

**UNITED STATES
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD**

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In re:

Docket Nos. 50-247-LR; 50-286-LR

License Renewal Application Submitted by

ASLBP No. 07-858-03-LR-BD01

Entergy Nuclear Indian Point 2, LLC,
Entergy Nuclear Indian Point 3, LLC, and
Entergy Nuclear Operations, Inc.

DPR-26, DPR-64

May 3, 2013

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**STATE OF NEW YORK'S
REPLY TO ENTERGY AND NRC STAFF'S
PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW FOR
CONTENTION NYS-5**

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TABLE OF CONTENTS

	Page
INTRODUCTION	1
POINT I NRC Staff Has Misrepresented The Record As To A Critical Element Of The Board’s Review	2
POINT II The Commission Has Never Held That Complying With Unspecified “Key Provisions” Of GALL Is Sufficient To Provide Reasonable Assurance	3
POINT III The Record Supports The State’s Position That An AMP For Buried Pipes Without Cathodic Protection Will Not Provide Reasonable Assurance	9
POINT IV NRC Staff And Entergy’s Proposed Findings Of Fact Are Inconsistent As To The Roles And Enforceability Of Implementing Procedures	11
POINT V Additional State Proposed Findings Of Fact In Reply.....	13
CONCLUSION.....	16

Pursuant to 10 C.F.R. § 2.712, the Atomic Safety Licensing Board's ("ASLB" or "Board") July 1, 2010 Scheduling Order at ¶ N, and the Board's February 28, 2013 Order, the State of New York hereby replies to Entergy and NRC Staff's Proposed Post-Hearing Findings of Fact and Conclusions of Law on Contention NYS-5.

INTRODUCTION

Entergy and NRC Staff's Proposed Findings of Fact and Conclusions of Law provide no basis in law or fact to support a Board decision in their favor on Contention NYS-5. NRC Staff inexplicably and blatantly misstates the record in this proceeding, asserting that Entergy's proposed aging management program for buried pipes complies with the GALL Report, Revision 2, when no testimony supports that position (and indeed, Staff's own testimony refutes it). Rather than acknowledge that the State's expert is correct about the corrosive conditions at Indian Point, Entergy would have the Board suspend common sense and believe that although no cathodic protection is warranted, Entergy is installing it anyway – for no reason. Here is the simple story: Indian Point has corrosion problems that necessitate an aging management program requiring cathodic protection. Entergy's current proposed aging management program makes no reference to cathodic protection and as such, it is incapable of providing reasonable assurance that the facilities' current licensing basis will be maintained throughout the period of extended operation. By omitting cathodic protection from the terms of the requested operating licenses for Indian Point, Entergy avoids making cathodic protection an enforceable condition – one for which compliance can be compelled. Entergy aggregates to itself maximum flexibility and discretion to do as it sees fit and to follow its own interests.

POINT I

NRC STAFF HAS MISREPRESENTED THE RECORD AS TO A CRITICAL ELEMENT OF THE BOARD'S REVIEW

NRC Staff states in its Revised Proposed Findings of Fact that “[t]he Applicant has adopted GALL Report AMP XI.M41, without exception.” NRC Revised Staff Proposed Finding of Fact (“NRC Staff Proposed Finding”) ¶ 2.169, *citing* Tr. at 3732-33. This statement is false. In support of its statement, NRC Staff cites testimony from its own expert in which he states *the opposite* – that Entergy has adopted GALL Report XI.M34, the version of the GALL Report that all experts in this proceeding acknowledge has been superceded. The record in this proceeding is clear that Entergy has *not* adopted GALL Report Rev. 2, section XI.M41, but has instead continued to commit only to the outdated version of the GALL Report, Rev. 1, section XI.M34. *See* Entergy Test. (ENTR30373) at 17, A.34(2) (“the details of the ten-element NUREG-1801 program XI.M34 description were incorporated by reference into the IPEC LRA.”); 32, A41 (“As stated in LRA Section B.1.6, the BPTIP described in the April 2007 LRA was consistent with the program attributes described in NUREG-1801, Section XI.M34, Buried Piping and Tanks Inspection, without exception.”). Entergy also makes this clear in its Proposed Findings of Fact. Entergy Proposed Finding ¶ 93 (“Entergy committed to NUREG-1801, Rev.1, AMP XI.M34, without exception.”).

NRC Staff admits that it did not apply GALL Revision Two to Entergy’s AMP for buried pipes because this revision was issued after Entergy’s LRA for Indian Point was submitted. Staff Proposed Finding ¶ 2.19, n21 (“Inasmuch as GALL Report Rev. 2, AMP XI.M41, was issued after Entergy submitted its LRA, the Staff did not apply this AMP to the IP2/IP3 LRA.”) But NRC Staff *did* apply GALL Revision Two to another AMP in this

proceeding, that of inaccessible cables.¹ Thus, NRC Staff has not even consistently applied one version of the GALL Report to all aspects of Entergy's application.

Further elucidating NRC Staff's confusion, NRC Staff member William Holston testified that Entergy's proposed aging management program is *not* consistent with GALL Report Rev. 2, section XI.M41 because Entergy's proposed aging management program does not require cathodic protection. Tr. 3393:18-21 (Holston).

POINT II

THE COMMISSION HAS NEVER HELD THAT COMPLYING WITH UNSPECIFIED "KEY PROVISIONS" OF GALL IS SUFFICIENT TO PROVIDE REASONABLE ASSURANCE

As discussed above, Entergy's proposed AMP is not consistent with the GALL Report, Revision 2, Section XI.M41. However, NRC Staff and Entergy claim that because the AMP meets the "key elements or objectives" of GALL Report, Revision 2, Section XI.M41 it provides reasonable assurance. Entergy Proposed Finding ¶ 117; NRC Staff Proposed Finding ¶ 2.19, n.21; ¶ 2.126, n.58. The logical implication of this statement is that there must be other "elements and objectives" of GALL Rev. 2, section XI.M41 that were not applied, or with which Entergy has not complied. NRC Staff also admits that "[i]n effect, the NRC Staff's review consisted of a 'hybrid' evaluation, under GALL Report Rev. 1, GALL Report Rev. 2, and LR-ISG-2011-03." NRC Staff Proposed Finding of Fact ¶ 2.19, n.21, *citing* Tr. at 3938; *see also* Tr. 3937:16-17 (in which NRC Staff witness Mr. Holston states that he neither applied GALL Revision One nor GALL Revision Two to Entergy's license renewal but "GALL 1.5 kind of"). Neither Entergy nor NRC Staff offer any Commission case law authorizing either a

¹ See NRC Staff's Proposed Findings of Fact and Conclusions of Law Part 3: Contention NYS-6/7 (Non-EQ Inaccessible Medium and Low Voltage Cables) at ¶ 3.116.

hybrid approach between current and outdated NRC Staff guidance, or measuring an AMP against only “key elements” of the current GALL Report. In fact, NRC Staff testimony and language in the GALL Report itself say otherwise.

As NRC Staff itself notes in its testimony:

An applicant can take credit for a program described in the GALL Report such that its AMP would be found acceptable, in one of three ways:

- (1) It may establish a program that is completely consistent with all the recommendations in the GALL Report, or
- (2) It may establish a program that is consistent with the GALL Report with exception(s) to certain portion(s) of the GALL Report that the applicant does not intend to implement, and/or it may state enhancements, revisions or additions to existing aging management programs that the applicant commits to implement prior to the period of extended operation to ensure that its AMP is consistent with the GALL Report AMP. Enhancements may expand, but not reduce the scope of an AMP, or
- (3) If an applicant’s facility has specific materials, environments, aging effects and/or plant-specific operating experience for which aging cannot be effectively managed by any of the GALL Report AMPs, the applicant may develop a plant-specific program that meets the recommended format and content of an AMP as set forth in Section A.1.2.2, Aging Management Program for License Renewal, NUREG-1800, Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants.

NRC Staff Test., NRCR20016 at 12-13. These are the only three options laid out by the Commission for the application of the GALL Report during license renewal. Neither Entergy nor NRC Staff have asserted in this proceeding that Indian Point has “specific materials, environments, aging effects and/or plant-specific operating experience for which aging cannot be effectively managed by any of the GALL Report AMPs.” Thus, option (3) is not in play here. This means Entergy’s options for relying on the GALL Report as a measure of the adequacy of its AMP are limited to either option (1) establishing a program that is completely consistent with all the recommendations in the GALL Report, or option (2) establishing a

program that is consistent with the GALL Report with exceptions to certain portions of the GALL Report that the applicant does not intend to implement. Entergy has chosen to follow option (1) and has adopted the GALL Report, Revision 1, Section XI.M34 without exception. As the State's expert has testified, adhering to this outdated aging management program will not provide the basis for reasonable assurance – it does not take into account current operating experience that reflects corrosion problems at numerous facilities, including Indian Point. *See* Duquette Test. (NYS000164) at 16:8-14, 25:18-26:11; Duquette Report (NYS000165) at 1-2, 21.

And the GALL Report itself states in its Introduction:

NUREG 1801, "Generic Aging Lessons Learned (GALL) Report," is referenced as a technical basis document in NUREG - 1800, "Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants" (SRP- LR). The GALL Report lists generic aging management reviews (AMRs) of systems, structures, and components (SSCs) that may be in the scope of license renewal applications (LRAs) and identifies aging management programs (AMPs) that are determined to be acceptable to manage aging effects of SSCs in the scope of license renewal, as required by 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." If an applicant takes credit for a program in the GALL Report, it is incumbent on the applicant to ensure that the conditions and operating experience at the plant are bounded by the conditions and operating experience for which the GALL Report was evaluated. If these bounding conditions are not met, it is incumbent on the applicant to address the additional effects of aging and augment the GALL report AMPs as appropriate

If an LRA references the GALL Report as the approach used to manage aging effect(s), the NRC staff will use the GALL Report as a basis for the LRA assessment consistent with guidance specified in the SRP - LR.

GALL, Rev. 2 (NYS000147A) at 1; *see also* GALL, Rev. 1 (NYS000146A at 3)(nearly identical language). The State submits that by its plain language, NRC Staff in the GALL Report has unambiguously required *the applicant's AMP itself* to comply with GALL, not a series of ancillary documents that are not submitted to the Board with a license renewal

application but that are instead generated after the license renewal audit.²

After NRC Staff concluded that Entergy's AMP did not comply with GALL Revision Two because it did not include cathodic protection (Tr. 3393:18-21 (Holston)), Staff then measured the AMP's unenumerated "key elements" against the Interim Staff Guidance, creating what NRC Staff deems a hybrid, or a "GALL 1.5" review. Tr. 3937:16-17. NRC Staff is without the authority to pick and choose elements of the GALL Report it applies to its review of a license renewal application. An applicant must adopt, either wholly or with exceptions, the entirety of the GALL Report.

As the State's expert has testified, compliance with the old version of the GALL Report fails to address the highly relevant operating experience that prompted Revision Two. Duquette Test. (NYS000164) at 16:8-14, 25:18-26:11; Duquette Report (NYS000165) at 1-2, 21. As such, adherence to Revision One does not provide the basis for reasonable assurance. By not applying GALL Revision Two to Indian Point's buried piping AMP, Staff allowed Entergy to avoid the requirements of the updated recommendations (even though they were created specifically to address operating experience plants like Indian Point with a history of corrosion and leaks). NRC Staff gave Entergy a "pass" a second time when Staff then used the absence of cathodic protection as a self-fulfilling justification for Entergy's continuing *lack* of cathodic protection: the same Staff member who reviewed Entergy's application then weakened GALL Revision Two's requirements and issued the Interim Staff Guidance, and deemed Entergy's

² The State previously explained in its Proposed Findings of Fact that although Staff testified that Entergy's procedures were available for review during the Staff audit, this could not have been the case because the procedures had not been created yet. State Proposed Findings ¶¶ 117-18.

application sufficient with that.³ Tr. 3726:4-8, 16-21 (Holston: “Even as we were issuing GALL Rev 2 ... for plants with cathodic protection, we recognized that there were several applicants that did not have cathodic protection. ... After we gained enough experience with evaluating plants without cathodic protection, we issued the interim staff guidance, and which it now [sic] specifically includes recommendations for a number of inspections, soil samplings, searching, operating experience for plants without cathodic protection.”). In other words, NRC Staff wrote GALL Revision Two to require cathodic protection⁴ but then, upon receiving application communications from applicants who did not have and did not intend to install cathodic protection, and did not wish to be obligated to install cathodic protection, NRC Staff retreated and issued an amendment to the GALL Report via the Interim Staff Guidance which relaxed this GALL standard. NRC Staff then applied this prong of the Interim Staff Guidance to Entergy’s application and deemed Entergy’s outdated proposed aging management program sufficient.

As Judge Wardwell observed, the role of the GALL Report in NRC Staff evaluations can be fickle. NRC Staff testified that

All of the GALL report is a series of recommendations. None of them are absolute requirements. They are one method that an applicant can utilize to meet the reasonable assurance or establishment a reasonable assurance of degradation of piping.

³ See NRC Test. (NRCR20016) at 2, ¶ A.2.b (William Holston is the principal reviewer of Entergy’s AMP for buried pipes and authored the draft and final ISGs).

⁴ Tr. 3734:4-9 (JUDGE WARDWELL: “So let me ask you this. If an applicant wants to be consistent with GALL 2, they would have to install cathodic protection; is that correct?” MR. HOLSTON: “To be consistent with GALL Rev 2, AMP 11.M41, yes.”); *see also* Tr. 3735:3-10 (MR. HOLSTON: “So for a plant that committed to meet AMP XI.M41 as published in GALL Rev 2 ... the preventive action that says that you will have cathodic protection. So if they said they were consistent, then we’d expect that plant to have cathodic protection.”) (as corrected by transcript corrections; *see* Board Order dated Feb. 28, 2013).

Tr. 3729:10-15. To this, Judge Wardwell responded:

[Y]ou're claiming it's just recommendations, and it seems like you want, when it's convenient, you're going to rely on GALL as an absolute, and when it's not convenient, "Oh by the way, they're just suggestions."

Tr. 3732:2-6 (J. Wardwell).

Commission case law holding that GALL can be used as a reference point for the adequacy of an AMP was not decided in the context of a fluctuating GALL Report, or in the context of a revision to the GALL Report issued soon after an application was received which then lessened the requirements to which an applicant would be held, as the ISG did here. *See, e.g., Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-10-17, Docket No. 50-271-LR (Jul. 8, 2010) at 45 (issued six months before GALL Revision Two was issued, when the only operating revision of GALL was GALL Revision One). It appears to be an issue of first impression whether the Commission's statements regarding the role of the GALL Report hold true when NRC Staff is continuing to apply only an outdated version of the GALL Report to a license renewal application. Given that GALL Report Revision Two was issued specifically to address operating history like that of the corrosion and leaks occurring at Indian Point, the Commission's intent cannot be met by using only GALL Revision One as the measuring benchmark for adequacy at Indian Point. As discussed below, an examination of the operating history at Indian Point and the record in this proceeding supports the implementation of cathodic protection as a necessary component in any adequate aging management program at Indian Point.

POINT III

THE RECORD SUPPORTS THE STATE'S POSITION THAT AN AMP FOR BURIED PIPES WITHOUT CATHODIC PROTECTION WILL NOT PROVIDE REASONABLE ASSURANCE

Despite NRC Staff and Entergy's protestations to the contrary, the record in this proceeding has established that cathodic protection is warranted, and that an AMP without cathodic protection will not provide reasonable assurance. Moreover, although NRC Staff has crafted a "guidance" document that would allow an applicant to avoid installing cathodic protection, it is not clear in this proceeding why Entergy would need to do that – Entergy has already installed cathodic protection on multiple systems, indicating that cathodic protection is both feasible and warranted at Indian Point. What Entergy has not done is include cathodic protection in its aging management program for NRC Staff review.

NRC Staff admits that upon reviewing Entergy's operating history through Requests for Additional Information, "We saw backfill issues We saw coating issues." Tr. 3935:6-8 (Holston). Entergy also testified that when their consultant performed the APEC survey, it recommended the installation of cathodic protection at more than one location. Tr. 3715:22-3716:3 (Azevedo). In fact, NRC Staff and Entergy's witnesses testified on multiple occasions about recently-installed cathodic protection systems at Indian Point. *See* Tr. 3672:2-4 (Holston); 3715:22 – 3716:3 (Azevedo); 3736:7-11 (Azevedo); 3811:16-19 (Lee); 3830:8-12 (Cox); 3846:13-3848:14 (Cox, J. Wardwell, Azevedo). Entergy's witness Mr. Cox even characterized Entergy's cathodic protection program as "extensive." Tr. 3830:8-12 (Cox).

Yet, Entergy and NRC Staff continue to argue that cathodic protection isn't necessary or warranted at this site. NRC Staff's Proposed Findings state that "the Staff found that no significant failures (*i.e.*, failure to provide pressure boundary integrity such that adequate flow

and pressure cannot be delivered) of in-scope buried piping have occurred, such that the installation of cathodic protection would be warranted.” NRC Staff Proposed Finding ¶ 2.170. This statement is wrong for two reasons. First, it assumes in circular fashion that protective measures like cathodic protection must only be taken once a safety-impairing failure has already occurred. No such requirement exists in law, regulation, guidance, or common sense – the purpose of preventive measures is to *prevent* such occurrences. Second, given the substantial testimony the Board received concerning the measures Entergy has taken to install cathodic protection (measures Entergy’s own witness called “extensive”), it should be evident to NRC Staff that cathodic protection is indeed warranted at this site. Entergy’s own commissioned APEC survey recommended cathodic protection at this site. Tr. 3715:22-3716:3 (Azevedo).

NRC Staff and Entergy apparently wish the Board to determine that Entergy deemed cathodic protection necessary as a practical matter, but that it is not necessary as a component of aging management. Such a conclusion is not logical – either cathodic protection is needed for aging management, in which case it must be required in the aging management program, or it is not. Here, Entergy’s actions and testimony indicate that cathodic protection is needed for aging management. As such, cathodic protection is required to be a component of Entergy’s aging management program at the Indian Point facilities. Moreover, NRC Staff has also acknowledged that inspections are not preventive measures. Tr. 3859:1-2; NRC Staff Proposed Finding ¶ 2.194. This testimony also supports the inclusion of cathodic protection in Entergy’s aging management program.

POINT IV

NRC STAFF AND ENTERGY'S PROPOSED FINDINGS OF FACT ARE INCONSISTENT AS TO THE ROLES AND ENFORCEABILITY OF IMPLEMENTING PROCEDURES

Entergy asserts that its corporate procedures, which implement its AMP, are enforceable. Entergy's Proposed Finding ¶ 128. NRC Staff's testimony directly contradicts Entergy's statement. NRC Staff Test., NRC000016 at 47:

Any corporate policies that may be adopted by Entergy are not binding on the licensee, for NRC regulatory purposes, unless they are NRC regulatory requirements or are incorporated in the license or the UFSAR. Although Entergy may elect to supplement its license requirements by following its corporate policies at the Indian Point site, those policies would not be enforced by the NRC unless they are incorporated in the current or renewed license or otherwise become NRC requirements. This applies to the three documents discussed by Dr. Duquette at pages 17-26 of his testimony and pages 12-19 of his Report (EN-DC-343, CEP-UPT-0100, and SEP-UIP-IPEC) (respectively, Exhibits NYS000172, NYS000173, and NYS000174).

Thus, the evidentiary record establishes that those Entergy policies and procedures are not now enforceable.

Entergy's Proposed Findings state that "actions required by Entergy's corporate and plant-specific procedures can be enforced by the NRC." Entergy Proposed Finding ¶ 128. But Entergy admits that NRC Staff stated that these procedures "are *not* binding on a licensee, for NRC regulatory purposes," unless they are NRC requirements or incorporated in the license or the UFSAR. Entergy Proposed Findings ¶ 127 (emphasis added). NRC Staff concurs with this point in its Proposed Findings of Fact. NRC Staff Proposed Findings ¶ 2.209. Only those procedures which "would conflict with a commitment in the IPEC UFSAR Supplement or other licensing basis document" require the § 50.59 process. Entergy Proposed Finding ¶ 131.

Entergy testimony makes clear that Entergy does not truly believe its corporate

procedures are or should be enforceable. *See* Tr. 3944:5-11 (“MR. COX: ... Treating these commitments as part of the FSAR gives us a good balance between having something that’s enforceable and then also having the flexibility to make changes where it’s necessary.”); *see also* Tr. 3653:25 - 3654:1-6 (“MR. COX: I’m not sure what purpose it would serve if you put those four procedure numbers in the UFSAR. If I come up with a new procedure that’s an improvement on one of those methods, have I got to get prior Commission approve [sic] on that? I’ve got to do the 50.59 evaluation to make changes to that. And it just seems like you’re taking away the flexibility.”).

In other words, Entergy seeks to maintain “flexibility” (*i.e.*, the ability to change corporate procedures without NRC notice or potential for enforcement) by only putting certain information into the UFSAR and leaving the rest of the details in corporate documents, also known as implementing procedures. As the State detailed in its original Proposed Findings of Fact, the details Entergy is leaving out of the UFSAR or a binding license commitment as to buried pipes include how to determine the final corrosion risk assessment number (NYS000173 at 13); how to determine the inspection priority and applicable inspection intervals (NYS000173 at 13); how to select pipes for examination (NYS000173 at 14); how to group pipes for inspection (NYS000174 at 11), pipeline inspection locations (NYS000174 at 12), and preferred inspection methodologies for piping (NYS000174 at 10); leak detection methods that may be used (NYS000173 at 15); acceptance criteria (NYS000173 at 16), and replacement and mitigation strategies (NYS000173 at 17-18, ENT000599 at 16-17).

Because none of the details above or Entergy’s other implementing procedures are incorporated in the UFSAR or in Entergy’s buried piping commitment in the LRA, there is no evidence in this record of any *legally binding* requirement that Entergy ever inform NRC staff

of changes to these or other implementing procedures. So for example, Entergy could change its pipeline inspection locations, leak detection methods, acceptance criteria, replacement strategies, inspection priority and inspection intervals, or corrosion risk assessment number with no notice to the NRC, and the NRC would not be able to take any enforcement action should Entergy adopt less stringent protocols for any of these.

Although Entergy witnesses testified that Entergy “screens” changes to its implementing procedures to determine if a full § 50.59 evaluation is required, this is required only by an internal Entergy procedure called a Process Applicability Determination. Entergy Proposed Finding ¶ 129 (*citing* ENT000602). There is no evidence in the record that these screenings are required by regulation, and they are in themselves only part of an Entergy manual which is not enforceable by NRC. *Id.* This is particularly relevant regarding Contention 5 and aging management of buried pipes because, as the State’s expert has testified, there is currently insufficient information regarding buried piping classification, corrosion risk assessment, and inspection prioritization. NYS000164 at 16:2-14, 17:7-11, 24:17 – 25:17. NRC Staff agrees with the State’s expert, acknowledging that there are no corrosion rates in Entergy’s AMP, but argues that this level of information is not required in an AMP. NRC Staff Proposed Finding ¶ 2.148. Yet NRC Staff’s witness also testified that he tells applicants, “[t]o be consistent with the GALL, you shall consider corrosion risk.” Tr. 3671:5-6 (Holston). It is not clear how these two statements are consistent.

POINT V

ADDITIONAL STATE PROPOSED FINDINGS OF FACT IN REPLY

244. Entergy asserts that Dr. Duquette has no expertise in radiation physics, but fails to note how this is relevant to Contention NYS-5, which addresses primarily corrosion in buried

pipes. Entergy Proposed Finding ¶ 78. The Board should find that Dr. Duquette, an expert in corrosion, is unreservedly qualified to offer testimony on Contention NYS-5.

245. Entergy states that section XI.M34 of NRC Staff's GALL Report, Revision 1, constitutes Entergy's proposed aging management program. Entergy Proposed Finding ¶ 93, citing Tr. at 3313:18-22 (Cox). This is not consistent with the Commission's statements in *Vermont Yankee* in which the Commission stated that licensees were obligated to create aging management programs for the NRC Staff that *demonstrate* consistency with the GALL Report; the Commission did not contemplate an applicant using the GALL Report itself as its AMP. *Vermont Yankee, LLC and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-10-17 at 45-46, 72 N.R.C. 1, 37 (Jul. 8, 2010).

246. The record contains no justification provided by Entergy for its lack of cathodic protection, as required by the Interim Staff Guidance (ISG). The ISG requires an applicant not using cathodic protection to "demonstrate through the submission of an analysis that external corrosion control (i.e., cathodic protection and coatings) is not needed." NRC000162 at 2. Entergy has acknowledged through its installation of cathodic protection that cathodic protection *is* in fact needed at Indian Point. The ISG also requires a demonstration through the submission of a study the impracticality of installing or operating a cathodic protection system. *Id.* Again, since Entergy has installed and is operating cathodic protection systems, the record does not and cannot contain such a showing. For this reason among others, Entergy is not in compliance with the ISG, contrary to Entergy and NRC Staff's statements to the contrary. Entergy Proposed Findings ¶¶ 106, 117, 215; 230(a); NRC Staff Proposed Findings ¶¶ 2.19, n.21; 2.126, n.58; 2.131, n.62; 2.166; 2.168.

247. Entergy stated in its Proposed Findings of Fact that Entergy's inspections found

no “significant” corrosion. Entergy Proposed Finding ¶ 185. Entergy does not cite any legal basis for requiring a finding of “significant” corrosion before consideration of corrosion in the plant’s operating experience. The record shows, and Entergy admits, that Entergy conducted pre-period of extended operation inspections and found degraded coating conditions. Entergy Proposed Finding ¶ 189; Tr. 3935:6-8; NYS000178. Moreover, buried pipes at the Indian Point facilities have, in fact, experienced instances of through-wall corrosion. NYS000170.

248. Entergy admits that it is installing and evaluating the need for further installations of cathodic protection. Entergy Proposed Finding ¶ 198. The installation of cathodic protection at Indian Point substantiates the State’s expert’s opinion that cathodic protection is needed at Indian Point and renders NRC Staff’s position that no cathodic protection is warranted baseless. *See* NRC Staff Proposed Finding ¶ 2.170.

249. NRC Staff acknowledges that inspections are not preventive measures and that poor backfill, such as that present at Indian Point, results in coating damage. Tr. 3859:1-2; NRC Staff Proposed Finding ¶ 2.194.

250. Despite acknowledging that inspections are not preventive measures, NRC Staff states that more inspections are sufficient to replace actual preventive measures like cathodic protection. NRC Staff Proposed Findings ¶ 2.152, n76. However, NRC Staff does not go on to clarify how more inspections could be sufficient when Entergy’s inspections that have already been conducted to date have found corrosion and when a significant leak did occur in the condensate storage return line – a leak that was not identified, let alone prevented, by inspections.

251. The record does not support Entergy’s statement that the “BPTIP” or Buried Pipes and Tanks Inspection Program is consistent with GALL Revisions 1 and 2. Entergy

Proposed Finding ¶ 230. First, as the State made clear in its Proposed Findings of Fact (*see* State Proposed Findings ¶¶ 12, 13), the record is not clear on what the BPTIP is. Second, NRC Staff testified that Entergy's AMP is *not* consistent with GALL Rev. 2. Tr. 3393:18-21 (Holston). As such, Entergy may not claim consistency with the GALL Report as an indicator of an AMP that provides reasonable assurance that the facilities' current licensing basis will be maintained throughout the period of extended operation.

CONCLUSION

For the foregoing reasons, and those expressed in the State's Proposed Findings, Entergy and NRC Staff's proposed findings of law and conclusions of law provide no basis in fact or law for a Board decision in Entergy's favor on Contention NYS-5.

Respectfully submitted,

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Dated: May 3, 2013