

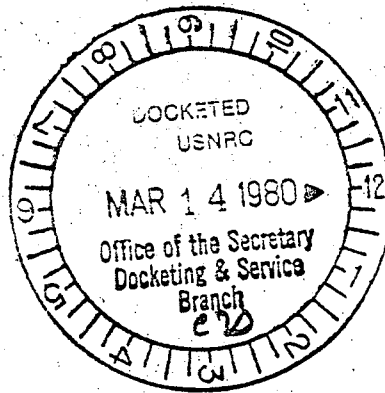


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Mr. John Ahearne,
 Chairman
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 Washington, D.C. 20555



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March 10, 1980

Dear Mr. Ahearne:

This letter is in response to a call for comments first, on the decision (Docket Nos. 50-3, 50-247, 50-286) by the Director of Nuclear Reactor Regulation, Harold Denton, on the Petition by the Union of Concerned Scientists (UCS) regarding the Indian Point nuclear plants and second, on the form that further action by the Commission should take.

While it is reasonable to institute immediately the Director's orders for increased safety measures at the Indian Point plant during this period of further consideration, as the Commission has done, I have certain reservations about the efficacy and logical consistency of those orders, as far as the goal of protecting the health of the public. Although it is not possible in this amount of time to develop a full technical treatment of those reservations, I have listed them briefly.

There are basic underlying concepts and assumptions which are highly questionable, and deserve full, explicit treatment. These include the segregation, with respect to the required levels of engineered safeguards, of acceptable short-term and long-term risks. In my opinion, the continual use by the Director of this concept, which serves most directly to permit operation of the plants prior to the incorporation of identified safety measures (so called long-term) and the satisfactory elimination of unresolved safety issues, is an improper and misleading use of the notion of statistical risk assessment. In that the present risk from operation (which does not change until improvements are made) is, if you will, in force at the time of an accident, and not the cumulative future risk, only the present risk pertains to assuring the health of the public, and any significant improvements to plant safety deemed necessary at all, are therefore necessary forthwith. If this is a difficult safety policy for nuclear plant operation, then, if we are primarily concerned with public safety, so be it. To create a conceptual framework which results in the NRC waiting for proposals from the licensee as to already identified safety measures is an abdication of regulation.

A shut-down of the plants, as requested by the UCS, was never seriously considered by Mr. Denton. Continued operation of the plants at any cost.

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(and risk) is not necessarily in the public interest. Implicit in Mr. Denton's decision is an assumption of overriding need for this nuclear capacity, but this issue has not been explored by the staff, and indeed, such an assumption is not true for Indian Point. Certainly, to support continued operation of the Indian Point plants, some argument must be made that the risk of operation is acceptable because of the benefits derived from their operation. Clearly, if there was no benefit from, or necessity for the plants' operation, only a zero risk would be appropriate. In that the staff has not quantified the net benefits of continued operation of the plants or their necessity, any decision to continue operation is a priori invalid as far as the public interest is concerned. As expressed in the separate views on this matter by Commissioners Bradford and Gilinsky, this must be one of the areas addressed by testimony in public hearings.

In his decision, Mr. Denton often states several reasons why an issue raised by the UCS is not an issue or has been fully treated, while noting that "nevertheless," or "in addition" there have been many changes made. It does not require a long memory to recall that similar claims of safety were made prior to these now highly touted safety improvements. This type of reasoning, along with a general style of defensiveness (perhaps unavoidable) rather than candor, helps make this decision unbelievable on all levels. Even had the technical aspects been treated sufficiently, this decision engenders no credibility on the part of even the uninformed public. For this reason (and others) a full public proceeding is absolutely necessary at this time.

Another concept that needs to be explicitly examined is that of offsetting a high surrounding population with extra engineered safeguards at a plant, so as to bring the risk commitment into a more normal regime. According to Mr. Denton's assessment that Indian Point and Zion account for 40% of the total U.S. nuclear risk, Indian Point accounts for roughly 25%, or about nine times more than 2 "typical" reactors' share. To satisfy the above offsetting logic then, the Indian Point reactors should be required to include safety systems and component safety margins far in excess of what has been claimed and what has been proposed. If, in full public proceedings this concept is found to be valid, there is good question as to whether continued operation at the Indian Point site is practical. If this concept is found to be valid but not sufficient, then the practicality of continued operation is improbable. Furthermore, according to Mr. Denton, both plants have already had "safety modifications too numerous to list." It is reasonable to question whether any of these improvements were important enough so that the plants should not have operated prior to their incorporation. Because of the ultimate nature of the nuclear safety issue, it seems to me that the NRC is inescapably held in the paradox that if these improvements were very significant, then, in the light of its constant public assurances, the prior effectiveness of the staff is automatically questioned. Such questions involving the historical safety at Indian Point must be addressed in public for the sake of the future safety.

Perhaps most importantly, the UCS position that the Indian Point plants should

not be permitted to operate prior to a site-specific analysis of the consequences of a class 9 accident, has been effectively ignored, and system efficacy is referenced to design basis accidents. The validity of the use of the DBA concept for public health purposes needs a full and open examination.

Finally, the reliance for decision-making on the Director's admittedly subjective opinion, and on WASH 1400, is to my mind improper treatment of a subject of such grave importance.

Most of the "extraordinary interim measures" found in Docket No. 50-247, Appendix A are effectively meaningless or ineffectual, vague, or inadequate. One example of the first categorization is the 2000°F peak cladding temperature LOCA calculation, which Mr. Denton informed the Commissioners during his presentation would require no operational change at Indian Point. Another is the requirement that the plants only operate in a baseload mode, which the utilities tell us (and makes sense) is the only way they have been operated. A third example is the order to test whether the LPI/RHR check valves were installed correctly. If so simple and basic a safety system is questioned for such a qualitative fault, there are dire implications for the myriad other safety systems and Indian Point safety in general.

An example of a vague order is that which calls upon the licensee to make a review of possible modifications and procedures to reduce serious accident potential. While a desirable thing to have done, such orders can in no way be used to justify present continued operation.

An inadequate order is that which requires one gas turbine to be operational in one hour, when previously, Mr. Denton used the existence of the gas turbines to argue that unit 2 has adequate emergency power.

On the whole, I find Mr. Denton's decision on the UCS petition inadequate and ill-founded, and therefore the petition remains to be acceptably adjudicated. As to the procedural question of further consideration, I would suggest as appropriate, a course of action similar to that suggested in his separate view by Commissioner Gilinsky. Surely a "safety policy and objective" for plants sited near high populations such as Indian Point and Zion must be explicitly developed with public participation. And surely, the issues raised in the UCS petition are serious enough to require adjudication in formal hearings (informal hearings are virtually useless to parties other than the licensee and the NRC). Therefore, I urge the Commission to establish a safety and licensing board for the purpose of conducting formal public hearings in New York City, with testimony under oath, cross-examination, and the power to subpoena relevant documents, on the following issues:

- 1) A safety policy for nuclear reactors near high populations
- 2) The safety issues raised in the UCS petition, and any others raised during the proceeding, including any of the 133 generic unresolved issues, which can be shown by any party to be safety-related
- 3) The necessity of and benefits from the operation of the Indian Point plants, and the costs of a shutdown versus those of continued operation.

The factual record compiled from this proceeding, along with a complete LER review of the Indian Point plants should be presented to the Commission itself for review and decision. It is extremely important that participation by the public and parties other than the NRC and its licensees be not only permitted, but effectively encouraged.

As stated by Commissioner Gilinsky, "the Commission should decide at the outset, on the basis of a fuller record than it has before it, whether to permit continued operation of the plants during the foregoing hearings." In my opinion, a fair and complete study of the UCS petition and the Director's decision, along with preliminary shut-down feasibility and costs estimates (as I have included with this letter) will bring the Commission to the conclusion that a shut-down of the Indian Point plants pending a full hearing is the only prudent course of action.

Sincerely,



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