

August 31, 2015

Stephen G. Burns, Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: Risk Management of Natural Gas Pipelines Near Nuclear Power Plants

Dear Chairman Burns:

The Union of Concerned Scientists (UCS) has been monitoring the management of risks to nuclear power plants posed by natural gas pipelines in the vicinity. In the late 1990s, we attended a public meeting conducted by the NRC and reviewed documents regarding a proposal to convert the Connecticut Yankee nuclear plant to a natural gas generator. Before the proposal was withdrawn for economic reasons, we had reviewed evaluations for hazards such as a cloud of natural gas from a ruptured pipeline entering the building housing the partially-filled spent fuel pool and detonating. We also reviewed evaluations around the same time for a cloud emanating from a liquefied natural gas terminal at Cove Point, Maryland detonating as it reached the Calvert Cliffs nuclear plant site. In both cases, we concluded that the potential hazards had been conservatively analyzed and that risks were being properly managed.

More recently, we have been monitoring numerous exchanges about the risks from existing and proposed natural gas pipelines near the Indian Point nuclear plant. We have also reviewed available documentation about the existing natural gas pipeline near Turkey Point Units 3 and 4 and the proposed new reactors.

We are aware that some have called for an independent evaluation of the natural gas pipelines near Indian Point. In fact, UCS has been asked to sign onto such requests or submit our own request for an independent evaluation.

The process used to date to evaluate the hazard posed to Indian Point from the natural gas pipelines is akin to using both belt and suspenders to manage trousers. The plant's owner evaluated the hazard (i.e., supplied the belt.) The NRC assessed the hazard using [Regulatory Guide 1.91](#) (i.e., added suspenders.) UCS does not advocate stapling trousers to flesh as an additional backup to the suspenders and belt. Instead, any additional effort would be better applied towards ensuring, or revealing, the efficacy of the existing measures.

Many questions about the natural gas pipelines near Indian Point have been asked and answered. But as my nuclear engineering department head taught me, it is not sufficient to have the right answers until all the right questions have been asked. It is not apparent to UCS that all the right questions have been asked and answered. It is entirely possible that all the right questions have already been asked and answered, but mis-communication and post-9/11 information withholding policies are preventing that picture from being seen.

Whatever the reasons for the current situation, UCS respectfully suggests that the Advisory Committee on Reactor Safeguards could reprise the role it played 15 years ago in resolving a similarly contentious matter. The ACRS reviewed the issues about steam generator tube integrity raised in a differing professional opinion and documented its findings and recommendations in [NUREG-1740](#) issued in March 2001. The NRC had asked the ACRS to engage on the matter and the ACRS's involvement ended what had become a non-productive impasse frustrating to all parties involved.

The ACRS could perform an equally invaluable function now by reviewing the process and criteria (e.g., Reg Guide 1.91 et al) used by the NRC to assess potential hazards from natural gas pipelines near nuclear power plants in general and the specific cases involving Indian Point and Turkey Point. The ACRS's review would also constitute an extension to or subset of the agency's post-Fukushima work to ensure that the risks from external hazards are being appropriately managed.

UCS respectfully recommends that you request the ACRS to review the risk management of natural gas pipelines near nuclear power plants. Some might perceive the ACRS's review as being redundant to the needs already being met by belt and suspenders. UCS sees the ACRS's reviews as being a longstanding and inherent part of applying Goldilocks suspenders that are neither too loose nor too tight but just right.

Sincerely,

A handwritten signature in blue ink that reads "David A. Lochbaum". The signature is fluid and cursive, with the first name "David" and last name "Lochbaum" clearly legible.

David Lochbaum
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