

NRR-PMDAPEm Resource

From: Pickett, Douglas
Sent: Tuesday, April 28, 2015 3:06 PM
To: pmb Blanch@comcast.net
Cc: Miller, Chris; Banic, Merrilee; Dudek, Michael; Beasley, Benjamin; McCoppin, Michael; Tammara, Seshagiri; Beaulieu, David; Cylkowski, David; Carpenter, Robert; Burritt, Arthur; Stewart, Scott; Screnci, Diane; Tiff, Doug; Sheehan, Neil; McNamara, Nancy; Setzer, Thomas; Krohn, Paul
Subject: Forwarding the Initial Recommendation of the NRC's Petition Review Board

Dear Mr. Blanch –

On October 15, 2014, you, the petitioner, submitted a 2.206 petition to the NRC concerning the 10 CFR 50.59 site hazards analysis prepared by Entergy Nuclear Operations, Inc., the licensee for Indian Point Nuclear Generating Unit Nos. 2 & 3. The 50.59 analysis was performed by the licensee to determine the safety impact on the Indian Point plant due to Spectra Energy's proposed 42-inch diameter natural gas pipeline that is planned to traverse a portion of the owner controlled property at the Indian Point facility.

The petitioner requested that the NRC take the following enforcement actions against Entergy for the following violations:

- Violation of 10 CFR 50.9, "Completeness and Accuracy of Information," for providing inaccurate and incomplete information in the 50.59 site hazards analysis;
- Violation of 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," for relying on a contractor who was not qualified in accordance with Appendix B requirements; was not qualified in accordance with Entergy's Quality Assurance program; and, as a result, was not qualified to perform an analysis for such a significant safety-related issue; and
- Violation of 10 CFR 50.59, "Changes, Tests, and Experiments," for failing to perform the necessary safety evaluation requirements.

Furthermore, the petitioner requested that NRC issue a Demand for Information against Entergy for the following:

- Demand an explanation as to why the previously identified violations do not also constitute a violation of 10 CFR 50.5, "Deliberate Misconduct;"
- Demand that Entergy seek the results of a new and realistic risk/hazard analysis consistent with the guidance provided by OSHA Appendix C, Section 1910.119, "Compliance Guidelines and Recommendations for Process Safety Management;" and
- Demand that Entergy attest to the completeness and accuracy of Entergy report IP-PRT-08-00032 prepared in August 2008, that assessed the safety impact of the existing 26 and 30-inch diameter natural gas pipelines that traverse the owner controlled property at Indian Point. That report was performed by the same contractor who performed the current site hazards analysis for Entergy. In addition, the report from August 2008 contributed to NRC's rejection of a previous 2.206 petition submitted by the petitioner concerning the existing natural gas pipelines.

The petitioner supplemented the original petition with the following:

- The Town of Cortlandt, NY, contracted with Accufacts Inc. to perform a review and analysis of the proposed Spectra Energy natural gas pipeline and how it may affect Cortlandt. The Accufacts letter, dated November 3, 2014, is critical of Entergy's 50.59 site hazards analysis and characterizes it as seriously deficient, inadequate, and under-representing the real risks.
- The petitioner's letter to Dori Willis dated November 11, 2014, discusses the proposed West Point Partners construction of a high voltage direct current transmission cable that may run near, or adjacent to the proposed natural gas pipelines before tying into the Buchanan switchyard. The petitioner

expressed concerns that stray DC currents emanating from the high voltage cable could adversely impact the existing gas pipelines, the new gas pipelines, and underground safety-related components at the Indian Point facility. The West Point Partners project has currently been suspended.

- The petitioner's letter to Bill Dean dated January 6, 2015, asked why the isolation valves in the 42-inch natural gas pipelines are not considered to be safety-related as defined in 10 CFR 50.2, "Definitions."
- The petitioner submitted three documents from the mid-1970s describing how the AEC/NRC developed the position for not allowing credit for operator actions in less than 10 minutes following an accident. These documents, which include draft ANSI Standard N660, "Proposed American National Standard Criteria for Safety-Related Operator Actions," along with comments from the AEC and the American Nuclear Society, were apparently submitted in support of the petitioner's concerns regarding the assumed 3 minute isolation valve closure time.

The petitioner supplemented the original petition with the following information provided during the petitioner's presentation before the Petition Review Board (PRB) on January 28, 2015:

- The petitioner, along with Mr. Richard Kuprewicz, questioned Entergy's assumption that the 42-inch isolation valves in the natural gas pipeline could be conservatively assumed to close within 3 minutes of a pipe rupture. The petitioner questioned the information available to the pipeline operator based in Houston, TX, and stated that it would take significantly more time than 3 minutes to isolate the line.
- The petitioner believes that both Entergy and the NRC under-estimate the impact of the heat flux generated by the fire. The heat flux may be the limiting factor following a pipe rupture.
- The petitioner requested that an independent analysis of a potential pipe rupture be conducted. The petitioner is willing to sign non-disclosure forms in order to conduct an analysis with information currently being withheld due to security concerns.

Subsequent to the January 28 presentation before the PRB, the petitioner supplemented the petition with the following emails:

- By email to the Commissioners dated March 17, 2015, the petitioner (1) stated that Indian Point is currently operating in an unanalyzed condition that significantly degrades plant safety, (2) identified 10 deficiencies in the NRC's confirmatory analysis of the proposed gas pipeline, (3) requested that the Commission direct the staff to rescind its approval provided to FERC, and (4) requested that the Commission direct the staff to accelerate its review of the petition.
- By email to the Chairman dated March 27, 2015, the petitioner questioned the Chairman's testimony of March 24, 2015, before the House Appropriations Committee regarding the staff's use of the ALOHA computer code in its confirmatory analysis. In addition, the petitioner requested the Commission to direct the staff to rescind its approval provided to FERC and endorse an independent study of the pipeline.

In accordance with the NRC staff's guidance found in Management Directive 8.11, a PRB was formed to review your petition. Following your presentation on January 28, 2015, the PRB met internally to consider your petition for review pursuant to 10 CFR 2.206. The PRB made its initial recommendation and this recommendation was considered and approved by senior NRR management. This approval was granted following an internal, independent peer review of the staff's confirmatory analysis.

The initial recommendation of the PRB is to reject your petition from further review because the issues raised in your petition, along with its supplements, have already been the subject of NRC staff review and resolution has been achieved as discussed by the following:

- The NRC staff thoroughly reviewed Entergy's site hazards analysis. The results are described in NRC Region 1 Integrated Inspection Report 05000247/2014004 and 05000286/2014004 dated November 7, 2014. The staff's inspection results agreed with Entergy's conclusions that a potential pipe rupture would pose no threat to the safe operation or plant shutdown of the Indian Point facility.
- NRC inspectors conducted a walk-down of the proposed pipeline routing to confirm assumptions used in the licensee's site hazards analysis report.

- NRC staff performed an independent confirmatory analysis of the potential hazards associated with failure of the proposed pipeline.
 - The NRC analysis assumed an unconfined explosion or jet flame at the source; delayed vapor cloud fire or vapor cloud explosion; and accompanying missile generation.
 - The NRC analysis calculated minimum hazard distances for pressure wave and critical heat flux.
 - The NRC analysis used conservative assumptions and rationale and concluded that safety-related structures, systems and components (SSCs) inside the security owner controlled area (SOCA) would not be exposed to conditions exceeding the threshold for damage.
 - Important to safety SSCs outside the SOCA could be adversely impacted. However, these impacts are bounded by low-probability natural events such as hurricanes or tornados and have been previously assessed.
 - Sensitivity studies concluded that an infinite source (i.e., the valves in the gas pipeline do not close and gas is emitted from an open-ended rupture for a period of one hour) would not significantly increase either the pressure pulse or heat flux to levels that would damage SSCs in the SOCA. This study demonstrated that the assumed pipeline isolation valve closure time would not have a significant impact.
 - The staff's overall conclusion is that both Indian Point units could safely shut down.
- Region I inspectors reviewed the qualifications of Entergy's contractor who prepared their site hazards analysis report and the NRC confirmed that the contractor possessed the requisite knowledge, experience, and abilities to conduct the hazards analysis.
- Region I inspectors confirmed that Entergy's acceptance of the contractor's site hazards analysis report was an appropriate application of their QA program pursuant to the requirements of 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," .
- Walkdowns of the site demonstrated that if the diesel generator fuel oil storage tank located near the switchyard is ruptured, oil would flow away from the site and would not cross Broadway. Therefore, there is no concern about oil from this tank flowing towards the site.
- The pipeline isolation valves are constructed under criteria developed by the U.S. Department of Transportation (DOT). Therefore, the petitioner's concerns regarding the safety class of the isolation valves should be directed to DOT.

As discussed in MD 8.11, you have the opportunity to make a second presentation before the PRB. The purpose of a second presentation would be to provide additional or clarifying information to the PRB concerning your petition and its supplements. If you do not request a second presentation, the PRB's initial recommendation becomes final and a closeout letter will be issued to you. If you request to make a second presentation, the PRB will reconvene following the presentation to reconsider its initial recommendation. If the PRB reverses its decision and decides to accept your petition for review, work will begin on the proposed Director's Decision. If the PRB still concludes that your petition should be rejected, you will be informed with a final closeout letter.

Please let me know within 30 days if you would like to make a second presentation before the PRB.

Doug

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Subject: Forwarding the Initial Recommendation of the NRC's Petition Review Board
Sent Date: 4/28/2015 3:06:07 PM
Received Date: 4/28/2015 3:06:00 PM
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