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W3F1-2021-0028

10 CFR 2.201

April 2, 2021

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

Subject: Response to An Apparent Violation in NRC Inspection Report
05000382/2021013; EA-20-114

Waterford Steam Electric Station, Unit 3
NRC Docket No. 50-382
Renewed Facility Operating License Nos. NPF-038

Reference: U.S. Nuclear Regulatory Commission (NRC) letter to Entergy Operations, Inc.,
"Waterford Steam Electric Station, Unit 3 – Inspection Report
05000382/2021013 and NRC Investigation Report 4-2017-033," (ADAMS
Accession No. ML21063A502), dated March 5, 2021.

Entergy Operations, Inc. (Entergy) hereby submits the Response to An Apparent Violation EA-20-114 for Waterford Steam Electric Station, Unit 3 in the Enclosure. As requested, the response contains the reason for the apparent violation, the corrective steps that have been taken and the results achieved, the corrective steps that will be taken, and the date when full compliance was achieved. Entergy further provides its enforcement perspective of the event.

This letter contains no new regulatory commitments.

Should you have any questions or require additional information, please contact Paul Wood, Manager, Regulatory Assurance at (504) 464-3786.

Respectfully,

A handwritten signature in black ink that reads "John Ferrick".

JF/jmg/jkb

Enclosure: Response to An Apparent Violation in
NRC Inspection Report 05000382/2021013; EA-20-114

cc: NRC Region IV, Regional Administrator
NRC Region IV Director, Division of Reactor Projects
NRC Senior Resident Inspector – WF3

Enclosure

W3F1-2021-0028

Response to An Apparent Violation in
NRC Inspection Report 05000382/2021013; EA-20-114

**Entergy Operations, Inc.
Response to An Apparent Violation in
NRC Inspection Report 05000382/2021013; EA-20-114**

Apparent Violation

Reference 1 proposed an apparent violation of 10 CFR Part 50, Appendix B, by Entergy Operations, Inc. (Entergy) at the Waterford Steam Electric Station, Unit 3 (WF3) as restated below:

The inspectors identified an apparent violation of 10 CFR Part 50, Appendix B Criterion V for the licensee's failure to accomplish activities affecting quality in accordance with Procedure PMC-002-003, "Concrete Cutting," Revision 3. Specifically, on November 9 and 10, 2016, a licensee contract superintendent directed employees to disengage an equipment protective device and continue drilling into a safety-related concrete structure containing embedded items without the required engineering evaluation, approval, and documentation. This resulted in the inappropriate cutting of structural rebar in the B1 diesel fuel oil storage tank vault.

Response by Entergy Operations, Inc.

As previously identified, documented in the WF3 Corrective Action Program (CAP), and corrected, Entergy concurs that a violation of 10 CFR Part 50, Appendix B Criterion V occurred in November 2016. Specifically, contract employees working on a Fuel Oil Storage Tank (FOST) replacement project at WF3 disengaged an electronic protection device (EPD) and inappropriately drilled into a piece of structural rebar without engineering evaluation, approval, and documentation as required by PMC-002-003, "Concrete Cutting," Revision 3, and the Job Safety Hazards Analysis (JSHA) in effect at the time. This resulted in a piece of structural rebar being partially cut. Entergy disagrees, however, that the contractor in question directed employees to drill into rebar without the requisite engineering approval or that he did so on two separate days.¹ Entergy also disagrees that escalated enforcement action is appropriate in this case and believes that a non-cited violation is more suitable pursuant to the NRC Enforcement Policy.

I. Entergy's Identification and Correction of the Apparent Violation

A. Project Background

In the fall of 2016, contract personnel were performing construction activities in support of the WF3 Fuel Oil Storage Tank ("FOST") project. As a part of those activities, contractor personnel were drilling holes in pre-assigned locations in the concrete floors and walls of FOST Vaults A1 (Alpha) and B1 (Bravo) in advance of constructing pier and beam structures in those vaults.

¹ Although Reference 1 refers to the individual in question as a "contract superintendent," his role was as a low-level contract "Civil Supervisor," which is how he was identified in Entergy's contact list for the FOST Project. The Civil Supervisor reported to a contract "Site Manager," who in turn reported to a contract "Project Manager," who in turn reported to other still relatively low-level personnel designated by Entergy to provide project coordination and oversight.

If the bit of the drill they were using touched a metallic object, an EPD (a safety grounding device required by EN-IS-111, "General Industrial Safety Requirements" whenever concrete drilling is performed) would automatically stop the drill to prevent drilling into an energized cable, to prevent possible electrical shock to those operating the drill. In the event the drill bit touched metal in the wall, engaging the EPD, the applicable Work Orders allowed abandoning that hole and adjusting the drilling location to a different spot within a given tolerance of the initial drilling location. Should the workers be unable to drill the alternate hole without triggering the EPD, consistent with Entergy's procedures and the applicable Work Order, a series of JSAs in effect during the course of the project required them to contact Entergy Engineering to request an assessment as to whether they could continue to drill in the originally designated hole, notwithstanding the presence of metal. If Engineering approval was obtained, a specialized drill bit referred to by personnel on the project as a "rebar eater" was used to drill through the metallic object.

It was relatively commonplace during the course of the project for the workers to encounter metallic objects in the concrete walls and floor, including rebar ties and other pieces of metal that may be embedded in the concrete, that would engage the EPD. After Engineering personnel had determined that it was safe to drill through those objects, pursuant to the JSA the EPD could be disengaged and drilling could continue with alternate safety controls in place.

The contract personnel who were drilling the holes were pipefitters and laborers. They understood that the EPD was in use for their safety, but there was confusion among them about the circumstances in which the EPD could be permissibly and safely disengaged to allow drilling to continue. Once the worker confusion became apparent to Entergy personnel, in September 2016, an Entergy Safety Representative issued a revised JSA to improve its clarity and the JSA requirements were reviewed with the contractor drilling crews. Nonetheless, unbeknownst to Entergy at the time, some of the workers continued to misunderstand the purpose and use of the EPD and alternate controls under the revised JSA.

Additionally, it was common for the contract laborers and even the contractor supervisors on the project to refer to any metal encountered in the wall as "rebar," as demonstrated by calling the specialty drill bit used to drill through metal a "rebar eater" despite the fact that it was impermissible, in accordance with Entergy's procedures, to drill through any structural rebar.

During the course of the project, crews were working simultaneously in both the Alpha and Bravo Vaults. As of early November 2016, Engineering had already provided prior approval to drill through non-structurally credited original construction steel in the floor of the Alpha Vault without the use of an EPD, as Engineering had already identified the structural rebar configuration in the Alpha Vault floor.

B. Issue Identification

On or about November 9, 2016, one of the drilling crews was drilling a hole in the east wall of the Bravo Vault when they encountered a metallic object several inches from the surface of the concrete and the EPD engaged. Consistent with the flexibility provided in the applicable Work Order, the workers began to drill a second, replacement hole immediately next to the first, abandoned hole. They again encountered a grounded metallic object several inches from the surface of the concrete. The EPD stopped the drill and the contract personnel contacted Entergy Oversight, which in turn contacted Engineering to assess the encountered metallic object.

An engineer inspected the second hole and concluded that the metallic object was structural rebar that should not be cut through. The engineer then observed that the rebar with which the drill bit had come into contact was running horizontally along the wall. He then inspected a third hole several inches away from the second hole but on the same plane as the horizontally oriented rebar and observed that the rebar in the third hole appeared to be partially cut. The engineer notified Entergy management regarding his observation, and Entergy immediately stopped all drilling on the project.

C. Corrective Action

Entergy initiated a condition report (CR-WF3-2016-07183), which required performing an extent of condition inspection of all open drilled holes, completing an engineering evaluation to assess the structural integrity and operability of the wall, and evaluating the acceptability of the current equipment and processes being used. The engineering evaluation concluded that (i) the hole identified by the engineer was the only hole containing cut rebar; (ii) the cut into the rebar did not pass through the rebar entirely; and (iii) even assuming it had, discounting the rebar did not adversely impact the structural integrity or operability of the wall.

Entergy also promptly undertook a Human Performance Evaluation related to the incident, which concluded that on November 8, 2016, a contractor Civil Supervisor gave a contractor foreman on the project a specialized drill bit (referred to by contract personnel as a “rebar eater”) so as to allow a drilling crew to drill through a metallic object, erroneously believing that the foreman was working on drilling through metal in the floor of the Alpha Vault, as previously authorized by Engineering. The foreman, in turn, erroneously believed that given its depth, the obstacle in the East Wall of the Bravo Vault was only a non-consequential metallic obstruction that the crew was pre-authorized to drill through.

Based on the conclusions of the Human Performance Evaluation, Entergy took several additional corrective actions commensurate with the circumstances to prevent recurrence, including implementing a rebar eater drill bit checkout and return log sheet, implementing a hole drilling log for each hole to be included in the relevant work package, and re-briefing the crew on the applicable JSHA requirements before they were authorized to resume work. On November 22, 2016, contractor personnel were permitted to recommence concrete drilling.

II. Summary of Specific Information Requested in Reference 1

A. Reasons for the Apparent Violation

The primary cause of the apparent violation determined by the WF3 causal analysis was that contractors violated Entergy’s Procedure PMC-002-003 and JSHA 2016-34 when a contractor gave the contract foreman on the project the specialized drill bit, erroneously believing that the foreman was working on drilling through metal in the floor of the Alpha Vault, which was previously authorized by Engineering.

Additionally, a contributing cause of the apparent violation, as determined by the Human Performance Evaluation, was that a miscommunication occurred between the contractor and the contract foreman at the time the contractor issued the rebar eater to the contract foreman.

B. Corrective Steps That Have Been Taken and The Results Achieved

As provided above, upon learning of the potential errant drilling, Entergy: (1) immediately stopped all work on the project, (2) performed an extent of condition inspection of all open drilled holes, (3) completed an engineering evaluation to assess the structural integrity and operability of the wall, (4) evaluated the acceptability of the current equipment and processes being used, (5) undertook a Human Performance Evaluation to identify the cause of the procedural violation; (6) implemented a rebar eater drill bit checkout and return log sheet; (7) implemented a hole drilling log for each hole to be included in the relevant work package; and (8) re-briefed the crew on the applicable JSHA requirements before they were authorized to resume work. As a result, with more than 200 holes drilled in each of the FOST areas, there were no further instances of cut structural rebar on the project.

C. Corrective Steps That Will Be Taken

Because the appropriate corrective actions were already taken in 2016, and full procedural compliance was achieved, no additional corrective actions are ongoing or planned in connection with this apparent violation.

D. Date When Full Compliance Will Be Achieved

Full compliance was achieved on November 22, 2016, at which time contractor personnel on the FOST Project were permitted to recommence concrete drilling.

III. Entergy's Enforcement Perspective

Pursuant to the NRC Enforcement Policy and Enforcement Manual, non-escalated enforcement and a non-cited violation are appropriate in this case. Even if escalated enforcement is pursued, given Entergy's identification and corrective action, no civil penalty should be imposed.

A. Escalated Enforcement is Not Warranted Because the Violation was Not Willful

The NRC assesses the significance of a violation by considering: (a) actual safety consequences; (b) potential safety consequences; (c) potential for impacting the NRC's ability to perform its regulatory function; and (d) any willful aspects of the violation.² It is Entergy's understanding from Reference 1 that escalated enforcement is being considered in this case due to an NRC Office of Investigations finding that the contractor willfully violated Entergy's procedures. For purposes of the Enforcement Policy, the term "willfulness" refers to conduct involving either: (i) a careless disregard for requirements, or (ii) a deliberate violation of requirements or a falsification of information.³

Here, the NRC appears to believe that the contractor may have deliberately violated Entergy's procedures. Specifically, Reference 1 explains that its Enclosure 1 "provides a factual summary

² NRC Enforcement Manual, December 1, 2020 (ADAMS Accession # ML20329A339) ("NRC Enforcement Manual") at Section 1.1.1(B); NRC Enforcement Policy, June 15, 2020 (ADAMS Accession # ML19352E921) ("NRC Enforcement Policy") at Section 2.2.1.

³ NRC Enforcement Policy at Section 7 (Glossary).

of the basis for the NRC's concern that willfulness was associated with an apparent violation in this case." Enclosure 1, a Factual Summary from Office of Investigations Report 4-2017-033, in turn provides that the contractor "deliberately violated" PMC-002-003 and JSHA 2016-34 by "failing to obtain engineering evaluation and approval when contract workers reported that they encountered a metal obstruction, and by directing the workers to continue to drill through structural rebar."⁴

As explained above, the contractor did not carelessly disregard, much less deliberately violate, Entergy's procedures. Rather, the evidence shows that he gave a specialized drill bit to one of his foremen based upon a misunderstanding as to the location in which it would be used. In addition, Entergy disagrees that the contractor ever directed workers to drill through structural rebar and is unaware of any evidence that shows that he did. Thus, escalated enforcement is not appropriate in this case.

1. Evidence Shows Actions Were Not Deliberate

The Enforcement Policy provides that "deliberate misconduct occurs when an individual voluntarily and intentionally . . . engages in conduct that the individual knows to be contrary to a requirement, procedure, instruction, contract, purchase order, or policy of a licensee, applicant for a license, or a contractor or subcontractor of a licensee or applicant for a license."⁵ In other words, the person committing the violation must know the requirement exists, understand the requirement, know the requirement is applicable at the time of the violation, and know his or her actions are contrary to the requirement.⁶ Of particular relevance in this case, in order to make a finding of deliberate misconduct, there must be sufficient evidence, either circumstantial or direct, that speaks to the contract supervisor's state of mind at the time he violated Entergy's procedure.⁷ The available evidence (both direct and circumstantial) shows that the contractor did not deliberately violate Entergy's procedures because he did not know that his actions were contrary to Entergy's requirements.

First, Entergy's contemporaneous Human Performance Evaluation concluded that the contractor believed, at the time, that he provided the specialized drill bit for work on pre-authorized drilling through metal in the floor of Vault A rather than drilling in Vault B. As far as Entergy is aware, the contractor's explanation has not deviated over time.

Second, the contractor had no apparent motive for knowingly authorizing or directing drilling through structural rebar, contrary to Entergy requirements. Cutting through rebar is a time-consuming and work-intensive process. It would be far more efficient for the contractors to move to a different hole within a given tolerance, as allowed by the applicable work order, and then ask for an engineering evaluation if necessary.

⁴ Emphasis added.

⁵ NRC Enforcement Policy at Section 7 (Glossary) (emphasis added).

⁶ NRC Enforcement Manual at Part II, Section 1.1.2(C).

⁷ See *In the Matter of Joseph Shea*, CLI-21-03, slip op. at 8-9 (2021).

Third, the contractor would have had no hope of concealing a deliberate violation of Entergy's Concrete Cutting procedure. The holes and their interiors were openly visible and there would have been no prospect of concealing cut rebar.

Finally, only a single piece of structural rebar was impacted. If the contractor had been directing workers to drill through structural rebar in the East wall of the Bravo Vault as indicated in Reference 1, out of the hundreds of holes drilled by the contractors, more cut or nicked structural rebar would have been identified.

2. Evidence Cited in Reference 1 is Insufficient to Support a Willful Violation

Two pieces of evidence are referenced in Enclosure 1 to Reference 1 to support the Office of Investigations finding of deliberate misconduct: (1) a Daily Construction Report dated November 10, 2016; and (2) a November 21, 2016 email from the contractor to his superior. These two pieces of evidence fall short of proving that the contractor deliberately violated Entergy's procedures.

First, the referenced Daily Construction Report does not prove that structural rebar was actually being cut, much less that it was being done at the contractor's direction.⁸ According to the excerpt cited in Enclosure 1 of Reference 1, the Daily Construction Report "documented in the work completed section, 'Working the East wall having issues. Need to cut rebar' and documented in the probable future delay section, 'Its slow cutting thru the rebar.'"

Documenting a need to "cut rebar" is consistent with the widespread overuse and incorrect use of the term "rebar" to refer to any metal obstruction given that at the time the report was written, it had not been confirmed by Engineering that the encountered metallic obstructions were rebar and it was never appropriate to cut through actual structural rebar. Further, the referenced report appears to be indicating a future need to cut through metal rather than an after-the-fact documentation of cutting it, which is consistent with the determination made by the contractor personnel on or about November 9, 2016, that Engineering needed to evaluate the encountered metallic obstructions prior to resuming drilling in the East Wall of the Bravo Vault.

An interpretation of the report to mean that the contractors were trying to drill through actual rebar and thus the contractor was deliberately violating Entergy's procedure is undercut by the fact that documenting a procedural violation is inconsistent with the concealment that would be expected from someone who was deliberately violating the procedure. A more plausible interpretation of "Its slow cutting thru the rebar," particularly in light of the fact that no rebar was actually cut through, is that the report was documenting the fact that encountering a metal object, moving to a new hole, and then needing to request an Engineering evaluation (as the records show the contractors did) was slowing down the project.

In sum, given the overall context and the fact that no structural rebar was actually cut through, the referenced Daily Construction Report is not evidence of a willful procedural violation.

⁸ Note that there is some ambiguity and inconsistency in the contemporaneous documentation regarding both the date that the rebar was cut and the date that the cut was discovered. Regardless, however, Entergy disagrees with NRC OI's interpretation of the information in the referenced Daily Construction Report.

Second, the email that the contractor sent to his superior on November 21, 2016, referenced in Enclosure 1 to Reference 1, states: "I think I me[a]nt to get the FE [field engineer] down there to look at the hole. But I apparently dropped the ball for us." This language is also insufficient to show an intent to deliberately violate Entergy's procedures. First, it is unclear based on this excerpt which hole the email is referring to. Assuming, however, that it is referring to the hole in which rebar was cut, this email is consistent with the idea that the contractor made a mistake.

Collectively, the evidence available to Entergy through its comprehensive analysis of the event establishes that the contractor did not know his actions in providing the specialized drill bit were contrary to Entergy's requirements. Entergy is not aware of any evidence that would indicate the contractor provided the drill bit with the intent of violating Entergy's drilling procedure, much less that he directed his crews to cut through structural rebar. For these reasons, Entergy does not agree that the violation in this case was willful. Thus, non-escalated enforcement is appropriate.

B. Notwithstanding Willfulness, Escalated Enforcement is Not Warranted, and a Non-Cited Violation is Appropriate

To the extent the NRC is relying on information of which Entergy is not aware to support the conclusion that the contractor willfully violated Entergy procedures, non-escalated enforcement and a non-cited violation are still appropriate.

The NRC Enforcement Policy provides that in determining the significance of a violation involving willfulness, the Office of Enforcement will consider such factors as the position, training, experience level, and responsibilities of the person involved in the violation, the intent of the violator, the economic or other advantage, if any, gained as a result of the violation, and the significance of any underlying violation.⁹

Here, the contractor was a low-level supervisor responsible for supervising the laborers on the drilling team, there is no indication that he acted with malevolent intent, and neither he nor his employer gained any advantage as a result of the violation. On the contrary, the partial cut in the structural rebar caused delays and work stoppages while Entergy assessed the situation and implemented corrective actions.

Perhaps most importantly, the underlying violation did not have serious (or in fact any) safety significance given that Entergy's engineering evaluation concluded that the identified cut in the rebar at issue did not pass entirely through the rebar and did not adversely impact the structural integrity or operability of the wall.

In addition, pursuant to both the Enforcement Manual and the Enforcement Policy, notwithstanding willfulness, other factors that lend themselves to non-escalated enforcement include that: the violation appears to be the isolated action of an employee without Entergy management involvement; the violation was not caused by a lack of management oversight; and significant remedial action commensurate with the circumstances was taken by the licensee

⁹ See NRC Enforcement Policy at Section 2.2.1.

that demonstrated the seriousness of the violation to other employees and contractors, thereby creating a deterrent effect within the licensee's organization.¹⁰

These criteria were all met in this case. Even if the contractor acted willfully in providing the specialized drill bit to the foreman, there is no indication that Entergy personnel, much less management personnel, were involved. Entergy engaged both a Project Coordinator and an individual designated as "Entergy Oversight" specifically to ensure that there was appropriate oversight. Finally, upon identification, Entergy took this issue very seriously and engaged in significant remedial action as described above.

C. If Escalated Enforcement is Pursued, Entergy Should Not Receive a Civil Penalty Due to Its Issue Identification and Correction Action

Even if the NRC has additional evidence to support a willful violation – evidence that Entergy does not have and could not have reasonably obtained – Entergy should receive credit for identification and corrective action such that there is no civil penalty.¹¹

Entergy should receive identification and corrective action credit in this case because: (1) it identified the procedural violation that is the subject of the apparent violation and took appropriate corrective action to correct the circumstances leading to the procedural violation; and (2) whether the NRC ultimately concludes the violation was willful should not be considered as part of the identification and corrective action credit analysis.

1. Entergy Identified the Problem that is the Subject of the Apparent Violation and Took Appropriate Action to Correct that Problem

Entergy should receive credit for identification because Entergy identified the issue that is the subject of the apparent violation. That is, Entergy discovered the cut rebar and determined that it had been cut without prior approval from Engineering, in violation of its procedures.

In its Enforcement Policy, the NRC states that the decision to give a licensee credit for identification "should be focused on identification of the problem requiring corrective action."¹² The NRC goes on to clarify, "[i]n other words, although giving credit for identification and corrective action should be separate decisions, the concept of identification presumes that the identifier recognizes the existence of a problem and understands that corrective action is needed."¹³ In this case, the problem requiring corrective action was the conduct of the drilling team which disengaged the EPD and cut rebar without first obtaining approval from Engineering, and that is the problem that Entergy corrected.

Specifically, in response to that problem, Entergy suspended all drilling work, initiated a condition report, performed an extent of condition inspection of all open drilled holes, completed

¹⁰ See NRC Enforcement Manual at Sections 2.2.2.A.4.b, 2.2.5.B.1.b; NRC Enforcement Policy at 2.3.2.a.4.

¹¹ See NRC Enforcement Manual at Figure 1.

¹² See NRC Enforcement Policy at 20.

¹³ *Id.* See also NRC Enforcement Manual at 100 ("Identification credit should be considered when licensee follow-up of the event demonstrates thoroughness in assessing contributing factors, as well as any obvious, direct cause").

an engineering evaluation to assess the structural integrity and operability of the wall, evaluated the acceptability of the current equipment and processes being used, performed a Human Performance Evaluation, implemented a rebar eater drill bit checkout and return log sheet, implemented a hole drilling log, and re-briefed the crew on the applicable JSHA requirements.

2. Whether the NRC Concludes the Violation Was Willful Should Not be Considered as Part of the Identification and Corrective Action Credit Analysis

During the Technical Debrief that took place on February 2, 2021, NRC staff indicated that Entergy may not receive credit for identification and corrective action because it failed to identify and correct the willful aspect of the violation. This stance is not appropriate because: (a) it is inconsistent with the NRC Enforcement Policy and the NRC Enforcement Manual; (b) Entergy's ability to recognize willful misconduct has already been addressed by its 2018 Confirmatory Order; and (c) Entergy could not reasonably have been expected to determine that the rebar was cut willfully.

a) Pursuant to the NRC Enforcement Policy and Enforcement Manual, Willfulness is Not Properly Considered When Determining Whether to Grant Identification and Corrective Action Credit

Pursuant to the NRC Enforcement Policy, NRC assesses the extent to which a violation was willful only when determining the severity level of the violation, and not in determining whether the licensee should receive credit for identification. Section 2.0 of the Policy describes the enforcement process as consisting of three distinct, chronological steps, namely: (1) the identification of the violation; (2) the assessment of the severity of the violation; and (3) the disposition of the violation.¹⁴

Section 2.2 of the Policy addresses how the NRC determines the severity level of the violation, which includes an assessment of the extent to which the violation was willful.¹⁵

Section 2.3 of the Policy then *separately* addresses how the NRC disposes violations for which the severity level has already been determined. Section 2.3.4 (Civil Penalty) addresses how the NRC assesses whether to levy a civil penalty and the amount of that penalty. When assessing whether the NRC should give identification credit, the Policy provides that, “[a] stated purpose of this Policy is to encourage prompt identification of violations of NRC requirements” and that “the overarching consideration is whether the NRC should give credit for a licensee’s efforts to identify the violation.”¹⁶ Further, the Policy provides that, when deciding whether to issue identification credit in connection with licensee-identified violations, the NRC must consider “all of the circumstances of identification”¹⁷ including:

¹⁴ NRC Enforcement Policy at Section 2.0 (NRC Enforcement Process).

¹⁵ See NRC Enforcement Policy at 9-11.

¹⁶ NRC Enforcement Policy at 9-11. Emphasis added.

¹⁷ *Id.* Emphasis added.

- whether prior opportunities existed to identify the problem requiring corrective action, and if so, the age and number of those opportunities;
- whether the problem was revealed as the result of a licensee self-monitoring effort, such as conducting an audit, a test, a surveillance, a design review, or troubleshooting; and
- for a problem revealed through an event, the ease of discovery and the degree of licensee initiative in identifying the root cause of the problem and any associated violations.¹⁸

The Policy does not suggest that the NRC should assess the extent to which a violation was willful or whether the licensee agreed with the NRC on willfulness in determining whether the licensee should receive credit for identification.

In turn, the NRC Enforcement Manual, which provides guidance to NRC staff regarding the implementation of the NRC's enforcement program, mirrors the approach provided in the Policy, and similarly does not suggest that the NRC should assess the extent to which a violation was willful in determining whether the licensee should receive credit for identification.¹⁹

Denying Entergy credit for identification and corrective action on this basis is also inconsistent with the agency's own precedent. Based upon a review of Notices of Violation issued over the past five years, Entergy did not find any examples of the NRC denying a licensee identification credit because the licensee did not identify the willful aspect of an underlying violation. Indeed, none of the Notices of Violations reviewed indicated that willfulness was considered as part of the identification credit assessment.

b) Entergy's Ability to Recognize Willful Misconduct Has Already Been Addressed by its 2018 Confirmatory Order

Denying identification and corrective action credit to Entergy based on Entergy's conclusion that the apparent violation was not willful would imply that Entergy's ability to identify willful misconduct is the problem requiring corrective action. Even if true, Entergy subsequently remedied that problem through the actions it took to satisfy the NRC's March 12, 2018 Confirmatory Order.²⁰ In that Order, the NRC required Entergy to improve its ability to prevent and detect willful misconduct by issuing training and communications to its workforce.²¹ The Order also required Entergy to conduct a causal evaluation focused on the recurrence of willful misconduct and to adopt corrective actions.²² Entergy's resulting corrective actions included the development of a committee to review events for potentially willful conduct. Indeed, had the 2016 event involving cut rebar occurred in 2020, Entergy's evaluation of potential willfulness would have been far more robust than it was in 2016. There are no immediately apparent corrective actions Entergy could take now to further improve its ability to identify willful

¹⁸ *Id.* Emphasis added.

¹⁹ NRC Enforcement Manual at Section 2.5.2.2.

²⁰ Letter from K. Kennedy, NRC, to J. Ventosa, Entergy Nuclear, *attaching* Confirmatory Order Modifying License, March 12, 2018 (Accession No. ML18072A191).

²¹ *Id.* at 9.

²² *Id.* at 10.

misconduct. Put another way, if the NRC were to deny identification credit due to a failure to identify willful misconduct, there is nothing more the NRC could accomplish that is not already being accomplished through the Confirmatory Order and related inspections. Because NRC issued the Confirmatory Order after the apparent violation occurred, it would be appropriate for the NRC to take into account the actions Entergy is already taking in response to the Order in assessing whether to give Entergy corrective action credit.

c) Entergy Could Not Reasonably Have Been Expected to Determine that the Contractor Deliberately Directed Cutting Rebar

When it characterizes a violation as “NRC-identified,” the NRC concludes the licensee missed an opportunity to identify the problem warranting corrective action.²³ According to the Enforcement Policy, the NRC should consider the ease of the NRC’s discovery and ask, “should the licensee have reasonably identified the problem (and taken action) earlier?”²⁴

Consistent with the Enforcement Policy, the Enforcement Manual provides:

4. Cases where identification credit is denied should be limited to investigations where corrective actions or root causes default to “easy fixes” and the inspectors can demonstrate that other significant, credible causes existed that were not identified by the licensee.
 - a. Granting of identification credit should be considered for those cases where licensee efforts are thorough enough to rule out the potential for more subtle contributing factors.²⁵

Here, Entergy undertook considerable effort to determine the circumstances giving rise to the cut rebar. Entergy interviewed involved personnel and conducted a Human Performance Evaluation in 2016, at the time of the event. In addition, in connection with the NRC OI Investigation associated with this case and an earlier, related OI Investigation, from 2017-2020, Entergy engaged an experienced outside investigator to conduct additional interviews and review records related to the event. Entergy took reasonable actions to identify the issue.

As it pertains to the willfulness of the contractor’s actions, evidence the NRC obtained to support its conclusion – much of which, notably, Entergy is not privy to – the NRC obtained through an extensive federal investigation. Specifically, the NRC’s conclusion relies on work conducted by a federal investigative agent over more than three years, including testimony obtained under oath and records obtained via subpoena. These investigative techniques are beyond Entergy’s reasonable ability.

²³ NRC Enforcement Policy at 21-22. See also NRC Enforcement Manual at 100 (“Cases where identification credit is denied should be limited to investigations where corrective actions or root causes default to “easy fixes” and the inspectors can demonstrate that other significant, credible causes existed that were not identified by the licensee.”)

²⁴ NRC Enforcement Policy at 21-22.

²⁵ NRC Enforcement Manual at 100.

Under these circumstances, NRC guidance makes clear that Entergy is entitled to credit for identification. According to the Enforcement Policy, “[i]f the NRC identified the violation but concludes that, under the circumstances, the licensee could not have reasonably identified the problem earlier, the matter would be treated as licensee identified for purposes of assessing the civil penalty.”²⁶ Further, NRC guidance instructs, “[a] missed opportunity to identify is normally not applied where the licensee appropriately considered the information available to it and took, or planned to take, reasonable action within a reasonable time.”²⁷ That is the case here.

IV. Conclusion

In conclusion, consistent with the NRC Enforcement Policy and NRC Enforcement Manual provisions discussed above, Entergy requests that discretion be applied and that escalated enforcement action not be taken. First, Entergy disagrees with NRC’s finding that the FOST contractor deliberately violated its Concrete Cutting procedure. Entergy was and is still unaware of any evidence showing that the contractor intentionally violated its procedure. Second, notwithstanding willfulness, a non-cited violation is appropriate for reasons including that there was no safety consequence resulting from the violation, the contractor was a low-level supervisor responsible for supervising the drilling team, there is no indication that he acted with malevolent intent, neither he nor his employer gained any advantage as a result of the violation, and Entergy took significant remedial action commensurate with the circumstances. Third and finally, even if NRC decides escalated enforcement action is appropriate, Entergy should receive identification and corrective action credit and thus no civil penalty, consistent with the application of the factors described in the NRC Enforcement Policy, NRC Enforcement Manual, as well as prior precedent.

²⁶ NRC Enforcement Policy at 22.

²⁷ NRC Enforcement Policy at 23. The analysis is similar for “mixed identification” scenarios, in which multiple violations exist, some identified by the NRC and some by the licensee. For mixed identification scenarios, the Enforcement Policy recommends consideration of “the timing of the NRC’s discovery, the information available to the licensee that caused the NRC’s concern, the specificity of the NRC’s concern, the scope of the licensee’s efforts, the level of licensee resources given to the investigation, and whether the licensee had dismissed the NRC’s analysis or was pursuing it in parallel.” *Id.* at 22. The Enforcement Policy states that the decision as to whether to give the licensee credit should focus on identification of the problem requiring corrective action. *Id.*

- References:
- 1) U.S. Nuclear Regulatory Commission (NRC) letter to Entergy Operations, Inc., "Waterford Steam Electric Station, Unit 3 – Inspection Report 05000382/2021013 and NRC Investigation Report 4-2017-033," (ADAMS Accession No. ML21063A502), dated March 5, 2021.
 - 2) U.S. Nuclear Regulatory Commission (NRC) letter to Entergy (Entergy Nuclear Operations, Inc. and Entergy Operations, Inc.), "Confirmatory Order, NRC Inspection Report 05000416/2017014, and NRC Investigation Reports 4-2016-004 and 4-2017-021," (ADAMS Accession No. ML18072A191), dated March 12, 2018.
 - 3) Entergy Operations, Inc. and Entergy Nuclear Operations, Inc. (Entergy) letter to U. S. Nuclear Regulatory Commission (NRC), "Basis for Concluding the Terms of Confirmatory Order EA-17-132/EA-17-153 are Complete, Element L," (ADAMS Accession No. ML21028A782), dated January 28, 2021.