Paul M. Blanch

Energy Consultant

November 5, 2010

Mr. William Borchardt
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Mr. Borchardt:

Subject: Supplement to 10 CFR 2.206 petition filed on October 25, 2010

Please supplement my original 10 CFR 2.206 petition by adding two new paragraphs (#9 and #10) on page 12 of the original petition to read as follows:

9. In 1999 the NRC Staff evaluated the IPEEE for Indian Point Unit #2. I can assume a similar evaluation was conducted for Indian Point Unit #3. I have reason to believe this SER contains inaccurate information based upon information provided by the licensee at the time. The following was obtained directly from ADAMS on November 2, 2010:

STAFF EVALUATION REPORT OF INDIVIDUAL PLANT EXAMINATION OF EXTERNAL EVENTS (IPEEE) SUBMITTAL ON INDIAN POINT UNIT 2 NUCLEAR GENERATING STATION

"A special review was performed of natural gas pipelines and "pig stations" located near IP2. As a conservative step, three potential failure impacts were evaluated: (a) a fire at the pipeline. (b) a potential explosion: and (c) transport of a vapor cloud and fire at the plant site. A fire at the pipeline was evaluated and determined not to impact ***IP2*** *because there is a 100-foot-wide firebreak around the plant. There is an old stack at the plant site which could collapse on the control room,* ***but the IPEEE submittal indicates that natural gas***

__does not detonate unless confined__[1], and that therefore a severe shock wave at the plant site is not credible[2]. Finally, the nearest point of approach of the pipeline is 1,200 feet from IP2[3]. Natural gas is lighter than air and readily rises and disperses into the atmosphere. The IPEEE states that it is unlikely that weather conditions would form to support a gas cloud which could travel 1,200 feet and still support combustion or asphyxiation. A conservative bounding frequency calculation indicates that the frequency of an ignition of such a vapor cloud at IP2 is less than 6.0 x 10^{-7}/yr. The scenario was screened from further analysis based on this result and on the understanding that redundant and diverse systems would have to fail for the scenario to result in core damage."

"In summary, the IPEEE submittal adequately addresses soil failure concerns. The conservative analysis of natural gas pipeline issues provides further support to the conclusion that no credible scenario exists[4].

Natural gas pipeline accidents were screened based upon the frequency of such accidents which could pose a hazard to the plant."

The NRC must demand a copy of the licensee's analysis that concludes that the hazards presented by the gas lines is less than 6.0 x 10^{-7}/yr[5] and that this number will not be impacted by the natural aging of the gas pipes over the remaining period of operation.

---

[1] Recent events including the explosions at San Bruno, CA, Chandler OK, Middletown, CT and other gas explosions indicates this statement is not supported by actual events. The explosion in San Bruno left a crater about 170 feet long from a gas line operating at 400 PSI whereas the Indian Point gas lines operates at 700 PSI. See Figures 1 and 2 enclosed clearly show results of explosion in non-confined space.

[2] The shock wave from the Middletown Connecticut (2010) natural gas explosion caused window breakage more than a mile away from the explosion. Figure #1 (enclosed) from the San Bruno fire and explosion also indicates that an explosion may detonate in and unconfined space further indicating the NRC's SER is possibly faulted. Also, a natural gas explosion in Edison, NJ created a 60-foot-deep crater and sent a fireball 300 feet up into the air that could be seen in New Jersey, New York, and Pennsylvania. It was designated a federal disaster area.

[3] Google Earth indicates the nearest point from the gas line to IP-2 is about 900 feet and for IP-3 this number is about 400 feet.

[4] This statement is in direct conflict with the NEF study cited paragraph #5 of the original petition.

[5] The IP-3 structures are about half the distance from the gas lines therefore the probability of damage from a fire or explosion will be significantly higher than for IP-2. Failure probability will increase with gas piping degradation and aging. I would assume the shock wave increases inversely with the square of the distance.

This analysis must be conducted with a documented quality assurance verification as required by 10 CFR 50 Appendix B[6]. An explosion or fire may impact "safetyrelated functions of those structures, systems, and components;" therefore within the scope of Appendix B.

10. The original licensing basis from the IP-3 1968 Safety Analysis Report stated there were automatic shut-off valves capable of terminating gas flow in the event of a rupture and/or explosion. Since the original licensing of Indian Point, these valves have been removed thereby increasing the "consequences of a malfunction of an SSC important to safety[7]"

    The NRC has very clear requirements/expectations stated in Information Notice 91-63,[8] that changes involving external hazards must be evaluated under the clear requirements of 10 CFR 50.59. It is difficult to imagine that the NRC will impose its requirements at Fort Saint Vrain with a population density of a few thousand persons and not at Indian Point with a population density of tens of millions.

    The NRC must demand a copy of the licensee's 10 CFR 50.59 analysis that evaluates if the removal of these automatic shut-off valves constitutes an unreviewed safety question (USQ).

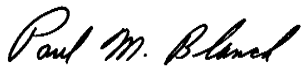
I appreciate this opportunity to supplement my original petition and plan to pursue the matter of redacting publically available information from my petition through other official channels.

---

[6] 10 CFR 50 Appendix B "The pertinent requirements of this appendix apply to all activities affecting the safetyrelated functions of those structures, systems, and components;"

[7] 10 CFR 50.59

[8] NRC INFORMATION NOTICE 91-63: NATURAL GAS HAZARDS AT FORT ST. VRAIN NUCLEAR GENERATING STATION "These additional hazards were not evaluated by the licensee prior to their introduction to the site to determine the impacts on the safe operation of the plant and whether these hazards exceeded those evaluated during the initial licensing of the facility. For the gas well drilled in 1987, the licensee's 10 CFR 50.59 evaluation was too narrowly focused and did not consider additional possible malfunctions before concluding that an unreviewed safety question was not involved."



Paul M. Blanch

Copy to:

John Boska
Indian Point Project Manager, NRR/DORL
U.S. Nuclear Regulatory Commission
email: john.boska@nrc.gov

Figure 1
Result of apparent unconfined gas explosion
San Bruno, California

Figure 2
"Massive Crater Left in Wake of
San Bruno Gas Pipe Explosion"
Unconfined