

Accufacts Inc.

“Clear Knowledge in the Over Information Age”

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**To: Chairman Kevin J. McIntyre
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426**

Sent via Electronic Mail to kevin.mcintyre@ferc.gov

Re: Safety Study of Algonquin Natural Gas Pipelines, in vicinity of IPEC nuclear facility

Accufacts has reviewed the June 22, 2018 letter (“Letter”) sent to you from various New York State agencies concerning a recently completed HDR Engineering risk analysis addressing a portion of the Algonquin natural gas pipelines in proximity to a nuclear plant facility, the Indian Point Energy Center (“IPEC”) operated by Entergy.¹ Accufacts assisted the Town of Corlandt, New York in providing pipeline technical guidance concerning the AIM Project Filing (FERC Docket No. 14-96-000). I have signed nondisclosure agreements, under FERC’s CEII protocols concerning this matter, and have also met with the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) and Nuclear Regulatory Commission (“NRC”) representatives to discuss the obviously highly sensitive nature of natural gas pipeline rupture consequences in proximity to IPEC. I have over forty years of experience in incident investigation, mainly pipeline rupture failures, and extensive background in process safety management and pipeline safety regulatory development, especially for sensitive locations.

I would classify the above identified safety tone identified in the Letter as professional and reasonable, and fully concur with the finding, “While the probability of pipeline incidents is low, the proximity to the Indian Point nuclear plant makes the potential consequences of such an event very significant. Additional scrutiny and monitoring to better understand and reduce risks associated with the Algonquin pipelines is warranted. FERC must engage in further action to mitigate and investigate potential risks.” This key finding comes as no surprise given the incompleteness I observed within FERC and the NRC during this process to understand the risks and consequences of a large diameter gas transmission pipeline rupture.

¹ The New York State Department of Homeland Security and Emergency Services, Department of Public Services, Department of Health, and the Department of Environmental Conservations letter to FERC Chairman, “Re: Safety Study of Algonquin Natural Gas Pipelines, Westchester County, New York,” June 22, 2018.

The Letter makes prudent recommendations about the gas transmission pipelines in the vicinity of IPEC. Based on my extensive background in pipeline rupture, control room operation, emergency response, and pipeline safety regulation, I would further clarify and expand on the Letter's four identified recommendations to FERC:

- 1) Pipeline segment isolation within 3 minutes of a rupture near IPEC** - FERC should require the pipeline operator to demonstrate the specific equipment and processes that would enable the control room operator, located in Texas, over 1,500 miles from New York, to remotely rapidly identify a possible pipeline rupture on the 42-inch, 30-inch, or 26-inch pipelines in the vicinity of IPEC, and to take action to remotely close appropriate valves within three minutes of a rupture event. I have previously commented to FERC that system dynamics and the laws of thermodynamics will make this very difficult to rapidly remotely determine via pipeline pressure loss. Neither the pipeline operator, nor FERC, nor the NRC, has adequately demonstrated to me how the control room operator will confirm a pipeline rupture. Without such confirmation or verification, it would be highly unlikely for a pipeline operator to quickly shut down and isolate a large diameter high pressure gas transmission pipeline. Enbridge, the pipeline operator, needs to not only demonstrate how control room operators will verify a possible pipeline rupture but must further show detailed control room operating procedures and protocols defining such serious actions. There are ways for Enbridge to quickly demonstrate these important requirements, but to date neither FERC nor the NRC has provided me such information that would instill confidence that the control room has the proper equipment or protocols in place for such a highly sensitive location that is legitimately in the best interest of national security.
- 2) IPEC decommissioning will place the pipelines at greater risk of rupture** – Since it has been decided to cease IPEC electrical generation, the possible abnormal loading threat activities associated with decommissioning and equipment removal identified in the Letter appear legitimate. My experience would tell me that Enbridge and Entergy should be able to develop an equipment removal plan, with appropriate safeguards that don't place the pipelines at real threat of abnormal loading that could cause pipeline rupture. Without such a properly implemented plan, that can be independently verified for effectiveness, the recommendation to cease gas operations during the decommissioning activities that may threaten the pipeline integrity, while extreme, would be appropriate.
- 3) Enhanced monitoring near IPEC is already occurring** – While I am not surprised to read that the New York Department of Public Services (DPS) has already implemented

enhanced monitoring around IPEC, I must caution that my experience has shown that, while safeguards to avoid third party damage (such as a concrete cover) to the new 42-inch segment are well meaning to reduce pipeline risks, those safeguards are not absolute. By all means, I fully support the Letter's recommendation to FERC to require regular communication between Enbridge, the pipeline operator, and Entergy, IPEC's operator, on incident prevention activities and emergency preparedness. I would especially advise focus on incident prevention to keep the "genie in the pipeline" to avoid a very preventable national emergency.

- 4) No approval for new capacity or increased pressures on the three pipelines without at least conducting new safety assessments** - I am a little confused by the recommendation to FERC to not approve any applications for new capacity or increased pressures on the three Algonquin pipeline segments in close proximity to IPEC. This may be a simple attempt to recognize the possible demands to try and get more gas into the Northeast via the Algonquin system. From my perspective, FERC's approval of the AIM Project permitted the pipeline operator to add the requested horsepower, pressure letdown equipment and maximum allowable operating pressure, so this recommendation might be a simple placeholder to properly flag a new safety review should increased gas rates beyond those already approved occur before IPEC is properly decommissioned along with proper protection of spent fuel rod storage.

In conclusion, I concur with the Letter's major observation, "The safety analyses that have been done by the federal government with respect to these segments may not have been sufficiently thorough." Neither FERC nor the NRC has adequately demonstrated to me that they technically understand the transient dynamics associated with gas transmission pipeline rupture and its severe consequences on IPEC. FERC would be irresponsible if it failed to heed the recommendations identified in the Letter and failed to also address the additional identified questions needing answers to prudently complete a proper safety analysis concerning the pipeline risks near IPEC. Based on my experience, FERC could resolve these technical questions within 30 days if they brought the right technical expertise to the process.

Sincerely,



Richard B. Kuprewicz
President
Accufacts Inc.