



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 9, 2020

MEMORANDUM TO: Chairman Svinicki
Commissioner Baran
Commissioner Caputo
Commissioner Wright

FROM: Margaret M. Doane
Executive Director for Operations

SUBJECT: CONCERNS PERTAINING TO GAS TRANSMISSION LINES
NEAR THE INDIAN POINT NUCLEAR POWER PLANT –
EXPERT TEAM EVALUATION

This memorandum forwards the report of the "U.S. Nuclear Regulatory Commission (NRC) Expert Evaluation Team on Concerns Pertaining to Gas Transmission Lines Near the Indian Point Nuclear Power Plant," dated April 8, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. [ML20100F635](#)). In addition, this memorandum highlights the Team's findings, recommendations, and describes the actions I will take in response to these recommendations.

The Team was established following a February 24, 2020, memorandum from the Chairman (ADAMS Accession No. [ML20057E265](#)). This memorandum directed me to address matters raised in the NRC's Office of the Inspector General (OIG) Event Inquiry Report, "Concerns Pertaining to Gas Transmission Lines at the Indian Point Nuclear Power Plant," (Case No. 16-024) dated February 13, 2020 (ADAMS Accession No. [ML20056F095](#)).

In response to the Chairman's February 24, 2020, memorandum, I tasked David Skeen to lead a team of experts (Team) to respond to the matters raised in the NRC's OIG report (ADAMS Accession No. [ML20058E354](#)). As directed, all team members were independent from the previous work described in the Event Inquiry. The Team included both NRC staff and external members with expertise in fields pertaining to the issues identified by the OIG.

In summary, the Team concluded that Entergy (the plant owner) and the NRC used optimistic assumptions in analyzing the potential impacts to the Indian Point site from a postulated rupture of the 42-inch Alognquin Incremental Market (AIM) natural gas transmission pipeline. Despite this finding, the Team performed its own evaluation and determined that the Indian Point reactors would remain safe in the unlikely event of a pipe rupture.

CONTACT: David Skeen, Team Lead
301-287-9056

Specifically, the Team determined that a rupture of the 42-inch natural gas transmission pipeline that runs near Indian Point is unlikely. This pipeline was installed using modern techniques, stringent quality standards, and construction precautions that limit the likelihood of later pipeline damage. This stretch of pipeline was designated as a high consequence area under Department of Transportation requirements, meaning that additional inspection, integrity threat assessment, pipe remediation, and documentation requirements apply. However, if a rupture occurred on the section of that 42-inch pipeline, the equipment needed to safely shut down the reactors and maintain them in a safe condition would be protected and remain available. The Team also found that the robust concrete structures housing the spent fuel pool and dry fuel storage containers would withstand the heat and pressure impacts of an explosion or fire that could follow a pipeline rupture.

The Team also reviewed the NRC practices and processes used to analyze the pipe rupture and recommends several improvements to the NRC's current approach. The recommendations include reviewing the processes and practices used for technical reviews, inspection support, petition reviews, pipeline analysis, and coordination with other agencies. Further, because the assumptions in Entergy's analysis of the 42-inch AIM pipeline were found to be optimistic, the Team recommends that Entergy revisit the assumptions it used to identify the risk posed by a postulated rupture of the 42-inch pipeline near Indian Point. Specifically, Entergy should be asked to assess the importance of these assumptions to its original conclusions and update its hazards analysis, if needed.

I have reviewed the Team's report and found it to be thorough and well documented. I accept all of its recommendations and conclusions. I take the Team's recommendations very seriously, so I will direct three actions in response to their findings.

First, I will task Mr. Skeen to work through the Office of Nuclear Reactor Regulation to request that Entergy revisit the assumptions it made regarding the consequences of a postulated rupture of the 42-inch AIM pipeline and update its analysis, if needed. I will also task Mr. Skeen to lead agency efforts to address the NRC process and practice issues identified in the report. Mr. Skeen will continue to have access to both NRC staff, and external members to the extent that might be helpful and depending on their availability.

Second, to ensure a rapid response to these issues, I will direct that Offices take immediate action to improve processes and procedures within their areas of responsibility pending the full implementation of the Team's recommendations. Offices will be asked to focus on documenting confirmatory analyses and 2.206 petitions; performing peer reviews; and formalizing and documenting interactions with other agencies when NRC's expertise or decisions will be cited by another agency.

Third, I will task Mr. Skeen to lead the agency's efforts to address the issues noted in Section 6.3, "Future Analysis and Activities," of the report. This section lists several requests by outside parties for the NRC or other entities to take action beyond the scope of the Team's 45-day review.

I am appreciative of the work of Mr. Skeen, Team Lead, Ms. Theresa Clark, Deputy Team Lead, and all Team members, especially those external to the NRC. The Team assembled on very short notice and compiled a detailed and extensive report in a relatively short time, concurrent with the agency's coronavirus response. The report provides significant information and analysis, bringing more clarity to the safety questions at issue with the pipeline. The Team's

product will prove very useful in the future as we strive to enhance our approach to regulatory oversight by improving our processes and procedures.

Enclosure:

Report of the U.S. Nuclear Regulatory
Commission Expert Evaluation Team on
Concerns Pertaining to Gas Transmission
Lines Near the Indian Point Nuclear Power
Plant

cc: SECY

OGC

OCA

OPA

CFO

SUBJECT: CONCERNS PERTAINING TO GAS TRANSMISSION LINES NEAR THE INDIAN
POINT NUCLEAR POWER PLANT – EXPERT TEAM EVALUATION DATED APRIL 9, 2020

DISTRIBUTION:

Public

D. Dorman, OEDO

C. Haney, OEDO

D. Skeen, Team Lead

T. Clark, Deputy Team Lead

RidsNrrOd

RidsNmssOd

RidsNsirOd

RidsResOd

RidsRgn1MailCenter

RidsRgn2OraRslo

RidsRgn3Ora

RidsRgn4OraRslo

RidsACRS_MailCTR

ADAMS Accession Nos.: Pkg: ML20100F609, Ltr: ML20099F775, Rpt: ML20100F635

OFFICE	EDO
NAME	MDoane
DATE	4/9/2020

OFFICIAL RECORD COPY