

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED  
USNRC

BEFORE THE NUCLEAR REGULATORY COMMISSION

8/27/82  
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In the Matter of

CONSOLIDATED EDISON COMPANY OF  
NEW YORK (INDIAN POINT, UNIT 2)

Docket Nos. 50-247-SP  
50-286-SP

POWER AUTHORITY OF THE STATE OF  
NEW YORK (INDIAN POINT, UNIT 3)

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OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

RESPONSE TO SECRETARY'S LETTER  
OF AUGUST 23, 1982

The undersigned Intervenor<sup>\*/</sup>s received a copy of an August 23, 1982 letter to the Administrative Judges in the Indian Point investigation from the Secretary of the Commission. It states that the Commission has "formally authorized" the Secretary to respond to the Atomic Safety & Licensing Board's questions of August 9, and that it intends to affirm the response next week.

It is our understanding that only one Commissioner was at work during the period within which this response was written. In addition, as Commissioner Gilinsky notes, the Secretary's letter has not been discussed by the Commission. Finally, the Commission neither invited nor considered the comments of the Intervenor<sup>\*/</sup>s and interested States before issuing the letter which, if finalized, would make the participation of many of these groups either impossible or ineffective.

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<sup>\*/</sup> This is submitted on behalf of the Union of Concerned Scientists, The New York Public Interest Research Group, Friends of the Earth, The New York City Audubon Society, Parents Concerned About Indian Point, West Branch Conservation Assoc., The Westchester Peoples Action Coalition, and Dean Corren.

Putting aside for the moment the extremely irregular procedure used by the Commission -- a pattern which has unfortunately characterized the Commission's "sua sponte" actions in this case -- we hope by this response to persuade you that the course of action described in the Secretary's letter is wrong so that you will not affirm it.

It is now nearly three years since the UCS petition was filed. The Intervenors and Interested States have expended a great deal of effort, time and scarce financial resources in attempting to put on the public record for your consideration facts necessary for you to evaluate the risk of the Indian Point plants. We have followed all of the rules of this investigation and the orders of the Licensing Board, suffered the many months of needless delay and finally -- after 3 years had gotten to the point of bringing our witnesses to hearing. At the very least, we are entitled, as part of the public you are sworn to protect, first to your informed consideration and second, to a decision which forthrightedly addresses what the Atomic Safety & Licensing Board has put to you. That issue is, in brief: is it your intent to excise the testimony of the Intervenors and Interested States from this investigation? If a majority of you no longer wants public participation in an investigation of the Indian Point plants, we believe that we have the right to know that now.

The requirement that each party (or consolidated parties) must include in direct testimony a discussion of accident

probabilities (and even more remarkably that Intervenor may not rely on the probability testimony of other Intervenor to meet this requirement) is a prescription for excising public participation which furthers no legitimate independent purpose. We can understand, at least in the abstract, that the Commission could have a concern about the completeness of the record and a desire to ensure that the record contains sufficient information to assess the probability of serious accidents in addition to their consequences. That, it seems clear to us, is the only pertinent legitimate concern, given that this is an investigation, not an adjudication -- a distinction which the Commission has not hesitated to assert in other contexts. Indeed, the Commission has ruled that the ex parte rule will not apply here precisely because it wished to use this investigation to get a complete record, unencumbered by the usual prohibition against off-the-record contacts with the Commissioners. Memorandum and Order, January 8, 1981, n.4

However, it is manifestly clear that the concern about having a record devoid of information on accident probabilities simply does not apply here. For one thing, the testimony presented on accident consequences by the Attorney General of New York, the Audubon Society of New York City, UCS and NYPIRG, that of Jan Beyea and Brian Palenik, was explicitly based upon the postulation of a PWR-2 accident from WASH-1400. The Commission may not be aware of this fact, although it has the testimony and cross-examinations available to it. The public

record is full of work on the probabilities of these events, a great deal of it done by NRC or under contract to NRC at the taxpayer's expense. It is beyond serious question that, had this hearing continued in an orderly fashion, your Staff and CON ED/PASNY would have presented their evidence on the probability of this accident and others like it, we would have cross-examined as in every other NRC case and the record would be made.

Cross-examination has long been recognized as an extremely important tool for the public to develop record evidence in NRC proceedings. If that is the case for adjudications, where an enforceable order can issue as the outcome, there is no reason for being more restrictive in an investigation, which can culminate in no enforceable action against the Licensees. If your Staff comes forward with a probability analysis that the Intervenors, after cross-examination, could support, your order would prevent us from doing so because the Intervenors and Interested States would not be allowed to participate in the hearing unless they had each done their own probability analysis. This is an absurd result.

In any case, if you have any remaining fears at all in that score, you need only direct your Staff to come forward with all of the analyses the taxpayers have already sponsored on the probability of PWR-2 and other similar serious accidents. This is after all, an investigation. You would then have before you the most complete record possible.

Under these circumstances, what possible legitimate purpose could there be to requiring each Intervenor to present direct evidence on the probability of PWR-2 or some similar sequence as a precondition for presenting evidence or consequences? Do you expect each group to do multi-million-dollar probabilistic risk assessment? Even if we could pay for it, it would not further the cause of knowledge or the completeness of this record one whit. Indeed, requiring each Intervenor to present independent evidence on probabilities will needlessly clutter the record and add to the delay. The only possible outcome of erecting this senseless legal obstacle will be to throw the Intervenor and Interested States out of this investigation. That, of course, means the end of the investigation; it would have no further claim to any credibility in the eyes of the public.

CON ED and PASNY claim that it is the Intervenor's strategy to "discredit the use of Probabilistic Risk Analysis (PRA) methodology to calculate the probability of a nuclear accident." Licensees' Response to August 9, 1982 Memorandum and Certification, August 17, 1982 at 3. We need only point out that the Commission itself stated, after belated peer review of WASH-1400, on January 19, 1979, that it "does not regard as reliable the Reactor Safety Study's numerical estimate of the overall risk of a reactor accident." NRC Policy Statement, January 19, 1979.

UCS believes and has said in many forums, that the state

of the art of probabilistic risk assessment is not sufficiently well-developed to yield meaningful predictions of the absolute probabilities of accidents. Indeed, Intervenors intend to present evidence to this effect. Surely that is a highly relevant factor in assessing the risk of Indian Point since it goes directly to determining the degree of uncertainty inherent in the PRA results -- a factor the Commission must consider.

Nor are we alone in this view. Just this June 9, the ACRS told you that PRA is not "sufficiently developed" for the purpose of determining compliance with numerical safety goals. P. Shewmon, Chairman, Advisory Committee on Reactor Safeguards to Nunzio J. Palladino, June 9, 1982, P.1. The ACRS continued:

The large uncertainties inherent in PRA are well recognized and are acknowledged in the Proposed Policy Statement [on Safety Goals]. These uncertainties make the use of PRA in decision-making (which occurs already within the NRC) subject to large differences in the results obtained by different groups of analysts for the same accident scenario. These uncertainties also permit abuse of the methodology to obtain a result which supports a predetermined position by selective choice of data and assumptions. Id. at 3.

In addition, your own Staff concluded that the risk curves for Indian Point have an uncertainty "perhaps as much as a factor of 100 at the lower probabilities." Report of the Task Force on Interim Operation of Indian Point, May 30, 1980, p.32.

The Intervenors views on PRA, shared by many other respected members of the technical community who are not in the employ of the nuclear industry, neither disqualifies them from participa-

ting in this case nor lends support to the Commission's order. Indeed, CON ED and PASNY's comments on the subject are merely a variation on their oft-repeated theme that any groups critical of nuclear power should for that reason be debarred from this proceeding.

The second general area covered by the Secretary's letter, the directions regarding the order of the presentation of testimony (Board certified questions 2A and 2B) will be counterproductive to the useful consideration of the emergency planning testimony, will create an illogical presentation of the issues, and will delay the proceedings.

The fact that the NRC Staff has begun a "120 day clock", pursuant to 10 CFR 50.54(s)(2)(ii) as a result of deficiencies in emergency planning at Indian Point renders critical the information contained in the emergency planning testimony pre-filed by Intervenors. Whereas the NRC Staff and FEMA have limited resources to investigate the off-site emergency planning problems, the Intervenors offer the proof of witnesses, whose every day responsibilities require them to implement the procedure in the plans and who therefore have first hand knowledge of the deficiencies. These deficiencies may be revealed in a review of the written plans, but cannot be remedied without resorting to reality. Further, Intervenors have offered the emergency planning testimony of noted professionals, whose opinions could only benefit the ongoing examination and review of the Indian Point Emergency Plans. For example, the testimony

of Richard Altschuler on the question of the adequacy of the public information brochure, an area of concern and significant deficiency must be considered before that deficiency can be effectively resolved.

Intervenor's witnesses should thus play a meaningful role in the review process and we insist that the 120 day period is the best time for consideration of the emergency planning testimony. The Commission would only duplicate efforts and lengthen the proceedings by resolving the "120-day clock" without the input of emergency planning witnesses. Before positions harden into an adversarial context at the close of the 120 day period, all of the information available on the present state of emergency planning should be sought.

Secretary Chilk indicates further on page 3 of his August 23rd letter, that the question of the effectiveness of emergency planning is not a necessary foundation for testimony on the risks of the Indian Point plants. Secretary Chilk would permit the parties to:

"present testimony concerning accident risks based on assumptions as to ranges of emergency responses and that any disputes as to the feasibility or likelihood of particular emergency response testimonial assumptions can be either addressed expeditiously without inquiring into details of questions 3 and 4 or postponed until questions 3 and 4 are addressed on their merits."

Assumptions about the ranges of emergency responses are challenged in much of Intervenor's prefiled testimony. FEMA's official assessment of July 30, 1982, found the plans to be deficient in all but one out of 15 planning criteria. Therefore, if assumptions rather than facts are to be used, testimony can only be based on the assumption that the emergency plans will not protect the public in the event of an accident at Indian Point. Any other "assumption" is plainly unwarranted and constitutes an attempt to substitute fiction for reality. Of course, the logical approach is to continue with the emergency planning evidence, on which the parties are ready to proceed, so that the examination of risks can be made on a solid foundation of fact rather than assumption.

If the Commission insists that testimony on probabilities be presented first, the result will be another delay of unknown dimensions. New deadlines for the filing of testimony on other issues will have to be set. The Intervenor, probably like other parties, are not ready to proceed immediately. It also appears that at least one of the Licensees, Con Edison, may not be ready to present its case on the Probabilistic Risk Assessment Study, Table C to Summary of Meeting held on July 27, 1982, with NRC and Licensee management to discuss the scheduling of open licensing issues.

It is our sincere hope that you will give serious consideration to the points we have made, lift the order of July 27, 1982, and allow these hearings to go forward. So far as we can

tell, you have not previously considered the implications of your order as we have outlined them. Make no mistake: The Secretary's letter does not obviate the Atomic Safety & Licensing Board's concerns. Whether each witness or each party must present direct testimony on accident probabilities as a precondition for presenting evidence or consequences, the effect is essentially the same.

The Intervenors cannot pay experts<sup>\*/</sup> and, more importantly, should not have to; the NRC has already paid them. It need only bring them forward.

In closing, we remind you that you not only have our contentions, you also have all of our testimony on accident consequences and emergency planning before you at this moment. Far from being peripheral, the adequacy of emergency planning is central to an investigation of the risks of Indian Point. Apart from other aspects of risk, the consequences at Indian Point are great because of the density of population. The effectiveness of emergency measures is the single most important factor in reducing consequences and therefore reducing risk.

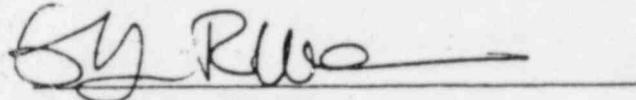
If the Commission does not wish to consider that evidence in this investigation, simply tell us now instead of forcing

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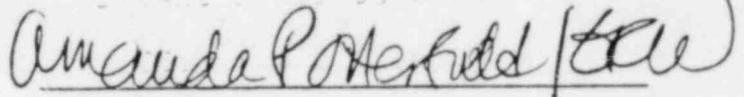
<sup>\*/</sup> In an attempt to rebut the Atomic Safety & Licensing Board's point that only CON ED, PASNY, and NRC can attend to pay for probability analysis, the Licensees have informed the Commission that UCS has retained Robert Weatherwax. The Commission may be interested to know that UCS has been able to pay only \$3000 for a report assessing CON ED and PASNY's voluminous PRA. The report has not yet been prepared. Moreover, even if UCS presents direct testimony on this issue, by the terms of the Secretary's letter, no other Intervenor could rely on this except NYPIRG. Each would have to prepare their own.

us through months of pointless legal maneuvering which will only exhaust our remaining resources and strip this investigation of its remaining public credibility.

Submitted by:



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For the Union of Concerned Scientists,  
The New York Public Interest Research  
Group, Friends of the Earth, The New  
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Branch Conservation Association, West-  
chester Peoples Action Coalition,  
and Dean Corren.

SUPPLEMENT TO "RESPONSE TO SECRETARY'S LETTER OF AUGUST 23, 1982"

As the Commission is surely aware, contracts have been let with IEEE and ANS to produce a procedures guide for probabilistic risk assessment. Revision 1 of NUREG/CR-2300 ("PRA Procedures Guide") was issued on April 5, 1982. The authors of the guide include persons who have contributed to WASH-1400 and other risk assessments since 1975. Certainly, their assessment of the time and manpower required to produce a risk assessment must be given considerable weight.

To summarize the information contained in Chapter 2 of NUREG/CR-2300, to produce a full probabilistic risk assessment on a minimum schedule would require a 29-member technical team 12 months simply to complete the analysis (a total effort of 135-383 man-months). To produce a draft report, submit it to peer review, revise the draft, and produce a final report would require an additional 6 months.<sup>1/</sup>

A quick assessment of the cost can be made by assuming that technical labor will cost \$3,000 per man-month (certainly an underestimate). For the 135-383 man-months required to produce a full risk assessment, a cost of \$400,000 to \$1,150,000 is obtained. This estimate does not include costs associated with the procurement of necessary documentation, site visits, computer time, and administrative and clerical support.

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<sup>1/</sup> The time estimates, of course, presume freedom from other tasks, a high degree of cooperation from the licensees and their consultants, and essentially unlimited access to security plans, proprietary reports, and other sensitive documents.

The effort in preparing a full probabilistic risk assessment is apparent. Moreover, there is little middle ground since NUREG/CR-2300 estimates that even to produce a quantification of event sequences and core melt frequencies would require a 13-member technical team 16 months to produce a final report (the minimum time schedule<sup>2/</sup>).

We can see no utility in requiring the intervenors to prepare a risk assessment and present a direct case thereon. It is clear that such an effort would simply be duplicative of the risk assessments performed by the Staff and the licensees. We believe that we can make an important contribution to the record on cross-examination.

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<sup>2/</sup> Even this effort would require 83-139 man-months of effort at a roughly estimated cost of \$250,000 to \$417,000 for technical labor alone.