

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION



COMMISSIONERS:

John F. Ahearne, Chairman  
Victor Gilinsky  
Joseph Hendrie  
Peter A. Bradford

In the Matter of )  
 ) Docket Nos. 50-247  
 ) 50-286  
CONSOLIDATED EDISON COMPANY OF NEW )  
YORK, INC. (Indian Point, Unit No. 2) )  
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POWER AUTHORITY OF THE STATE OF NEW )  
YORK (Indian Point, Unit No. 3) )  
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UNION OF CONCERNED SCIENTISTS REPLY TO  
LICENSEES MOTION FOR RECONSIDERATION OF THAT  
PORTION OF THE COMMISSION'S ORDER OF  
MAY 30, 1980 WHICH DIRECTS ADJUDICATORY HEARINGS

Con. Ed. and PASNY have asked the Commission to reverse its May 30, 1980, Order on Indian Point by withdrawing the central element: adjudicatory hearings before an Atomic Safety and Licensing Board to determine the risk posed by Indian Point and the need for special measures to mitigate that risk. The licensees' motion purports to be based primarily on the report of NRC's Interim Operations Task Force, dated June 12, 1980, although even the contents of the report are, in our view, misrepresented and used selectively at best. In actual fact, the licensees motion is a bald

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attempt to cut off fair and open hearings on the basis of untested and preliminary assertions admitted even by their authors to be qualified by enormous error bands, which the other side has had no opportunity to challenge.

In responding to the argument of the licensees, we do not wish to be misunderstood as accepting either the methodology or the conclusions of the Task Force Report, which are based upon the methodology of WASH-1400, the so-called "Rasmussen Report." UCS sent the Commission a letter dated July 16, 1980, containing our preliminary criticisms of the report. A copy is attached and incorporated herein. In short, we believe that the use of probabilistic risk assessment in this context is not legitimate. The methodology is incapable of yielding results within error bands narrow enough to be useful. Indeed, the Task Force concedes as much in qualifying the very conclusion upon which the licensees rely so heavily:

The changes committed to are clearly beneficial in reducing risk but it is questionable whether the factor of improvement, three, is statistically significant. The probabilities of severe core damage listed in table 7 are subject to at least a factor of 5 uncertainty in either direction due to uncertainties in the data upon which all this analysis is based.

Task Force Report, p. 26, Emphasis added.

The portion of the analysis which purports to compare the risks for different designs is qualified even more:

WASH-1400 assigned an uncertainty of plus or minus a factor of five to analysis such as this. The Lewis Committee questioned that small an uncertainty. We believe it is prudent to consider that these curves have an uncertainty, plus or minus, of about a factor of 10 at the higher probabilities and perhaps as much as a factor of 100 at the lower probabilities.

Id. at 32, Emphasis added.

UCS believes that the uncertainties are much greater than acknowledged by the staff. Probably the single most devastating criticism of WASH-1400 was its failure to reliably identify important common mode failures. In at least one case, this led the Lewis Committee to assign an uncertainty factor of up to one million to a probability in WASH-1400. Although the Task Force apparently made some attempt to address this in the few weeks given it, it is obvious that the fundamental criticism remains valid. Common mode failures not involving any of the WASH-1400 "dominant risk" scenarios would not be identified or factored into the analysis.

For these and other reasons contained in the attached letter, UCS believes that the Task Force Report cannot be given weight. We note that the document itself is almost wholly conclusory, admits to be based heavily on "judgment" and yet fails to provide the back-up data and analyses upon which anyone could rationally evaluate the exercise of "judgment." Moreover, it purports to balance known and quantifiable site deficiencies against the unknown and enormously uncertain factor of improvement associated with asserted design "advantages" of Indian Point.<sup>1/</sup> This balancing of real people against highly questionable calculations or judgments is inappropriate and unjustifiable.

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<sup>1/</sup> UCS has commented extensively on each asserted design "advantage," demonstrating that most do little more than attempt to ensure compliance with contemporaneous NRC regulations. Some may actually be counter-productive. The staff has ignored these comments, despite the Commission's clear directive to consider them. Order, May 30, 1980, item #4.

However, even if one were to accept the Task Force report, it provides scant support for the licensees. The licensees claim that, with respect to "individual risks posed to each of our citizens," the Task Force concluded that Indian Point poses about 30 times less risk, citing page 32 of the Task Force Report. This is a cruel and misleading use of the report. First, it fails completely to acknowledge the above-quoted error factors conceded by the authors or the fact that the authors question even the statistical significance of their conclusions. Second, it ignores the figures which attempt to assess the total risk associated with Indian Point as compared with other plants. Figure 1 (Task Force Report, p. 9) displays the following: The probability of 1 early fatality at Palisades (chosen as the "average" plant) is the same as the probability of 2,000 fatalities at Indian Point. The probability of 1 early fatality at Diablo Canyon is the same as the probability of 8,000 early fatalities at Indian Point. These findings hardly support the argument that Indian Point is "safer" than the average plant.

The licensees argue at length that it is "discriminatory" for the Commission to single out Indian Point for special proceedings. They state that there is no "appreciable difference" between Indian Point and "other similar reactor sites."<sup>2/</sup> It is true that there are a few other sites almost as bad as Indian

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<sup>2/</sup> It is at least interesting that in making this argument the licensees use a demographic measure different from any contained in the Task Force report, namely, density within 5 miles. For every measure of population density contained in the report, Indian Point is the worst site.

least at the 10 and 30 mile distances. However, at each distance considered, Indian Point is the worst. Moreover, this small group of bad sites are far worse than the average. The following information from tables 1 through 3 of the report is instructive: At the 10 mile radius only one site -- Indian Point -- has over 200,000 people. Seven plants have over 100,000, but 71 of the III listed have under 35,000. The mean site has approximately 1/8 the population of Indian Point. Thus, there is a sharp dropoff in population density and the great majority of sites have far less people than a small group, of which Indian Point is the worst.

This pattern is more dramatically revealed as the land area in question is expanded. At the 30 mile radius (table 2), only Indian Point and Limerick have close to 4 million people. Two additional sites have over 2 million, but 99 of III have under 1 million. The mean site has 1/10 the population of Indian Point, the worst. Finally, at a 50 mile radius from Indian Point there are 17 million people. The next closest are Zion and Limerick at about 7 million. The mean site has about one million persons within 50 miles; Indian Point has 17 times more people within 50 miles than the mean site. This, it is clear that the consequences of a major reactor accident at Indian Point could be far greater than those anywhere else.

Moreover, it is well known that the Commission's siting policy has been driven by Indian Point since the 1960's. The reluctance to appear to admit to a mistake in siting Indian Point has contributed to other regrettable siting decisions.

There is clearly a rational basis for re-evaluating the risks posed by Indian Point and the plant-specific measures needed to mitigate that risk. The fact that Zion and Limerick are also bad sites is no reason to refuse to begin a reassessment of past siting and safety policy with Indian Point, which still remains unique in its proximity to the largest population center in the United States, the licensees' protestations to the contrary notwithstanding. This is particularly true in view of the fact that the consequences of a major reactor accident at Indian Point or any other site have never been analyzed or subjected to the probing which only an adjudicatory forum can provide. The licensees seek to stifle that process before it has begun. We cannot help but wonder what they fear.

The licensees urge the Commission to defer to the Director's Decision of February 11, 1980. Two points should be made in this connection. First, the staff is not the final arbiter of Commission policy; as they have reconized in this case, the Commissioners alone have that duty. It would be irresponsible for the Commissioners to permit this unprecedented case to be resolved via closed-door negotiations between the licensee and the staff.

Second, it must be noted that the staff appears to be changing its position from that articulated to the Commissioners and to UCS earlier this year. Previously, the staff took the clear position that the need for long-term design measures to mitigate the consequences of a class 9 accident was established -- that the time was past for resisting these modifications on the basis of analyses of accident probabilities. Thus, the 27 "interim"

measures ordered by the Director were explicitly only sufficient to make the Indian Point plants safe enough until the major design modifications could be implemented. This was said to require a period of 1-2 years. It is no longer at all clear that the staff maintains this position. Indeed, it would appear that the emphasis has shifted once again to pre-TMI argument over the probability of accidents.

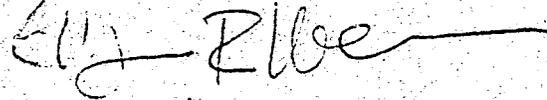
Under these circumstances, it is more than ever clear that adjudicatory hearings are an absolute necessity in order for a fair resolution of the issues raised by UCS on the basis of a factually reliable plant-specific record. Without this process, there is no assurance that the staff and licensee will not negotiate the issues away entirely, even to the extent of abrogating the basis of the Director's Decision. Indeed, in the interim since the February 11 Director's Decision, UCS and the rest of the affected public have been forced to the sidelines.

The time has passed when the Commission could avoid the issues raised by the UCS petition or when it could consign them to the staff's unreviewed and unreviewable discretion. The Commission took a major step forward when it directed that hearings would be held on Indian Point to compile a factual record upon which the Commission could act. A retreat from that position would surely signal that the Commission is afraid to have the facts revealed. We do not believe that is the case and we urge you to stand by your decision. All UCS has ever asked is a fair chance to present its case.

Finally, we understand that the General Counsel has recommended a procedure which would allow the licensees to demand a second hearing if they are displeased with the results of the first. This remarkable recommendation is unwarranted and unnecessary. The licensees have the right, of course, to one fair hearing. There is no requirement that they be permitted a second chance. Such a procedure would be cumbersome and time-consuming in the extreme. We cannot imagine why it is under consideration.

UCS urges you to act expeditiously in beginning the hearing process for Indian Point. Our petition was filed on September 17, 1979. For months, we have watched the staff and licensee negotiate, culminating in the February 11 "agreement." It is time for the public to have its forum.

Very truly yours,



Ellyn R. Weiss

Counsel for Union of Concerned  
Scientists

Dated:

cc: Indian Point Service list