listing of which piping is lined or coated was not necessary for the aging management review. [ABC 4/17/06]</p> <p>In accordance with the piping specification QC-10 there is no coated piping in the service water system. The only coated components are a few valve body internals and heat exchanger heads that are currently and will continue to be inspected as part of the service water program.</p>	Harry Breite	Ivy, Ted	Closed	Woodfield, Jon

<i>Item</i>	<i>Request</i>	<i>Response</i>	<i>Lead</i>	<i>Support</i>	<i>Status</i>	<i>Inspector:</i>
68	<p>B.1.26-W-04</p> <p>Explain if there any portions of the service water system that are infrequently used and are periodically flushed. If so, describe these portions and how often they are flushed. Explain the criteria used to initiate the flushing. Explain if any other flushing of the system is done and how the strainers are cleaned. Discuss the historic inspection results of the gravity portion of the ACS piping coming from the deep water basin and if this has been a problem area with flow blockage.</p>	<p>The only section of the Service Water (SW) system which are flushed on a regular basis are instrumentation tubing lines (3/8" stainless steel tubing). A list of the specific line has been provided. These lines are flushed on a 12 or 18 month basis as identified in the Preventive Maintenance program. The SW strainers are self cleaning and are not opened and cleaned on a regular basis. The suction line from the deep basin to the RHRSW pumps is opened and inspected every other outage (3 years). The results of the inspection have shown the line to be free of tuberculation and silt. The line is treated with a biocide before being closed after inspection. No issues with flow blockage have been identified in the past six years. The line was found to be fouled in the early 1990's and was subsequently cleaned and the addition of biocide was started. This appears to be very successful based on the recent inspections.</p>	Harry Breite	Ivy, Ted	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
69	B.1.26-W-05 VYNPS takes exception to GALL AMP XI.M20 element 5 by stating that the VYNPS program requires tests and inspections each refueling outage, but not annually. Provide documentation that this frequency is in agreement with the commitments made by VYNPS under GL 89-13. Provide the frequency of heat transfer testing for each heat exchanger in the service water system. The applicant is requested to state which VYNPS group is responsible for reviewing the test data and to provide through a plant procedure an example of how this process is implemented. Explain the type of heat transfer testing which is done on the service water system heat exchangers.	PP7021 provides information related to Vermont Yankee's compliance with GL89-13 requirements. A copy of this procedure was provided. GL 89-13 provides for the options of performing either thermal performance testing or periodic cleaning. VY has chosen to perform cleaning for most of the SW supplied heat exchanger and coolers. The exceptions are the Stand-by Fuel Pool Cooling (SBFPC) Heat Exchangers, the Emergency Diesel Generator Coolers (3 each) and the Corner Room RRU's #7 & 8. The SBFPC heat exchangers are thermal performance tested every 18 months. Based on the satisfactory results of the tests VY is preparing a change to perform cleaning instead of testing. The coolers have been internally examined and found to be very clean and free for silt, sludge and tuberculation. The frequency of cleaning has yet to be determined but is anticipated to be in the every 3 to 6 year range. The Emergency Diesel Generator Coolers are tested every month and the results are trended by System Engineering. No adverse trends have been identified. A copy of the trends for the "B" Diesel has been provided. Copies of the test data sheets for the entire year 2004 have been provided.. The RRU's are tested quarterly by measuring the DP across the units. This will detect any fouling which would decrease thermal performance. No performance issues have been identified. All performance data and inspection results are monitored and trended by the System Engineering Department and the Service Water System Engineer.	Harry Breite	Ivy, Ted	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
70	B.1.26-W-06 Provide the NRC inspection report written in 2002 for the service water system. Characterize the 20 service water system leaks and how they were repaired under the VYNPS corrective action program. Provide the VYNPS self-assessment and independent evaluation which was completed on 12/20/2002. Provide an example of the documents which provide the protocols for the use of biocides to mitigate MIC and any other procedure changes made after the self-assessment. Provide a sampling of the different performance testing and inspection results for 2004 that are discussed in the LRA operating experience with acceptance criteria. If more recent performance testing and inspection results are available, provide a sampling of them.	A copy of NRC Report, NVY 02-61 was provided. CR-VTY-2003-02344 was provided. This CR document the investigation into the adverse trend created by approximately 20 through wall leaks in the SW system. The result of this investigation identified several causes. One of these being the use of carbon steel components which bare susceptible to Microbiological Influenced Corrosion (MIC). Another cause was determined to be ineffective chemical treatment of the system. The ineffectiveness of the chemical treatment was reinforced by a follow up assessment (DR Lutey Report). This assessment was also provided. Changes were made to the sampling program and chemical treatment process. New chemical addition pumps were installed and sampling was implemented for SW components during inspections. It should be noted that the plant is limited by the NPDES permit to no more than 2 hours a day of treatment to the SW system. This reduces the effectiveness of the treatments. VY also began treatment of lines which are not normally inservice, i.e. supply line to the Diesel Generator Cooler. These lines are treated when the diesels are run to insure that the lines are full of treated water when they are secured. Copies of the inspection database detailing the results of internal inspections have been provided.	Harry Breite	Ivy, Ted	Closed	Woodfield, Jon
71	B.1.26-W-06 Provide the NRC inspection report written in 2002 for the service water system. Characterize the 20 service water system leaks and how they were repaired under the VYNPS corrective action program. Provide the VYNPS self-assessment and independent evaluation which was completed on 12/20/2002. Provide an example of the documents which provide the protocols for the use of biocides to mitigate MIC and any other procedure changes made after the self-assessment. Provide a sampling of the different performance testing and inspection results for 2004 that are discussed in the LRA operating experience with acceptance criteria. If more recent performance testing and inspection results are available, provide a sampling of them.	Duplicate entry. Close to # 70.	Harry Breite	Ivy, Ted	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
72	B.1.27.1-W-01 Provide a masonry wall inspection report for an unreinforced masonry wall.	Inspection Report for Masonry wall G-191513-51 provided in Drawing B-191600 Sheet 96 for an unreinforced masonry wall was provided..	Steve Vekasy	Ahrabli, Reza	Closed	Woodfield, Jon
73	B.1.27.1-W-02 Explain how often masonry walls are inspected for cracking. Explain if the inspection frequency varies from wall to wall. If the frequency does vary, explain the basis for the differences in frequency. Explain the qualification and training that is required of the inspection personnel. Explain if inspectors use crack maps during the inspections to help in the detection of changes.	Site procedure PP-7026 will be in the program basis document Additional Response (AA): Inspection of masonry walls, in scope of license renewal, are performed each refueling outage. Upon completion of six successive surveillance intervals during a ten year period, the sequence of the inspection is reverted back to the initial sequence interval. The inspections are performed by inspection team comprised of degreed engineers having understanding of structures, materials of masonry construction and masonry wall analysis techniques. The observed instances of cracking are detailed on as-built and considered in record analysis.	Steve Vekasy	Ahrabli, Reza	Closed	Woodfield, Jon

<i>Item</i>	<i>Request</i>	<i>Response</i>	<i>Lead</i>	<i>Support</i>	<i>Status</i>	<i>Inspector:</i>
74	<p>B.1.27.1-W-03</p> <p>Explain if Masonry Wall crack changes are turned over to engineering for evaluation and documentation by procedure. Provide the procedure for performing the Masonry Wall crack inspections. What engineering procedures are used to control and evaluate the attachment of new components to masonry walls evaluated under NRC IEB 80-11? Explain if there is a masonry wall log book or data base to track new attachments to block walls and evaluate the effects on the existing evaluations performed under 80-11?</p>	<p>PP 7026 Rev 1 requires that if during the course of inspection, a "significant finding" is encountered a Condition Report shall be generated and the Civil Structural Supervisor is notified (Section 4.4, PP 7026). PP 7026 is provided for reference. The Engineering Request process is used to control the plants configuration. Walls affected via planned modifications are identified during the design process and the analysis of record and design drawings reflecting I. E. B. 80-11 are updated accordingly. Administrative controls require that proposed new attachments are reviewed by the Civil Structural Department (Section 4.4.5, PP 7026). A log book is maintained by the Civil Structural Department with a summary findings memo and surveillance walkdown sheets (Form VYPPF 7026.01 and Section 4.4.7, PP 7026).</p> <p>Attachments include the Vermont Yankee Masonry Wall Routine Surveillance for RFO 25 in which three corrective updates were performed for observed discrepancies. The CR generated for correcting the drawings is also attached along with a corrected drawing for example.</p>	Steve Vekasy	Ahrabli, Reza	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
75	<p>B.1.27.2-W-01</p> <p>The program description in the LRA for the Structures Monitoring Program (B.1.27.2) makes no reference to GALL, Section XI.S7, RG 1.127, Inspection of Water-Control Structures Associated With Nuclear Power Plants. GALL XI.S7 states that for plants not committed to RG 1.127, Revision 1, aging management of water-control structures may be included in the Structures Monitoring Program. However, details pertaining to water-control structures are to incorporate the attributes of GALL XI.S7. Explain if VYNPS is committed to RG 1.127 Revision 1 for inspection of its water control structures (such as Intake Structure). If VYNPS is not committed to RG 1.127 Revision 1, explain how the 10 element attributes of GALL XI.S7 are incorporated into the VYNPS Structures Monitoring Program.</p>	<p>Regulatory Guide (RG) 1.127, Inspection of Water-Control Structures associated with Nuclear Power Plants, is identified as XI.S7 Program in GALL for managing aging effects associated with water control structures, and Structures Monitoring Program, XI.S6, is identified as managing aging effects associated with structures and structural components. The water-control structure at VYNPS is the intake structure. Aging effects requiring management for the intake structure and its structural components were determined based on industry guidelines and operating experience. The attributes that are in the GALL XI.S7 aging management program, but not in the VYNPS Structures Monitoring Program, are attributes dealing with earthen embankment water control structures. RG 1.127 proposes inspection parameters (e.g., settlement, depressions, sink holes, slope stability (e.g., irregularities in alignment and variances from originally constructed slopes), seepage, proper functioning of drainage systems, and degradation of slope protection features) and frequency (not to exceed 5 years) for earthen embankment water control structures. These parameters are not applicable parameters for the intake structure. During the VYNPS aging management review, the aging effect requiring management for the intake structures was determined to be loss of material of the structural components and commodities. Loss of material is effectively managed by Structures Monitoring Program and the Fire Protection Program as indicated in LRA Table 3.5.2-3. Therefore, the attributes of the NUREG-1801 XI.S7 aging management program regarding earthen structures are not necessary attributes for the VYNPS Structures Monitoring Program for water control structures.</p>	Steve Vekasy	Ahrabli, Reza	Open	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
76	B.1.27.2-W-02 Explain why the drywell floor liner seal and other components are not part of the ASME Section XI subsection IWE inspection program. Justify this exclusion. Explain why the inspection of crane rails and girders are not under an Inspection of Overhead Heavy Load and Light Load Handling Systems AMP. Explain if all the structures and components being added to the Scope of Program for this AMP by enhancement are currently inspected by another program, since the SMP is an existing program.	Drywell moisture barrier is examined under the Containment Inservice Inspection Program. LRA Table 3.5.2.6 shows the drywell moisture barrier to be inspected under the structural monitoring program; this will be changed to the Containment Inservice Inspection Program. Crane rails and girders are covered under the periodic surveillance and preventive maintenance program. Not all the structures and components added by the enhancement to SMP are currently inspected under another program.	Ted Underkoffler & S	Ahrabli, Reza	Open	Woodfield, Jon
77	B.1.27.2-W-03 Explain if VYNPS has any porous concrete subfoundations and a site dewatering system. Explain if the Structures Monitoring Program requires periodic sampling and testing of groundwater to determine and confirm that the below grade water chemistry/soil is non-aggressive to concrete structures below grade. Provide the results for the two most recent tests and provide the scheduled frequency of groundwater monitoring. Explain if there is any seasonal consideration for groundwater monitoring.	No, VY does not have porous concrete subfoundation. (AA) Revised Response: No, VY does not have porous concrete subfoundation and does not rely on site dewatering system or ground water monitoring. (AA)	Steve Vekasy	Ahrabli, Reza	Open	Woodfield, Jon
78	B.1.27.2-W-04 Will VYNPS take advantage of inspection opportunities for structures required for license renewal and identified as inaccessible? As inaccessible areas become accessible by such means as excavation or other reason, will additional inspections of those areas be performed?	Yes. VYNPS will take advantage of inspection opportunities for underground structures that become accessible by excavation. As indicated in the response to Item 5 (B.1.1-L-04), VYNPS will enhance procedure PP 7030, Structures Monitoring Program, to provide additional guidelines for inspection of underground structures unearthed during excavation of piping (Commitment#1). (Ref. LRPD-02, Section 4.21.B.4b).	Steve Vekasy	Ahrabli, Reza	Closed	Woodfield, Jon

<i>Item</i>	<i>Request</i>	<i>Response</i>	<i>Lead</i>	<i>Support</i>	<i>Status</i>	<i>Inspector:</i>
79	B.1.27.2-W-05 Explain how the frequency of inspection for the structures, buildings and components within the scope of this program are affected when aging effects are discovered.	<p>Vermont Yankee's current structures monitoring program is performed by Design Structural Engineers in accordance with PP 7030, Structures Monitoring Program Procedure. Our surveillance tracking program ensures that this inspection is performed on a three year interval.</p> <p>Any adverse condition discovered during inspections of buildings, structures and components would be entered into Entergy's corrective action process through the initiation of a Condition Report in the PCRS tracking system. The corrective action program defines further responses to the discovered condition. Attributes considered through the corrective action will include, as applicable, apparent cause evaluation, root cause evaluation, extent of condition, consideration of Operating Experience, required corrective action and follow-up verification. Frequency of future inspections will also be considered through the corrective action process.</p>	Steve Vekasy	Ahrabli, Reza	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
80	B.1.27.2-W-06 Explain if the inspection acceptance criteria for the Structures Monitoring Program is based on ACI 349.3R-96, and if not, provide the industry codes, standards and guidelines that the acceptance criteria is based on. Explain the basis of the acceptance criteria for crane rail/girder inspections and drywell floor liner seal.	<p>Although ACI 349.3-3R-96 is known and available to Vermont Yankee's structural monitoring team and is an option standard in Gall XI .S6 for monitoring parameters and acceptance criteria, Vermont Yankee performs its structural monitoring program (e.g. acceptance criteria) in accordance with the standards listed in Sect. 5.2 of PP 7030, Structures Monitoring Program Procedure. These standards include:</p> <p>5.2.1 10CFR50.65, Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants</p> <p>5.2.2 NEI 96-03, Nuclear Energy Institute, Industry Guideline for Monitoring the Condition of Structures at Nuclear Power Plants</p> <p>5.2.3 NUMARC 93-01, Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants</p> <p>5.2.4 NRC Inspection Manual, Inspection Procedure 62002, Inspection of Structures, Passive Components and Civil Engineering Features at Nuclear Power Plants</p> <p>5.2.5 NUREG-1522, Assessment of In Service Conditions of Safety Related Nuclear Power Plant Structures</p> <p>The acceptance criteria for crane rail/girder inspections are contained in the Preventative Maintenance tasks for the crane inspection.</p> <p>The acceptance criteria for the drywell floor liner seal is covered under 4.14.2, Containment Inspection Program. LRDP-02 will be revised to indicate that this seal is covered in the Containment Inspection Program, not the Structures Monitoring Program as currently stated.</p>	Steve Vekasy	Ahrabli, Reza	Open	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
81	<p>B.1.27.2-W-07 VYNPS lists the following structure issues under operating experience for this AMP.</p> <ul style="list-style-type: none"> • Concrete pad above JD diesel generator day tank sinking and cracking • Degradation of Cooling Tower structural column <p>Provide the documentation for these issues showing when, where and how they were discovered. Also, provide the documentation on how these issues were evaluated and resolved with a discussion on the need for any followup inspections.</p> <p>Provide the most recent inspection results for the reactor building overhead crane rails/girders, reactor building (a few examples of areas where aging has been discovered), cooling towers, and intake structure (a few examples of areas where aging has been discovered). Provide the last three inspection reports for the drywell floor liner seal.</p>	<p>Documentation of the operating experience with structural repairs was provided to the Inspection Team in the following format:</p> <p>Concrete pad above the JD diesel generator day tank WO 99-1090-000 WO 99-9746-001</p> <p>Degradation of cooling tower structural columns WO 05-5158-000 WO 97-5357-004 WO 97-5327-00 WO 03-1243-009</p> <p>Intake structure floor concrete repair WO 04-1745-000</p> <p>The concrete pad above the JD diesel generator day tank is in a high traffic area. Degradation was identified by personnel transiting the area. The cracked concrete slab was replaced. This was essentially a design issue, in that the original pad was not designed to bear the weight of the fuel oil delivery truck. The reference WO replaced the pad and added bollard columns to prevent vehicles from driving over the pad. No further follow-up inspections are required.</p> <p>Degradation of cooling tower structural columns was discovered during routine fall and spring structural inspection PMs. These columns were replaced in kind. Follow-up inspections are performed during the routine fall and spring structural inspection PMs.</p> <p>The most recent inspection and repair results for the Turbine Building overhead crane were provided to the Inspection Team. Included were reports of two different inspections, repair information and monitoring plans. Both the Reactor and Turbine Building overhead cranes are in scope of the Maintenance Rule and are subject to the same inspection and corrective action programs. Recent Reactor Building overhead crane inspections have identified only mechanical and electrical deficiencies (i.e.</p>	Steve Vekasy	Ahrabli, Reza	Closed	Woodfield, Jon

trolley motors, brakes, etc.). The results for the Turbine Building overhead crane were provided in lieu of the Reactor Building overhead crane because the recent inspection results involve structural elements and show the effectiveness of the Maintenance Rule crane inspection program. The Structures Monitoring Program will be enhanced to describe how the program takes credit for the structural inspection program being performed through the Maintenance Rule crane inspection program.

Examples of inspections for cooling tower aging are included in the referenced WOs above.

As stated in other responses, LRDP-02 will be revised to indicate that the drywell floor liner seal will be covered under the containment inspection program, not the structures monitoring program. The seal was replaced two refueling outages ago, and the seal inspection report for last outage has already been provided to the inspection team.

Degradation of intake structure floor concrete was discovered during routine diver PM inspections performed every refueling outage. The small washed out area was repaired with an underwater concrete repair product. Follow-up routine diver PM inspections will be performed every refueling outage

Item	Request	Response	Lead	Support	Status	Inspector:
82	<p>B.1.27.3-W-01</p> <p>Explain which VYNPS individual is responsible for the coordination of Vernon Dam FERC inspections. Explain the process of VYNPS interfacing with FERC with respect to Vernon Dam and if there are any plant procedures for dealing with FERC, provide a current copy. Explain if VYNPS has any influence on what and when repairs are made on Vernon Dam from a management or economic standpoint. Provide the most recent Vernon Dam assessment performed by FERC. Explain how VYNPS receives the report and if the report is independently reviewed by any VYNPS personnel such as in systems or design engineering.</p>	<p>There has not been any need for site to coordinate or interface with Vernon Dam FERC inspection. VYNPS does not have an individual responsible for coordinating, interfacing, collecting and reviewing FERC inspection report. There is no site procedure for dealing with FERC and obtaining a current copy. Reports are normally received on site after each inspection. And, VYNPS does not have any influence on what and when repairs should be made from management or economics standpoint. As stated in LRA section 2.4.5, Vernon Dam is not part of the site structures owned by VYNPS. Dam inspectors are regulated by the Federal Energy Regulatory Commission (FERC), which licenses the dam and associated power block.</p> <p>A copy of FERC inspection report of Vernon dam, for the period October 28, 1998 to June 24, 2002 is attached to this response.</p> <p>"Prior to period of extended operation, VYNPS will develop plans and process to ensure its involvement and interface with Vernon dam inspection, review of the inspection reports, and implementation of required maintenance and repairs. "</p>	Steve Vekasy	Ahrabli, Reza	Open	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
83	B.1.27.3-W-02 The operating experience for this AMP states that daily inspections are made of Vernon Dam and periodic underwater inspections are made on the Dam. Explain what organization makes the daily inspections and the underwater inspections. Explain how often the underwater inspections are performed and what determines the frequency. Explain if VYNPS has ever independently inspected Vernon Dam. Explain if any flooding has occurred which required additional FERC inspections beyond the normal 5 year. The operating experience states that areas of degradation were found on Vernon Dam during the 2002 FERC inspection and will continue to be monitored. Explain if the continued monitoring is by FERC on a five year cycle or by VYNPS personnel on a more frequent basis. Explain the type and number of staff that work at Vernon Dam on a daily basis to maintain it. Explain if and how any personnel at Vernon Dam have the ability to communicate immediately with responsible individuals at VYNPS should a problem develop at the Dam which could affect the availability of plant cooling water.	As stated in LRA section 2.4.5, Vernon Dam is not part of the site structures owned by VYNPS. Dam inspections are regulated by the Federal Energy Regulatory Commission (FERC), which licenses the dam and associated power block. Daily inspections are performed by Licensee's (USGen New England, Inc.) maintenance personnel. And, underwater inspections are performed by divers once every 5 years determined by FERC. Independent inspection of Vernon Dam by VYNPS neither has been necessary or performed. No evidence of flooding to require additional FERC inspections beyond the normal 5 year. As stated in the inspection reports, maximum rise in stage cause by a breach will not exceed 1.7 feet under either 50 or 100 year flood condition. The areas of degradation, found on Vernon Dam during the 2002 FERC inspection, are monitored by FERC on a five year cycle. However, daily inspection by the licensee also supplements these inspections. Number and type of staff at Vernon Dam on daily basis is not known. Although not procedurized, any problem with dam is expected to be communicated to the site. *Prior to period of extended operation, VYNPS will develop plans and process to ensure its involvement and interface with Vernon dam inspection, review of the inspection reports, and implementation of required maintenance and repairs. "	Steve Vekasy	Ahrabli, Reza	Open	Woodfield, Jon
84	B.1.30.1-M-01 Since the applicant is currently and periodically sampling and analyzing the cooling water of the other systems "controlled" by VYNPS's existing program—the stator cooling water and plant heating boiler systems—is it also the intent of the applicant to periodically sample and analyze the John Deere Diesel cooling water system?	No, as stated in LRA Section B.1.30.1, rather than sampling, procedures will be enhanced to flush the John Deere diesel cooling water system and replace the coolant and coolant conditioner every three years. [LAP 4/16/06]	Steve Vekasy		Accepted	Mike Morgan

Item	Request	Response	Lead	Support	Status	Inspector:
85	B.1.30.2-M-01 Section XI.M2 of the GALL notes that a "water chemistry only" program may not be fully effective for verification of corrosion or SCC in slow flow or stagnant flow areas. The GALL further suggests that for some of these "susceptible locations" a one-time inspection verification program may be appropriate. Do you intend to implement a "one-time inspection (or some other program) to verify existence of corrosion or SCC in these "susceptible locations"?"	Yes, the one-time inspection program described in LRA Section B.1.21 includes inspections to verify the effectiveness of the water chemistry control aging management programs by confirming that unacceptable cracking, loss of material, and fouling is not occurring. [LAP 4/13/06]	Rick Gerdus	Lori Potts	Accepted	Mike Morgan
86	B.1.30.2-M-02 Section XI.M2 - Element Number four (4) - of the GALL notes that the staff considers a BWR water chemistry program as a "...mitigation program and (that it) does not provide detection of any aging effects...". The GALL further states that "...inspection of select components (should) be undertaken to verify the effectiveness of the program..." The applicant's AMP does not present any other program - other than the indirect results of their existing water chemistry program - to verify effectiveness of the chemistry control program. Do you intend to perform "other" inspections, as suggested by the GALL, "...to ensure that significant degradation is not occurring and that intended functions of system components will be maintained during the extended period of operation..."?	Yes, the one-time inspection program described in LRA Section B.1.21 includes inspections to verify the effectiveness of the water chemistry control aging management programs by confirming that unacceptable cracking, loss of material, and fouling is not occurring. [LAP 4/13/06]	Rick Gerdus	Lori Potts	Accepted	Mike Morgan
87	B.1.30.3-M-01 The applicant's exception for this AMP states that "...monitoring pump performance parameters is of little value in managing effects of aging on long-lived, passive CCW system components...". The associated GALL for this AMP (XI.M21; Element 4) states that "...control of water chemistry does not preclude corrosion or SCC at locations of stagnant flow conditions or crevices...". How does this AMP ensure that a stagnant flow condition or crevice will not be periodically present in system piping during the period of extended operation?	This AMP does not ensure that a stagnant flow condition or crevice will not be periodically present in system piping during the period of extended operation. Preventing stagnant flow conditions is not a recommended preventive action in NUREG-1801, Section XI.M21. As stated in LRA Section B.1.20.3, passive intended functions of pumps, heat exchangers and other components will be adequately managed by the Water Chemistry Control - Closed Cooling Water Program through monitoring and control of water chemistry parameters. Also the one-time inspection program described in LRA Section B.1.21 includes inspections to verify the effectiveness of the water chemistry control aging management programs by confirming that unacceptable cracking, loss of material, and fouling is not occurring. [LAP 4/13/06].	Rick Gerdus	Lori Potts	Closed	Mike Morgan

Item	Request	Response	Lead	Support	Status	Inspector:
88	B.1.30.3-M-02 The applicant's exception for this AMP also states that "...in most cases, functional and performance testing verifies that the component active functions can be accomplished and as such would be included as part of the maintenance rule...". Does this AMP reference or refer to "maintenance rule activities" as part of planned aging management actions; i.e., actions which address GALL XI.M21 "parameters monitored/inspected"?	No, functional and performance testing are not aging management actions. They are maintenance rule activities and not part of the Water Chemistry Control - Closed Cooling Water Program. As stated in LRA Section B.1.30.3, the Water Chemistry Control - Closed Cooling Water Program takes exception to this recommendation of NUREG 1801, Section XI.M21. [LAP 4/16/06]	Rick Gerdus	Lori Potts	Closed	Mike Morgan
89	A-P-01 Please clarify the rationale for the unusual numbering system used for auxiliary systems after the first 12. (Note: This question is arbitrarily linked to the first item of Table 3.3.1-13-1)	Section 13 includes all the systems that have intended functions that meet 10 CFR 54.4(a)(2) for physical interaction. The aging management review of these systems that have functions that met 10 CFR 54.4(a)(2) for physical interaction was done separately from the review of systems with intended functions that met 10 CFR 54.4 (a)(1) or (a)(3). The results of this review therefore needed to be presented separately so that they could be distinguished from the 10 CFR 54(a)(1) and (a)(3) review. Table 3.3.1-13 would be the next sequential table number after the remainder of the auxiliary system tables. To indicate individual systems included in the aging management review for (a)(2), Table 3.3.1-13 is subdivided by system. For example, Table 3.3.1-13-1 is for the augmented off gas system, a system which only has components included for (a)(2). For the core spray system, Table 3.3.1-13-6 shows the components included for (a)(2) but since the system is also in scope for other reasons, Table 3.2.2-2 shows the components included for 54.4(a)(1) and (a)(3). This numbering system was chosen so that these systems and the components that had intended functions unique for 54.4(a)(2) could be uniquely identified and reviewed separately. This allows a reviewer to clearly distinguish which component types in a system were included for 10 CFR 54.4(a)(2) for physical interaction. Since most of these systems are auxiliary systems they were added as part of the auxiliary systems section. [TSI 4/13/06]	John Hoffman	Ivy, Ted	Closed	Patterson, Malcol

<i>Item</i>	<i>Request</i>	<i>Response</i>	<i>Lead</i>	<i>Support</i>	<i>Status</i>	<i>Inspector:</i>
90	3.1.1-14-P-01 "Support" is not listed as an intended function Please clarify which IF (SNS, SRE, and/or SSR) is intended.	This response assumes that the question is referring to the tables in Section 3.3.2-13 for components included for 10 CFR 54.4(a)(2). This function is described in Section 2.3.3.13 under "System Description (pg. 2.3-65) and in the definition in Table 2.0-1 for "Pressure boundary." As shown in the component type tables in Section 2.3.3-13, a footnote states "For component types included under 10 CFR54.4(a)(2), the intended function of pressure boundary includes providing structural/seismic support for components that are included for nonsafety-related SSCs directly connected to safety-related SSCs" when this function is appropriate. Pressure boundary was only used because there is no difference in the aging management review regardless of whether the component intended function is pressure boundary or structural support, and if the pressure boundary intended function of the component is maintained the structural support function will be maintained. This definition of providing structural/seismic support would be equivalent to the intended function of SSR as defined in Table 2.0-1.[TSI 4/13/06]	John Hoffman	Lori Potts & Finnin,R	Closed	Patterson, Malcol

Item	Request	Response	Lead	Support	Status	Inspector:
91	<p>3.6.2.2-N-01</p> <p>In LRA, Table 3.6.2-1, under Cable connections (metallic parts), you have stated that no aging effects requiring management and no AMP is required. Further, in LRA, Table 3.6.1 under discussion of cable connection metallic parts, you have stated that cable connections outside of active devices are taped or sleeved for protection and operating experience with metallic parts of electrical cable connections at VYNPS indicated no aging effects requiring management. Electrical cable connections (metallic parts) are subject to the following aging stressors: thermal cycling, ohmic heating, electrical transients, vibration, chemical contamination, corrosion, and oxidation. NUREG-1801, Revision 1, AMP XI.E6, "Electrical Cable Connection not Subject to 10 CFR 50.49 Environmental Qualification Requirements," specifies that connections associated with cables within the scope of license renewal are part of this program, regardless of their association with active or passive components. Also, refer to pages 107, 256, and 257 of NUREG-1833, "Technical Bases for Revision to the License Renewal Guidance Documents," for additional information regarding AMP XI.E6. Provide a basis document including an AMP with the ten elements for cable connections or provide a justification for why an AMP is not necessary.</p>	<p>VYNPS electrical AMR AMRE-01 in section 4.1.4.4 states for cable connections (metallic parts)</p> <p>"An evaluation of thermal cycling, ohmic heating, electrical transients, vibration, chemical contamination, corrosion, and oxidation stressors for the metallic parts of electrical cable connections identified no aging effects requiring management.</p> <ul style="list-style-type: none"> • <input type="checkbox"/> Metallic parts of electrical cable connections potentially exposed to thermal cycling and ohmic heating are those carrying significant current in power supply circuits. Typically, power cables are in a continuous run from the supply to the load. Therefore, the connections are part of an active component that is controlled by Maintenance Rule and is not subject to aging management review. • <input type="checkbox"/> The fast action of circuit protective devices at high currents mitigates stresses associated with electrical faults and transients. In addition, mechanical stress associated with electrical faults is not a credible aging mechanism because of the low frequency of occurrence for such faults. Therefore, electrical transients are not applicable stressors. • <input type="checkbox"/> Metallic parts of electrical cable connections exposed to vibration are those associated with active components that cause vibration. Since active components are controlled by Maintenance Rule, they are not subject to aging management review. • <input type="checkbox"/> Corrosive chemicals are not stored in most areas of the plant. Routine releases of corrosive chemicals to areas inside plant buildings do not occur during plant operation. Such a release, and its effects, would be an event, not an effect of aging. The location of electrical connections inside active components protects the metallic parts from contamination. Therefore, this stressor is not applicable. • <input type="checkbox"/> Oxidation and corrosion usually occur in the presence of moisture or contamination such as industrial pollutants and salt deposits. Enclosures or splice materials protect metal connections from moisture or contamination. Therefore, oxidation and corrosion are not applicable stressors. 	Al Haumann	Stroud, Mike	Open	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
		Based on the evaluations of the stressors above, there are no aging effects requiring management for metallic components of connections and no AMP is required.				
92	<p>3.6.2.2-N-02</p> <p>In LRA, Table 3.6.2-1, under switchyard bus (switchyard bus for SBO) and connections you have stated no aging effects requiring management and no AMP is required. NUREG 1800, Rev. 1, Standard Review Plan for Review of License Renewal Application for Nuclear Power Plants, Section 3.6.2.2.3 identifies loss of preload is an aging effect for switchyard bus connections. Torque relaxation for bolted connection is a concern for switchyard bus connections. An electrical connection must be designed to remain tight and maintain good conductivity through a large temperature range. Meeting this design requirement is difficult if the material specified for the bolt and the conductor are different and have different rates of thermal expansion. For example, copper or aluminum bus/conductor materials expand faster than most bolting materials. If thermal stress is added to stresses inherent at assembly, the joint members or fasteners can yield. If plastic deformation occurs during thermal loading (i.e., heatup) when the connection cools, the joint will be loose. EPRI document TR-104213, "Bolted Joint Maintenance & Application Guide," recommends inspection of bolted joints for evidence of overheating, signs of burning or discoloration, and indication of loose bolts. Provide a discussion why torque relaxation for bolted connections of switchyard bus is not a concern for VYNPS.</p>	<p>VYNPS electrical AMR Section 4.3.4 of AMRE-01.</p> <p>Connection surface oxidation for aluminum switchyard bus is not applicable since all switchyard bus connections requiring AMR are welded connections. No aging effects have been identified for welded connections on switchyard bus for SBO.</p>	Al Haumann	Stroud, Mike	Accepted	Nguyen, Duc
93	<p>3.6.2.2-N-03</p> <p>Provide AMR line item for transmission conductor connections in Table 3.6.2-1. Address any aging effects requiring management.</p>	<p>Table 3.6.2-1 Component type – Transmission conductors will be revised to be Transmission conductors and connections.</p>	Al Haumann	Stroud, Mike	Open	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
94	<p>3.6.2.2-N-04 In LRA, Table 3.6.2-1, under Transmission conductors, you have stated that no aging effects requiring management and no AMP is required. NUREG 1800, Rev. 1, Standard Review Plan for Review of License Renewal Application for Nuclear Power Plants, Section 3.6.2.2.3 identifies loss of conductor strength due to corrosion is the aging effect of high voltage transmission conductor. The most prevalent mechanism contributing to loss of conductor strength of aluminum core steel reinforce (ACSR) transmission conductor is corrosion which includes corrosion of steel core and aluminum strand pitting. Degradation begins as a loss of zinc from the galvanized steel core wires. Corrosion rate depend largely on air quality, which includes suspended particles chemistry, sulfur dioxide concentration in air, precipitation, fog chemistry and meteorological conditions. Explain why loss of conductor strength due to corrosion is not an aging effect requirement management for transmission conductors at VYNPS.</p>	<p>VYNPS electrical AMR Section 4.2 in AMRE-01. The prevalent mechanism contributing to loss of conductor strength of an ACSR transmission conductor is corrosion, which includes corrosion of the steel core and aluminum strand pitting. Corrosion in ACSR conductors is a very slow acting mechanism, and the corrosion rates depend on air quality, which includes suspended particles chemistry, SO2 concentration in air, precipitation, fog chemistry and meteorological conditions. Air quality in rural areas generally contains low concentrations of suspended particles and SO2, which keeps the corrosion rate to a minimum. Tests performed by Ontario Hydro showed a 30% loss of composite conductor strength of an 80-year old ACSR conductor due to corrosion. Aluminum conductor alloy reinforced (ACAR) conductors are used at VYNPS as well as ACSR conductors. ACAR conductors are more resistant to loss of conductor strength since the core of the conductor is an alloy of steel and corrosion resistant metals. Conclusions for ACSR conductors conservatively bound ACAR conductors. Therefore, corrosion of transmission conductors is not aging effect requiring management and an AMP is not required.</p>	Al Haumann	Stroud, Mike	Open	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
95	<p>3.6.2.2-N-05</p> <p>In LRA, Table 3.6.2-1, under high voltage insulators, you have indicated that no aging effects requiring management and no AMP is required. In LRA, Section 3.6.2.2 .2, you have also stated that at VYNPS surface contamination build-up on insulator is not a concern. NUREG 1800, Rev. 1, Standard Review Plan for Review of License Renewal Application for Nuclear Power Plants, Section 3.6.2.2.3 identifies surface contamination is the aging effect of high voltage insulators. Various airborne materials such as dust and industrial effluent can contaminate insulator surfaces. The buildup of surface contamination is gradual and in most areas such contamination is washed away by rain; the glazed insulator surface aids this contamination removal. However, a large buildup of contamination enables the conductor voltage to track along the surface more easily and can lead to insulator flashover. Surface contamination can be a problem in areas where there are greater concentration of airborne particles such a near facilities that discharge soot. Explain why surface contamination is not a concern at VYNPS.</p>	<p>:__ VYNPS electrical AMR Section 4.4 in AMRE-01.</p> <p>Various airborne materials such as dust, salt and industrial effluents can contaminate insulator surfaces. The buildup of surface contamination is gradual and in most areas, such contamination is washed away by rain; the glazed insulator surface aids this contamination removal.</p> <p>VYNPS is not located near the seacoast where salt spray is prevalent, or near facilities that discharge soot.</p> <p>At VYNPS, as in most areas of the New England transmission system, contamination build up on insulators is not a problem. Therefore, surface contamination is not an applicable aging mechanism for the insulators at VYNPS.</p>	Al Haumann	Stroud, Mike	Accepted	Nguyen, Duc
96	<p>3.6.2.2-N-06</p> <p>Are all electrical and I&C containment penetrations EQ? If not, provide AMRs and AMPs for non-EQ electrical and I&C containment penetrations. The AMRs should include both organic (XLPE, XLPO, and SR internal conductor/pigtail insulation, etc.,) as well as inorganic material (such as cable fillers, epoxies, potting compounds, connector pins, plugs, and facial grommets).</p>	<p>Section 3.4.2 in AMRE-01.</p> <p>FSAR Section 5.2.3.4.3</p> <p>:__ VYNPS electrical AMR Section 3.4.2 in AMRE-01.</p> <p>At VYNPS, electrical penetration assemblies are included in the EQ program and are not subject to aging management review since they are short-lived.</p>	Al Haumann	Stroud, Mike	Accepted	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
97	<p>3.6.2.2-N-07</p> <p>In LRA, Table 3.6.1 under metal enclosed bus, you have stated that an evaluation of metal enclosed bus for VYNPS determined that VYNPS does not have any phase bus that support a license renewal function. 10 CFR 54.4 (a)(3) requires, in part, that all systems, structures, and components relied on in safety analyses or plant evaluation to perform a function that demonstrates compliance with the commission's regulations for station black out (10 CFR 50.63) are within the scope of license renewal. VYNPS FSAR Section 8.3.3 states that electric power supplied from the transmission network to the on-site electric distribution system by two independent circuits, one immediate access and one delayed access. The immediate access circuit is supplied from the 345 kV transmission system through 345 kV/115 kV auto-transformer. It feeds the on-site electric distribution system through the two 115 kV to 4160 V start up transformers and is available immediately following a loss of generating capability. The delay access circuit is available by opening the generator no-load disconnect switch and establish a feed from the 345 kV switchyard through the main generator step-up transformer and unit auxiliary transformer to the 4160 V safety buses. Answer the following questions and support them with a main one line diagram:</p> <p>3.6.2.2-7(a). In regard to the above, are non-segregated phase buses used to connect the start up transformers (T-3A and T-3B) (lower sides) to 4.16 kV safety buses?</p> <p>3.6.2.2-7(b). In regard to the above, are iso phase buses used to connect the delay access circuit from the 345 kV switchyard through the main generator step-up transformer and unit auxiliary transformer?</p> <p>3.6.2.2-7(c). In regard to the above, are non-segregated phase buses used to connect the unit auxiliary transformer (lower sides) to 4.16 kV safety buses?</p> <p>If the answer to a, b, or c is yes, explain why metal enclosed buses (iso phase and/or non-segregated phase buses) are not in scope of license renewal and not require an AMP.</p>	<p>___ The VY UFSAR Section 8.3.3 describes three offsite power sources. The immediate access circuit from the 345kV yard through the 345/115kV autotransformer to the startup transformers, the alternate immediate access circuit from the 115kV yard (Keene Line) through the startup transformers. The delayed access circuit is available by opening the generator no-load disconnect switch and establishing a feed from the 345kV switchyard through the main and aux transformers.</p> <p>As stated in ISG-2, "For purposes of the license renewal rule, the staff has determined that the plant system portion of the offsite power system that is used to connect the plant to the offsite power source should be included within the scope of the rule." This guidance was followed for the VY LRA. The guidance statement in ISG-2 is, "This path typically includes the switchyard circuit breakers that connect to the offsite system power transformers (startup transformers), the transformers themselves, the intervening overhead or underground circuits between circuit breaker and transformer and transformer and onsite electrical distribution system, and the associated control circuits and structures." Based on the guidance in ISG-2 and past applicants' SERs, VY added two sources of offsite power for the SBO recovery path. The two offsite paths chosen were the two immediate sources. Since the backfeed is a delayed source, and based on the recovery instructions in procedure OT 3122, "Loss of Normal Power," the two immediate offsite sources were chosen for SBO recovery for license renewal.</p> <p>3.6.2.2-N-07(a) No, there is no non-segregated phase buses in the path from the startup transformers to the 4.16 safety buses.</p> <p>3.6.2.2-N-07(b) The delay access circuit from the 345KV switchyard through the main generator step-up transformer and unit aux transformer is not in scope for license renewal based on the response to 3.6.2.2-</p>	Al Haumann	Stroud, Mike	Open	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
		<p>N-07 above. 3.6.2.2-N-07(c) No, there are no non-segregated phase buses in the path from the Unit Aux Transformer to the 4.16 safety buses. Summary The in-scope components required for recovery from a SBO do not include any non-segregated phase bus that requires aging management review.</p>				
98	<p>3.6.2.2-N-08 10 CFR 54.4 (a)(3) requires, in part, that all systems, structures, and components (SSCs) relied on in safety analyses or plant evaluation to perform a function that demonstrates compliance with the commission's regulations for station black out (10 CFR 50.63) are within the scope of license renewal. Vernon Hydroelectric Station has been designated as the Station Blackout (SBO) alternate ac (AAC) source and is used to meet SBO requirements 10 CFR 50.63. Are all SSCs (including electrical components) associated with Vernon Hydroelectric Station included in the scope of licensee renewal? If they are not, explain why not. If they are, provide an AMR for long-lived, passive SSCs associated with the hydro station.</p>	<p>The long-lived, passive components from the dam switchyard to the plant are in scope and subject to AMR. The underground cables and connections are included in E2. The Vernon Dam is regulated by FERC and inspected per FERC regulations.</p> <p>Follow-up Required X Yes No</p>	Al Haumann	Stroud, Mike	Open	Nguyen, Duc
99	<p>Are there any other license renewal intended functions other than SBO, associated with the Vernon Dam?</p>	<p>Vernon Dam is used for hydro-electric generation and is the alternate AC source of power for VYNPS. The deep basin beneath the west cooling tower is a safety-related, reinforced concrete structure constructed on bedrock. The basin acts as a reservoir to replace the evaporative and other losses occurring during alternate cooling system (ACS) operation, providing a one-week supply of makeup for the alternate cooling cell in the event of a loss of Vernon Dam. The Vernon dam has no intended functions for (10CFR54.4(a)(1) or (a)(2). The Vernon dam is credited for station blackout (10CFR50.63), intended function 10CFR54.4(a)(3).</p>		Ahrabli, Reza	Closed	Woodfield, Jon

Item	Request	Response	Lead	Support	Status	Inspector:
100	The NRC requested additional information on licensing renewal, specifically on how aging management applied to passive components in the Vernon Hydroelectric Station.	The attached information was provided to the NRC. In addition a FERC inspection report was provided for the demand NPCC Document A-3, Emergency Operational Criteria. The NRC requested additional information on how as underground cables, buried piping and support systems. Attachment #100	Metell / Sweet		Open	Eads, Johnny
101	B.1.30.3.M.04 GALL X1.M21 discusses pump and heat exchanger testing in the parameters monitored / inspected attribute. Is this testing part of the Water Chemistry Control - Coiled Cooling Water Program?	LRA Section B.1.30.3 includes an exception to the performance and functional testing discussed in the detection of aging effects attribute. This exception and its justification are equally applicable to the parameters monitored / trended attribute.		Lori Potts	Accepted	Mike Morgan
102	B.1.9-K-11 Please provide a copy of QA Surveillance 99-010 and more recent QA surveillance of Diesel Fuel Monitoring Program.	Provided QA Surveillance 99-010, QA Audit Report QA-2-2005-VY-1 and CR-VTY-2005-00196.	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike
103	B.1.9-K-12 Please identify sample point locations on John Deere diesel and diesel fire pump oil storage tanks.(Diesel Fuel Monitoring Program)	Provided Section 5 of OP2106 Rev. 18, App.DJD Diesel day tank sample location is at the bottom of this tank. Fire pump diesel fuel supply & sample point are 2 inches from the bottom of the diesel fire pump fuel tank. (4/21/06 08:00)	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike
104	B.1.9-K-13 Please provide 2000 and 2003 sample results spreadsheet. Also sample lab results for main storage tank and EDG day tanks are desired. (Diesel Fuel Monitoring Program)	Provided spreadsheet of monthly analysis data for the Main Fuel Oil Storage Tank for 2000 and 2003. Also, provided example analysis results for samples from the Walpole NH supplier tank, the John Deere diesel storage tank, the diesel fire pump storage tank, and the EDG day tanks. (4/20/06 08:00)	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike
105	B.1.30.3.M.04 Please provide a copy of recent third party assessment of the water chemistry control - closed cooling water program.	Third party assessment of "Chemistry" on May 6, 2003 provided for review. Summary states that closed cooling water systems are monitored and treated to provide a chemical environment that minimizes corrosion rates. (4/20/06 08:00)	Rick Gerdus	Lori Potts	Accepted	Mike Morgan

Item	Request	Response	Lead	Support	Status	Inspector:
106	<p>B.1.2.3-M-04 The Reactor Vessel Stud Program takes exception to GALL based on relief request ISI-03. The NRC does not believe this should be an exception.</p> <p>Review the relief request and ASME code. If this is not an exception, revise the program document.</p>	<p>The existing relief request ISI-03, for B-G-2 studs is based on Code Case N-652. Code Case N-652 has been endorsed by the NRC per Table 1 of Regulatory Guide 1.147, Revision 14.</p> <p>This is conservatively identified in the Reactor Closure Stud Program description as an exception to GALL, because it required relief to the existing code requirements.</p>		Finnin, Ron	Closed	Rowley, Jonathan
107	<p>The commitment to manage locations CUF>1.0 should be on a numbered commitment list.</p> <p>The commitment to analyse the limiting location for environmentally assisted fatigue should be on a numbered commitment list.</p> <p>NOTE: The commitment is in section 4 (4.3.3.?) not in App.B</p>	<p>A license renewal commitment list has been prepared, and the above commitment is number 27 on the list.</p>		Finnin, Ron	Accepted	Hsu, Robert
108	<p>Identify the site specific calculations for core plate hold down bolt preload.</p>	<p>No site specific calculation was found in the VYNPS current licensing basis for the number / preload of the core plate hold-down bolts required to prevent lateral motion of the core plate.</p>		Finnin, Ron	Closed	Hsu, Robert
109	<p>Accurately state / describe the information / documentation requested. Be as specific as possible. The NRC requested a copy of the Vernon hydrodrawing.</p>	<p>See Attachment # 109</p>	Ken Sweet	Stroud, Mike	Draft	Nguyen, Duc
110	<p>The NRC had a oneline diagram and asked if bus duct was used for the immediate access source or the delayed access source. He was interested if an AMR applied to either source for segregated or non-segregated bus, if used.</p>	<p>Immediate assess: The NRC was told that cables are used from the startup transformers to the 4 KV buses and overhead 115 KV bare cable is used to supply the transformers with bus above the transformers.</p> <p>Delayed Assess: The NRC was told that there is isophased busduct used on the backfeed for the 22 KV system and it connects to the auxiliary transformer. The NRC requested an AMR that followed NUREG 1801, Volume 1, for the isophase busduct.</p>	Ken Sweet	Stroud, Mike	Draft	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
111	Please provide results of the last inspection of the welds between the rerouted crd return line and the RWCU system. (BWR CRD Return Line Nozzle Program)	Provided results of 1985 inspection to Malcolm Patterson. 4/19/06 10:00	Dave King	Lori Potts	Closed	Patterson, Malcol
112	Please provide documentation related to resolution of vessel clad cracking.	Provided documentation 4/19/06 09:00	John Hoffman	Lori Potts	Closed	Hsu, Robert
113	The Bwr penetrations program second exception allows a smaller inspection than the code (1/2" vs 1/2" vessel wall thickness). What is the basis for this?	<p>The inspection of the vessel penetrations to 1/2' versus 1/2T was approved via Relief Request ISI-09. This relief request is in turn based on ASME Code Case N-613-1. Code case N-613-1 has been endorsed by the NRC per Table 1 of Regulatory Guide 1.147, Revision 14, August 2005.</p> <p>This is conservatively identified in the BWR Penetrations Program description as an exception to GALL because it required relief to the existing code requirements.</p>	Dave King	Finnin, Ron	Closed	Hsu, Robert
114	<p>Do the VY instrument nozzles have a bored (cold worked) safe end extension?</p> <p>If yes, they require additional inspection.</p>	<p>This question was erroneously applied to the vessel instrumentation nozzles. BWRVIP-49-A requires no additional inspection requirements for cold worked safe ends for the instrumentation nozzles.</p> <p>The question should have been directed at the SLC/DP nozzle, for which the discussion of cold worked safe ends is found in the BWRVIP-27-A inspection guideline 3.4.1. Per drawing 5920-52666R0 implementing the inspection guidelines of BWRVIP-27-A as applicable to VY, but that does not include the entire safe end extension examination required of those plants with cold worked safe ends.</p>	Ron Finnin	Finnin, Ron	Closed	Hsu, Robert
115	Accurately state / describe the information / documentation requested. Be as specific as possible. LRPD-05 section 4.4.1 second paragraph states that the BWR CRD Return Line Nozzle program provides reasonable assurance. Should this have been the Buried Piping Inspection Program?	Yes, this is a typographical error and it should have said that the Buried Piping Inspection Program provides reasonable assurance that the effects of aging will be managed such that the current licensing basis for the period of extended operation.		Ivy, Ted	Accepted	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
116	B.1.17-N-04 GALL X1.E3 under program description states, in part, that periodic actions such as inspecting for water collection in cable manholes, and draining water, as needed to prevent cables from being exposed to significant moisture. The above actions are not sufficient to assure water is not trapped elsewhere in the raceways. In addition to the above periodic actions, in scope, medium voltage cables are tested to provide an indication of the condition of the conductor insulation. VYNPS AMP B.1.17 under same element states that periodic actions will be taken to prevent cables from being exposed to significant moisture, such as inspecting for water collection in cable manholes and draining water, as needed. In-scope medium-voltage exposed to significant moisture and voltage will be tested to provide an indication of the condition of the conductor insulation. It is not clear to the NRC if you intend to use these periodic actions to preclude cable testings. If this is the case, provide a technical justification of why removing water in the cable manholes will provide assurance that water is not present elsewhere in the conduits or duct banks. If this is not the case, revise your AMP as appropriate to requires both testing and inspecting water accumulation in the manholes.	The intent of the VY AMP B.1.17 is to inspect for water in manholes and to test the in-scope medium-voltage cables.		Cox, Alan	Open	Nguyen, Duc
117	B.1.17-N-05 GALL X1.E3 recommends to test all in-scope inaccessible medium-voltage cables. Are all inaccessible medium-voltage cables within the scope of license renewal tested?	Yes, all of the in-scope medium-voltage cables will be subject to testing per the program requirements.		Lori Potts	Accepted	Nguyen, Duc
118	B.1.17-N-06 GALL X1.E3 under parameters monitored/inspected states that the specific type of test performed will be determined prior to the initial test and is to be a proven test for detecting deterioration of the insulation system due to wetting such as power factor, partial discharge test, or polarization index, as described in EPRI TR-103834-P1-2, or other testing that is state-of-the-art at the time the test is performed. VYNPS B.1.17 under the same attribute only states that the specific type of test performed will be determined prior to initial test. Revise your AMP to be consistent with GALL or explain how do you ensure that the test to be performed will be in accordance with industrial guideline or that is the state-of-the-art at the time the test is performed.	The VY AMP B.1.17 will state that the specific type of test to be performed will be determined prior to the initial test and is to be a proven test for detecting deterioration of the insulation system due to wetting as described in EPRI TR-103834-P1-2, or other testing that is state-of-the-art at the time the test is performed.		Potts & Stroud	Accepted	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
119	B.1.17-N-07 Do you currently inspect water in the man holes. Are there any existing procedures for inspecting man holes. Provide a copy of these procedures.	Yes, the manholes are inspected on an annual basis. An example is attached.		Stroud, Mike	Open	Nguyen, Duc
120	B.1.17-N-08 GALL X1.E3 defines medium-voltage cable is the voltage level from 2kV to 35kV VYNPS AMP B.1.17 defines medium-voltage cable is the voltage level from 2kV to 15kV. Revise the scope of the inaccessible medium - voltage level to be consistent with GALL or provide a technical justification that why the water tree phenomenon is not applicable to voltage level greater than 15kV. Are there any inaccessible medium - voltage cables within the scope of licensee that are greater than 15kV.	VY does not have any medium-voltage cable in-scope that is greater than 15KV. The VY AMP B.1.17 will define medium-voltage cable as voltage level from 2KV to 35KV.		Stroud, Mike	Accepted	Nguyen, Duc

<i>Item</i>	<i>Request</i>	<i>Response</i>	<i>Lead</i>	<i>Support</i>	<i>Status</i>	<i>Inspector:</i>	
121	B.1.18-N-03 GALL X1.E2 under corrective actions states that such an evaluation is to consider the significance of the test results, the operability of the component, the reportability of the event, the extent of the concern, the potential root causes for not meeting the test acceptance criteria, the corrective actions required, and likelihood of recurrence in addition to 10 CFR Part 50, Appendix B. VYNPSB.1.18 under the same element only refers to 10 CFR Part 50 Appendix B to address corrective actions. Revise your AMP corrective actions to be consistent with GALL or provide a justification of why such specific corrective actions are not necessary.	VYNPS B.1.18 AMP under corrective actions states that "an engineering evaluation will be performed when the test acceptance criteria are not met in order to ensure that the intended functions of the electrical cables can be maintained consistent with the current licensing basis. This evaluation is performed in accordance with the Entergy corrective action process per procedure EN-LI-102. This procedure provides the stated elements to consider including the extent of the concern, the potential root causes for not meeting the test acceptance criteria, the corrective actions required, and likelihood of recurrence. See procedure details below: Adverse Condition – An event, defect, characteristic, state or activity that prohibits or detracts from safe, efficient nuclear plant operation or a condition that could credibly impact nuclear safety, personnel safety, plant reliability or non-conformance with federal, state, or local regulations. Adverse conditions include non-conformances, conditions adverse to quality and plant reliability concerns. Operability Evaluation – A written evaluation of a Condition Report, to determine impact of the identified condition on the operability of structures, systems or components. The operability evaluation includes a determination for reportability. Extent of Condition – An evaluation to identify the total population of items that have or may have the same problem as identified in the original CR problem statement. The intent of the Extent of Condition review focuses on a determination of any potential impact to the operability/functionality of similar components, equipment, systems, human performance traps/issues, or organizational processes/programs. Root Cause – The most basic cause(s) for a failure or a condition that, if corrected or eliminated, will preclude repetition of the event or condition. Corrective Action – Corrective actions include actions intended to preclude repetition of significant conditions and				Accepted	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
		those intended to correct adverse conditions. Corrective Actions to Preclude Repetition – A type of corrective action intended to correct the root cause of a condition and thereby preclude repetition. A copy of EN-LI-102 is attached.				
122	B.1.18-N-04 Why high range radiation monitor cable is not considered in scope of X1.E2.	VYNPS electrical AMR, AMRE-01, states that "Cables and connections in the high-range reactor building area monitoring system, support a license renewal intended function. However, the entire length of these cables are EQ and do not require aging management since they are subject to replacement based on a qualified life.		Stroud, Mike	Accepted	Nguyen, Duc
123	B.1.19-N-03 For all new AMP provide a commitment number and the implementation period for this new program.	Resolution: Commitments numbers are being supplied in a table for all commitments.			Closed	Nguyen, Duc
124	B.1.19-N-04 GALL X1.E1 under scope of program states that this inspection program applies to accessible electrical cables and connections within the scope of license renewal that are installed in adverse localized environments caused by heat or radiation in the presence of oxygen. VYNPS AMP B.1.19 under the same element you have stated that this program will include accessible insulated cables and connections installed in structures within the scope of license renewal and prone to adverse localized environments. Clarify if the scope of this program include only insulated cables and connections installed in structures which (structures) are in scope of license renewal and prone to adverse localized environments or insulated cables and connections within the scope of license renewal that are installed in adverse localized environments. Why structures are included in the scope of the AMP. Modify the scope of the program as appropriate to remove the confusion	In a structure means inside the plant not outside. The VY B.1.19 will state that the program applies to accessible electrical cables and connections within the scope of license renewal that are installed in adverse localized environments caused by heat or radiation in the presence of oxygen.		Stroud, Mike	Accepted	Nguyen, Duc
125	B.1.19-N-05 Explain why the GALL X.E1, EQ, is included in the basic document for non-EQ insulated cables and connections program.	A revised copy of GALL for XI.E3 was provided.		Cox, Alan	Draft	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
126	3.6.2.2-N-09 GALL XI.E5 states that the fuse holder (not part of a larger assembly) metallic portions are subject to fatigue due ohmic heating, thermal cycling, electrical transients, frequent manipulation, vibration, chemical contamination, corrosion, and oxidation. In the LRA Table 3.6.1 item 3.6.1-6, you have stated that NUREG-1801 aging effect is not applicable to VYPNS. In AMRE-01 Revision 0 Page 14 of 108, you have states that VYNPS employs two general types of fuse holders. The first type is the bolt-mount fuse holder that uses either a lug or capscrew to secure the fuse between the clamps. The second type of fuse holder is the metallic clamp fuse holder, which uses the spring tension. Installation data for cables and connections indicated that the only fuse holders installed at VYNPS that utilize metallic clamps to secure the fuse are either part of active assembly or are located in circuits that perform no license renewal indented functions. Are there any bolt-mount fuse holders in scope of licensee renewal that are not part an active assembly. If there are, explain why aging effects as identified in the GALL is not applicable.	No, the two types of fuse holders are all located in active devices.		Stroud, Mike	Accepted	Nguyen, Duc
127	B.1.1-L-06 Program Description item. The LRA says "Buried components are inspected when excavated during maintenance". Is maintenance performed on an as needed basis or is it on a scheduled frequency	The Maintenance inspectons being credited are inspspectons that are being performed on an as needed basis since there are no routine scheduled maintenance inspections of buried piping.		Ivy, Ted	Draft	Lintz, Mark
128	B.1.1-L-07 Program Description item. The LRA says "A focused inspection will be performed within the first 10 years of the period of extended operation...." The LRA seems to address inspections that occur both before and during the period of extended operation; the Appendix A reference does not clarify this confusion. When does VY plan to perform these focused inspections?	The focused inspection will be performed within the first 10 years of the period of extended operation, unless an opportunistic inspection occurs within this ten-year period as stated in LRPD-02 section 4.1.B.4.b of the Buried Piping Inspection Program and in Appendix B.1.1 of the LRA. The first sentence in the third paragraph of the program description in the LRA describes a review of operating experience (if available) for examinations of buried piping for relevant information and is not a required inspection. Inspections of buried carbon steel piping were performed in 2003 which is within the 10 years priop to the period of extended operation. These inspections revealed no coating or piping degradation.		Lori Potts	Draft	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
129	B.1.1-L-07 Program Description item. Depending on the response to the above question, please clarify the Appendix A reference, as needed.	Appendix A is correct as written. The focused inspection is specified for the ten years immediately after entering the period of extended operation. This is consistent with the SER for Brunswick dated March 2006.		Ivy, Ted	Draft	Lintz, Mark
130	B.1.1-L-08 Acceptance Criteria item. The GALL Report says "Any coating and wrapping degradations are reported and evaluated according to site corrective actions procedures." The LRA says "Coating and wrapping degradation, or loss of material due to corrosion, is evaluated in accordance with the site corrective action program." PP 7030, Section 4.8, is very general, e.g., "signs of degradation," "areas of degradation." Does VY intend to enhance this guidance, as well as that addressed in question B.1.1-L-04?	It was the intent of the enhancement specified in B.1.1 to revise appropriate sections of procedure PP7030 to include attributes of coating damage and evidence of corrosion. This would include updating sections 4.3 & 4.8.		Ivy, Ted	Draft	Lintz, Mark
131	B.1.1-L-09 Operating Experience item. Why does LRDP-05, Section 4.4.1 reference the BWR CRD Return Line Nozzle Program?	Yes, this is a typographical error and it should have said that the Buried Piping Inspection Program provides reasonable assurance that the effects of aging will be managed such that the current licensing basis for the period of extended operation.			Draft	Lintz, Mark
132	B.1.30.2-M-03 An exception to BWRVIP - 130 criteria for feedwater copper was noted. Please provide related information. (Water Chemistry Control - BWR Program.	Provided Revision 1 of Technical Justification for Continued Operation of Entergy Northeast Vermont Yankee.(ENVY) with Feedwater Copper > 0.2 ppb. (4/20/06 08:00)	Rick Gerdus	Lori Potts	Accepted	Mike Morgan
133	B.1.30.2-M-04 Please provide a copy of recent third party assessments of the Water Chemical Control - BWR Program.	Third party assessment of BWR Water Chemistry control from March 2001, May 2003 and April 2005 were provided for review. (4/20/06 08:00)	rick Gerdus	Lori Potts	Accepted	Mike Morgan

Item	Request	Response	Lead	Support	Status	Inspector:
134	B.1.8-L-02 Detection of Aging Effects item. PP 7006, Section 4.4.4, refers to a Type A Test, which will be developed. Please explain.	Type A testing) and due to the expectations of VY on maintaining operating procedures current, OP 4029 (test procedure) was retired. By retiring the procedure that is conducted once every 10 to 15 years, forces the test engineer to develop a Type A Test that adopts the latest test equipment, processes, software programs, and testing philosophies into to the infrequently conducted evolution (SOER 91-01), thereby insuring that the complex Type A testing process is thoroughly understood by the test engineer. With the inception of 10CFR50 Option B (increased intervals of	Ted Underkoffler	Ahrabli, Reza & Pott	Accepted	Lintz, Mark
135	B.1.8-L-03 Monitoring and Trending item. The GALL Report says "The frequency of these tests depends on which option (A or B) is selected. With Option A, testing is performed on a regular fixed time interval as defined in 10 CFR Part 50, Appendix J." The LRA says "The first Type A test after the April 1995 Type A test shall be performed no later than April 2010. This is a one-time extension of the NEI 94-01, 10 year Type A test interval to 15 years. NRC approved Amendment 227 to Facility Operating License DPR-28 for VYNPS to extend the primary containment integrated leak rate testing interval from 10 years to no longer than 15 years on a one-time basis." Amendment 227 refers to its being a one-time extension, so it would not appear to extend into the period of extended operation. Please clarify	Under current regulations and NEI guidance, the one time change does not affect the Type A test interval or number of tests to be conducted during the period of extended operation.	Ted Underkoffler	Ahrabli, Reza	Accepted	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
136	B.1.8-L-04 Monitoring and Trending item. Does VY take any exception to the testing guidance of RG 1.163 or NEI 94-01?	At present, VY does not take direct exception to any provision in RG 1.163. VY does take exception to NEI 94-01. Specifically, with the adoption (TSA 223) of the Alternative Source Term (AST), the Main Steam Line Pathways were determined to be separate radiological (consequences) release paths exclusive of the Primary-Secondary Containment System radiological (consequences) release path. This pathway is subject to the 10CFR50 Appendix J Type C testing methodologies but the calculation methods, leakage-rate summations, and acceptance criteria were determined to be independent of the Primary Containment allowable leakage rate (La). NEI 94-01 does not address the effects AST adoption on a primary containment leakage rate testing program; therefore, an exception (TSA 223) for the VY current license and through the possible license extension period is required.	Ted Underkoffler	Ahrabli, Reza	Accepted	Lintz, Mark
137	B.1.8-L-05 Acceptance Criteria item. LRPD-02 identifies the following as an exception that the LRA did not. The GALL Report says "Acceptance criteria for leakage rates are defined in plant technical specifications. These acceptance criteria meet the requirements in 10 CFR Part 50, Appendix J, and are part of each plant's current licensing basis. The current licensing basis carries forward to the period of extended operation." The LRA says "VYNPS acceptance criteria are defined in plant technical specifications." Please expand on why the acceptance criteria is not consistent with the GALL Report.	See B.1.18-L-04 exception basis for response.	Ted Underkoffler	Ahrabli, Reza	Accepted	Lintz, Mark
138	B.1.8-L-06 Operating Experience item. Does VY monitor industry issues/events and assess these for applicability to its own program?	VY incorporates, as necessary, lessons learned into the Containment Leak Rate Program from operating experiences identified at VY and industry operating experiences. The incorporation of the lessons learned follows a process of an understanding of the operating experience, an assessment of the current program to determine applicability, and the document development to affect the change.	Ted Underkoffler	Ahrabli, Reza	Accepted	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
139	B.1.14-K-01 Requested operating experience information on a sample of the heat exchangers included in the Heat Exchanger Monitoring Program if any is available.	<p>RESPONSE: Operating History search was performed on the following components:</p> <p>HPCI gland Seal condenser (E-18-1A) HPCI Lube oil coolers (E-19-1A) RCIC lube oil coolers (E-21-1A) CST aluminum steam reheat coil (E-HB-1) Drywell atmospheric cooling units (RRU 1, 2, 3, 4) Drywell equipment drain cooler (E-ESC-1A) Reactor Recirculation pump seal water coolers (P-18-1A/B Hx-3) Reator Recirculation pump motor upper & lower bearings oil coolers (P-18-1A/B Hx-2) Reactor Recirculation pump motor air coolers (P-18-1A/B Hx-1)</p> <p>Keywords used in PCRS: Fouling Eddy Current Tube replacement Tube plugging Plugging Tube blockage</p> <p>No information was found on the heat exchanger or coolers for any of the above components in PCRS.</p> <p>EMPAC search on components: WO 2001-5153 performed 10/04/2002- E-18-1A HPCI Gland Seal condenser Cleaning and inspection WO 1997-8128 performed 04/02/1998- E-19-1A Inspect lube oil side of HPCI lube oil cooler RRU-1 through 4 are inspected and lubricated during refueling outages- External inspections only LIST OF ATTACHMENTS: WO 2001-5153 WO 1997-8128 NRC has these attachments.</p>	Kelly Loch	Ivy, Ted	Accepted	Kennedy, Mike

Item	Request	Response	Lead	Support	Status	Inspector:
140	B.1.14-K-02 What is the proposed frequency of inspection and basis of the frequency selected for the heat exchangers included in the Heat Exchanger Monitoring Program.	<p>RESPONSE:</p> <p>The development of the non Service Water (SW) cooled heat exchanger inspection and monitoring plan would be similar to the process which was used for the SW heat exchangers.</p> <p>The scope of this plan would include, but not be limited to, the following heat exchangers and coolers:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Drywell Coolers, RRU-1 through 4 <input type="checkbox"/> HPCI Gland Seal Condenser, E-18-1A <input type="checkbox"/> HPCI Lube Oil Cooler, E-19-1A <input type="checkbox"/> RCIC Lube Oil Cooler, E-21-1A <input type="checkbox"/> CST Reheat Coil, E-HB-1 <input type="checkbox"/> Drywell Equipment Drain Cooler, E-ESC-1A <input type="checkbox"/> Reactor Recirculation Pump Seal Water Coolers, P-18-1A HX-3 & P-18-1B HX-3 <input type="checkbox"/> Recirculation Pump Motor Upper & Lower Bearing Oil Coolers, P-18-1A HX-2 & P-18-1B HX-2 <input type="checkbox"/> Recirculation Pump Motor Air Coolers, P-18-1A HX-1 & P-18-1B HX-1 <p><input type="checkbox"/></p> <p>The follow is an example of the steps which would be used to develop the plan:</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> An initial visual inspection would be performed of the in scope heat exchangers. This inspection would document the "as-found" conditions. Additional examination methods may be used if "as-found" conditions warrant, (i.e. ultrasonic thickness measurements or radiography). The results of these inspections would be used to establish the frequency of future inspections. 2. <input type="checkbox"/> Where physically accessible, baseline eddy current data would be obtained. The number of tubes sampled would be determined based on industry best practices and EPRI recommendations. The results of these tests would be used to determine the frequency of future inspections and the number of tubes to be sampled. 3. <input type="checkbox"/> Future inspections and eddy current examinations would be scheduled via the 	Harry Breite	Ivy, Ted	Accepted	Kennedy, Mike

Item	Request	Response	Lead	Support	Status	Inspector:
		Preventive Maintenance process.				
		4.□Performance monitoring and trending would be performed in accordance with established fleet procedures.				
		Once developed the plan would be administered by the onsite engineering organization.				
141	B.1.12.1-L-07 Scope of Program item. The GALL Report has requirements in numerous program elements that are on a six-month frequency. The LRA states that these are on a refueling (twenty-month) frequency. Please discuss and justify the inspection frequency differential for the CO2 .system.	System walkdown every 6 months, starting prior to period of extended operations. The VY AMP B.1.17 will state that the specific type of test to be performed will be determined prior to the initial test and is to be a proven test for detecting deterioration of the insulation system due to wetting as described in EPRI TR-103834-P1-2, or other testing that is state-of-the-art at the time the test is performed	Larry Lukens		Draft	Lintz, Mark
142	Accurately state / describe the information / documentation requested. Be as specific as possible. __B.1.18-N-04__ Why high range radiation monitor cable is not considered in scope of XI.E2.	Resolution__VYNPS electrical AMR, AMRE-01, states that "Cables and connections in the high-range reactor building area monitoring system, support a license renewal intended function. However, the entire length of these cables are EQ and do not require aging management since they are subject to replacement based on a qualified life.		Stroud, Mike	Draft	Nguyen, Duc

Item	Request	Response	Lead	Support	Status	Inspector:
143	<p>B.1.18-N-05 GALL XI.E2 under parameter monitored/inspected states that the parameter monitored are determined from the specific calibration, surveillance or testing performed and are based on the specific instrumentation under surveillance or being calibrated, as documented in plant procedures. VY AMP B.1.18 under same attribute states that results from the calibrations or surveillance of components within the scope of license renewal will be reviewed. The parameters reviewed will be based on the specific instrumentation circuit under surveillance or being calibrated, as document in the plant calibration or surveillance procedures.</p> <p>a Why does the review of calibration results belong to parameter monitored/inspected attribute?</p> <p>b. The parameter monitored/inspected for cable testing was not mentioned. What is the parameter for cable testing. Confirm that cable testing will be perform on cables in-scope of XI.E2 that are disconnected during instrumentation calibration.</p>		Al Haumann	Stroud, Mike	Open	Nguyen, Duc
144	<p>B.1.18-N-06 VY B.1.18 under acceptance criteria address the acceptance criteria for calibration. However, it silences on the acceptance criteria for cable testing. What is the acceptance criteria for cable testing?</p>		Al Haumann	Stroud, Mike	Open	Nguyen, Duc
145	<p>B.1.20-K-03 Please provide QA Surveillance and self-assessment referenced in operating experience for Oil Analysis Program.</p>	<p>QA Surveillance SRVY 2002-025 and 2003 self-assessment provided. (4/19/06 17:00)</p>	Ron Scherman	Lori Potts	Open	Kennedy, Mike
146	<p>B.1.12.1-L-07 Scope of Program item. The GALL Report has requirements in numerous program elements that are on a six-month frequency. The LRA states that these are on a refueling (twenty-month) frequency. Please discuss and justify the inspection frequency differential for the CO2 .system.</p>	<p>The TRM frequencies are those that were in the Technical Specifications. We have no objection to increasing the frequency of these surveillances, provided thatthey can be safely performed online.</p> <p>System walkdown every 6 months starting prior to period of extended operation.</p>	Larry Lukens		Draft	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
147	B.1.12.1-L-08 Preventive Actions item. The GALL Report says "For operating plants, the fire hazard analysis assesses the fire potential and fire hazard in all plant areas...." The LRA says "The NUREG-1801 Preventive Actions do not specify any measures for preventing aging effects of fire protection structures, systems or components." Has VY performed a fire hazard analysis?	VY has a Fire Hazards Analysis, which we will be happy to provide	Larry Lukens		Draft	Lintz, Mark
148	B.1.12.1-L-09 Parameters Monitored/Inspected item. The GALL Report says "Visual inspection of the fire barrier walls, ceilings, and floors examines any sign of degradation such as cracking, spalling, and loss of material caused by freeze-thaw, chemical attack, and reaction with aggregates." The LRA says "Procedures will be enhanced to specify that fire damper frames in fire barriers shall be inspected for corrosion." What is the material and environment of the damper frames?	These dampers are in ventilation ducts; therefore, the conditions would be similar to other ambient conditions in the plant. Specific materials not known at this time. Will research and provide separately Material is carbon steel: environment is indoor air.	Larry Lukens		Draft	Lintz, Mark
149	B.1.12.1-L-10 Parameters Monitored/Inspected item. What examination technique will be used?	Visual exam, consistent with ANSI 45.2.6	Larry Lukens		Draft	Lintz, Mark
150	B.1.12.1-L-11 Parameters Monitored/Inspected item. The GALL Report says "The diesel-driven fire pump is under observation during performance tests such as flow and discharge tests, sequential starting capability tests, and controller function tests for detection of any degradation of the fuel supply line." The LRA says "Procedures will be enhanced to state that the diesel engine sub-systems (including the fuel supply line) shall be observed while the pump is running." Is there a VYNPS commitment associated with this enhancement?	Commitment #9	Larry Lukens		Draft	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
151	B.1.12.1-L-12 Acceptance Criteria item. The GALL Report says "Inspection results are acceptable if there are no visual indications (outside those allowed by approved penetration seal configurations) of cracking, separation of seals from walls and components, separation of layers of material, or ruptures or punctures of seals; no visual indications of concrete cracking, spalling and loss of material of fire barrier walls, ceilings, and floors; no visual indications of missing parts, holes, and wear and no deficiencies in the functional tests of fire doors." The LRA says "Acceptance criteria will be enhanced to verify no significant corrosion." How much is "significant?"	Commitment #8	Larry Lukens		Draft	Lintz, Mark
152	B.1.12.1-L-13 Acceptance Criteria item. What actions are taken, either with or without significant corrosion?	Commitment #8	Larry Lukens		Draft	Lintz, Mark
153	B.1.12.1-L-14 Acceptance Criteria item. Is there a VYNPS commitment associated with this enhancement?	Commitment #8	Larry Lukens		Draft	Lintz, Mark
154	B.1.12.1-L-15 Acceptance Criteria item. The GALL Report says "No corrosion is acceptable in the fuel supply line for the diesel-driven fire pump." The LRA says "Acceptance criteria will be enhanced to verify that the diesel engine did not exhibit signs of degradation while it was running; such as fuel oil, lube oil, coolant, or exhaust gas leakage." Does the enhancement include corrosion in the fuel supply line of the diesel-driven fire pump?	Evidence of corrosion inside the fuel line would appear as corrosion products in the fuel filter. Evidence of corrosion in the fuel filter would result in a Condition Report and an evaluation. Evidence of corrosion would be an inspection criterion for fuel filters removed from service. In addition, the internals of the fuel line are managed by the deisel fuel oil monitoring program	Larry Lukens		Draft	Lintz, Mark
155	B.1.12.1-L-16 Acceptance Criteria item. Is there a VYNPS commitment associated with this enhancement?	Commitment # 9	Larry Lukens		Draft	Lintz, Mark
156	B.1.12.1-L-17 Operating Experience item. Has VY experienced any fire-protection-related operating experience? Please describe.	OE Coordinator provided 12 since 2002 with the key word "Fire."	Larry Lukens		Draft	Lintz, Mark
157	B.1.12.1-L-18 Operating Experience item. Has VY reviewed and applied the industry operating experience that relates to fire protection?	VY routinely reviews Industry OE in accordance with fleet procedure, EN-OE-100. The VY OE coordinator routes OE to affected line organization groups, and enters action items into the corrective action process to ensure that timely review is completed and documented	Larry Lukens		Draft	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
158	B.1.12.1-L-19 Operating Experience item. Is any VY plant-specific operating experience not bounded by industry operating experience?	No	Larry Lukens		Draft	Lintz, Mark
159	B.1.12.1-L-20 Program Description item. Does VY inspect the fire dampers?	Yes. Surveillance Test #7134 is the Operating Cycle Test of Fire Barrier Dampers, using procedure OP 4019. We will add Fire Dampers to the program description.	Larry Lukens		Draft	Lintz, Mark
160	B.1.12.1-L-21 Program Description item. Does VY have an electric fire pump?	Yes. The pump end is identical to the diesel fire pump. It is located in the Intake Structure. Component ID is P-40-1B. Managed by Fire Water Program. Test Procedure # OP 4105.	Larry Lukens		Draft	Lintz, Mark
161	B.1.12.1-L-22 Program Description item. How does VY inspect/test Appendix R-required equipment?	Test Procedure #	Larry Lukens			Lintz, Mark
162	B.1.12.1-L-23 Detection of Aging Effects item. The GALL Report says "Visual inspection by fire protection qualified inspectors...." Of what does this consist, at VY?	At VY, the program is not yet sufficiently formal and will include training, acceptance criteria, and qualification as a "fire protection qualified individual ANSI 45.2.6 The injection program, EN-MA-102, will be used.	Larry Lukens		Draft	Lintz, Mark
163	B.1.12.1-L-24 Acceptance Criteria item. The GALL Report says "Inspection results are acceptable if there are no visual indications (outside those allowed by approved penetration seal configurations) of cracking...." OP 4019, Appendix B, allows cracks in poured concrete barriers, fire barriers, concrete block walls, drywall, plaster, silicone foam, pyrocrete, and smoke/gas seals.	OP 4019 acceptance criteria will be revised to require that any recordable "outside those allowed by approved penetration seal configurations" visual indication be identified and entered into the corrective action process for evaluation. The CA number to complete this action by 12/31/06 is CR-VTY-2006-112. CA-02; CA-03.	Larry Lukens		Draft	Lintz, Mark
164	B.1.30.1-M-02 Is the identified enhancement to AMP B.1.30, Water Chemistry Control – Auxiliary Systems, necessary and appropriate for this program		Rick Gerdus	Ivy, Ted	Open	Mike Morgan
165	B.1.30.1-M-03 Confirm that there are no other in-scope systems that rely on this AMP for managing the effects of aging.		Rick Gerdus	Ivy, Ted	Open	Mike Morgan

Item	Request	Response	Lead	Support	Status	Inspector:
166	B.1.21-K-04 LRA Section 3 Table 2's do not list the One-Time Inspection Program with the water chemistry control programs for components for which GALL recommends One-Time Inspection to verify effectiveness of the Water Chemistry Control Program.	LRA Section 3 Table 1's discussions provide the link between the One-Time Inspection and Water Chemistry Control Program for these components. The Appendix A description for the Water Chemistry Control - BWR, closed cooling water and Auxiliary Systems programs will be revised to provide a link to the One-Time Inspection Program activities to confirm the effectiveness of these programs.	Rick Gerdus	Lori Potts	Accepted	Kennedy, Mike
167	B.1.21.-K-05 Please provide sample selection criteria for the small - bore piping one-time inspection program.	Inspection locations will be based on physical accessibility exposure levels, NDE techniques, and locations identified in NRC Information Notice 97-46, Unisolable Crack in High-Pressure Injection Piping. The initial population will include all Class 1 small - bore piping.	Scott Goodwin	Lori Potts	Accepted	Kennedy, Mike
168	B1.15.2-P-01 Please explain why the AMP for ISI (IWB, IWC, & IWD) is not consistent with the GALL AMP XI.M1				Draft	Patterson, Malcol
169	B.1.15.2-P-02 The AMP for ISI (IWB, IWC, & IWD) makes no mention of any risk-informed program. Please confirm whether or not there are current or future plans for the implementation of risk-informed ISI.				Draft	Patterson, Malcol
170	Provide the basis for determining the inspections required for BWRVIP-48. Particarly address whether VY has any furnace sensitized material or Alloy 182 material that requires EVTI.		Larry Lukens	Finnin, Ron	Open	Hsu, Robert
171	Provide the last two inspection reports for one unreinforced Masonry Wall without bracing, one reinforced Masonry Wall without bracing and one steel braced Masonry Wall.		David Grimes	Ahrabli, Reza	Open	Woodfield, Jon
172	Please provide copies of OP4339 and EN-OE-100, procedures related to the Fire Water System Program.	Provided copies of OP4339 and EN-OE-100.		Lori Potts	Accepted	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
173	In Section 2b Preventive actions of LRPD-02 and it is stated that there are not preventive actions. GALL says that monitoring of water chemistry to control pH and concentration of corrosive contaminants and treatment with hydrazine are effective in reducing selective leaching. Do any of the systems that have selective leaching as an AMP have a treated water environment that performs any of these treatments to control selective leaching?	Yes, The Water Chemistry Control - Closed Cooling Water and BWR programs at VYNPS control pH and corrosive contaminants and could be effective in controlling selective leaching. Therefore any system and components with both the selective leaching and the water chemistry programs as aging management programs are included measures that could be effective in controlling the aging effect of selective leaching.		Ivy, Ted	Closed	Patterson, Malcol
174	What is the flaw evaluation calculation for the jet pump diffuser welds? Is this calculation considered a TLAA?		Larry Lukens	Finnin, Ron	Open	Hsu, Robert
175	Will UT of the flawed jet pump diffuser welds continue?		Larry Lukens	Finnin, Ron	Open	Hsu, Robert
176	Will VY continue to inspect 10% of CRD guide tubes every 12 years?		Larry Lukens	Finnin, Ron	Open	Hsu, Robert
177	Will VY continue to inspect the top guide at the rate of 10% every 12 years? This question has been addressed in item # 14.		Larry Lukens	Finnin, Ron	Closed	Hsu, Robert
178	What is the exam history, results, schedule and current status of shroud H8 and H9 welds?		Larry Lukens	Finnin, Ron	Draft	Hsu, Robert
179	Please provide a recent third party assessment of the preventive maintenance program.		Rich Rusin	Lori Potts	Draft	Mike Morgan
180	Following the proposed enhancement to the Periodic Surveillance and Preventive Maintenance Program, will it be apparent that these tasks contain an aging management element?		Rich Rusin	Lori Potts	Draft	Mike Morgan

Item	Request	Response	Lead	Support	Status	Inspector:
181	B.1.22-L-01 Program Description item. The GALL Report says "The External Surfaces Monitoring program is based on system inspections and walkdowns. This program consists of periodic visual inspections of steel components such as piping, piping components, ducting, and other components within the scope of license renewal and subject to AMR in order to manage aging effects. The program manages aging effects through visual inspection of external surfaces for evidence of material loss. Loss of material due to boric acid corrosion is managed by the Boric Acid Corrosion Program." The LRA says "This program entails inspections of external surfaces of components subject to aging management review. The program is also credited with managing loss of material from internal surfaces, for situations in which internal and external material and environment combinations are the same such that external surface condition is representative of internal surface condition." What materials are within the scope of this AMP?	The Walkdown program is not exclusive of any system material condition. It should be noted that the walkdown process may find signs of external piping degradation that would be evaluated for potential impact to interior piping surfaces. The walkdown program is not intended to inspect interior piping and component surfaces unless they have been revealed for inspection during maintenance and repairs.			Draft	Lintz, Mark
182	B.1.22-L-02 Program Description item. What examination methods are used?	System Walkdown use eye contact examination. System Engineers are not qualified in visual examination methods such as those used to qualify welding. The Entergy walkdown procedure provides a listing and a checklist of examinations to be performed during the walkdown. Plant issues ranging from standard housekeeping to equipment problems are documented and acted upon accordingly through work planning and the condition reporting system.			Draft	Lintz, Mark
183	B.1.22-L-03 Operating Experience item. . Has VY experienced any external surfaces-related operating experience? Please describe.	System Walkdowns , both online and during refueling outages, have found corrosion on piping and component surfaces. For instance, each refueling, the interior of the condenser hotwell and waterboxes are inspected. Repairs and or more detailed inspections are affected as required. In Refueling Outage 24 (November 2005) examination of spring cans supporting service water piping revealed rust and the need for recoating. Corrective actions driven through condition reporting and work order planning will result in recoating in 2006.			Draft	Lintz, Mark

Item	Request	Response	Lead	Support	Status	Inspector:
184	B.1.22-L-04 Operating Experience item. Has VY reviewed and applied the industry operating experience that relates to external surfaces?	Vermont Yankee System Engineers have received training in the EPRI Aging Management Field guide, which in effect is a collection of OE from many nuclear plant systems, both mechanical and electrical, as well as buildings and structures intended to provide specific details of corrosion and degradation throughout the plant. Review of OE is an ongoing activity for Vermont Yankee System Engineers intended to ensure latest issues are known and to continue to develop background related to assigned systems.			Draft	Lintz, Mark
185	B.1.22-L-05 Operating Experience item. Is any VY plant-specific operating experience not bounded by industry operating experience?	Through its condition reporting system, Vermont Yankee will contribute to industry OE as its Condition Reporting Committee directs. Aging related issues with Vermont Yankee are typical of industry based OE.			Draft	Lintz, Mark
186						
187						