Oct 31 1980

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of	)	
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE, et al.	)	Docket Nos. 50-443 50-444
(Seabrook Station, Units 1 and 2)	)	

NECNP REQUEST THAT DR. CHINNERY BE
CALLED AS A BOARD WITNESS
AND MEMORANDUM ON RELATED MATTERS

Since NECNP filed its request that Dr. Trifunac be called as a board witness, we have received a request from the Board for more information about Dr. Trifunac's schedule, responses from the Applicant and the NRC Staff, and a request from Dr. Chinnery that he also be called as a Board witness. We respond to these below.

1. Dr. Trifunac's Schedule

On October 17, Mr. Cho asked, on behalf of the Board, for details of Dr. Trifunac's schedule late this year and in early 1981. We were finally able to reach Dr. Trifunac on Wednesday, October 29, at which time he explained that he is tentatively scheduled to be out of the country from December 20-21, 1980, to February 10-15, 1981. Both the trip itself and the precise dates await confirmation.

We should note that Dr. Trifunac has expressed concern that he be given an indication of the points that his testimony should cover so that it will be useful to the Board beyond his original testimony. We understand that if he is to be called as a Board witness, we would not be able to assist him in preparing testimony, as would normally be the case. Accordingly, the Board will need to provide him with some direction concerning the issues it needs to have him address.

2. Response to Applicant and Staff Procedural Points

The Applicant has objected to calling Dr. Trifunac as a Board witness unless NECNP is denied the right to cross-examine his testimony, and the Staff has taken the position that Dr. Trifunac should file testimony in advance of the hearing so that he can be examined by the Staff, the Applicant, and the Appeal Board.

NECNP agrees that Dr. Trifunac's testimony should be filed far enough in advance to allow effective cross-examination. However, given his schedule, it appears to be appropriate that he should comment on the testimony filed by the parties, as he did in Diablo Canyon. (NECNP Memorandum of October 17, 1980, at 4-5). This is consistent with the Staff's target date of February 15, 1981, for written testimony and with the fact that he should be back in the country by then.

NECNP objects to the Applicant's suggestions and the implication of the Staff's filing that NECNP should be limited in its ability to examine Dr. Trifunac. Since he will be a Board witness, we will presumably not be able to consult with him in the

preparation of his testimony or in the preparation of our own case. Given the adversary nature of the proceeding, NECNP not only has a right to cross-examine Dr. Trifunac, but must be allowed to do so in order to assure the development of a complete record.

Finally, in its filing of October 17, 1980, the Applicant suggested that NECNP should be required to file its testimony first. There is no justification for this inappropriate jockeying for tactical advantage. As discussed in our Motion to Suspend Construction, the Applicant bears the burden of going forward with the evidence as well as the ultimate burden of proof.

In addition, the Applicant's assertion that it need simply respond to what Dr. Chinnery now has to say is not accurate. With the Commission's acceptance of Dr. Chinnery's approach as being within Appendix A of Part 100, the Applicant must present its own affirmative testimony on these issues. Even if the Applicant's characterization of its testimony were correct, however, it is thoroughly aware of Dr. Chinnery's hypothesis as a result of his previous testimony and has had ample opportunity to prepare its own testimony on that basis. Indeed, NECNP may argue equally well that it should have an opportunity to see the Applicant's testimony first since the Applicant has already had an opportunity to see Dr. Chinnery's. The Board should ignore this foolishness and order the normal simultaneous filing of testimony.

3. Request That Dr. Chinnery Be Called As A Board Witness

After learning of our request that Dr. Trifunac be called as a Board witness, Dr. Chinnery asked that we make the same request on his behalf. The reason for his request is similar to Dr. Trifunac's -- a concern with scientific integrity and the need to set the facts straight in this record. His letter of October 23, 1980, which speaks eloquently for itself, is attached. We ask that his request be honored, and that he be called as a Board witness as well.

Respectfully submitted,

Ellyn R. Weiss

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Dated: October 31, 1980

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23 October 1980

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Dear Ms. Weiss,

I have now had a chance to read a number of documents that you have recently sent to me. These include a copy of part of the decision of the Appeal Board (date unknown), the transcript of the May 29, 1980, presentations to the NRC Commissioners, and the NECNP memorandum to the Appeal Board dated October 17, 1980.

At this juncture, I would like to clarify my position for you, the NECNP, the Appeal Board, and (if necessary) for the Commissioners of the NRC. First and foremost, I am not, and never have been, a member of NECNP. I have not received any moneys from that organization, even for travel expenses. Further, I do not support the aims and objectives of that organization. I support the construction of nuclear power plant facilities, which I feel are essential for the maintenance of our present technological society.

However, this does not imply that I agree with all NRC procedures. In particular, I have some severe doubts about the methodology currently being used to assess the seismic risk at nuclear power plant sites. The current regulations (10 CFR Part 100, Appendix A) are to my mind not well formulated, given the scientific nature of many of the questions involved, and given the adversary proceedings in which these questions have to be considered. I would personally like to see these regulations rephrased to place them in a more rational scientific framework, and I would like to see the NRC hearings on these subjects evolve new ways to handle scientific testimony that relates to them. These are the sole objectives of my statements related to the Seabrook site.

At the Licensing Board hearing in 1975, I sought for an opportunity to express my disagreements with some of the statements made in the Power Company's Site Investigation Report. In particular, that report stated (as near as I can recollect) that "an intensity VIII earthquake [in the tectonic region containing the Seabrook site] was inconceivable". This statement was in direct conflict with the conclusions of a paper that I had published in 1973. Given the adversary nature of the proceedings before this licensing board, the only way in which I could present this opinion was to appear on behalf of the intervenors (the NECNP). I was never informed of the final decision of the Licensing Board.

The matter was taken up again in the Appeal Board hearing (date unknown), to which I was not invited. At that time, my testimony was judged to be "technically deficient and inconsistent with Appendix A". The second of these pronouncements was an interpretation of the intent of Appendix A, and while I do not agree with it, it is certainly within the proper limits for judgments of the Appeal Board. The first, charging me with being technically deficient, is a different matter. The Appeal Board members do not have the scientific qualifications for making such a judgment, and I consider it a personal affront. The impact of this was lessened by the minority opinion of Mr. Farrar, and the subsequent finding of the NRC Commissioners that my approach is not necessarily inconsistent with Appendix A (September 25, 1980). However, I shall not be happy until the matter is straightened out by the Appeal Board.

The Commissioners have directed the Appeal Board to reopen the record to take additional evidence on my methodology. When this takes place, I strongly urge the Board not to listen only to me, but to invite other scientists familiar with Eastern U.S. seismicity in general (and New England seismicity, in particular) to provide their opinions (which I admit will not always agree with mine). Only on such a basis can the Board come to a rational decision about the proper interpretation of Appendix A. What the Board will find is that we know remarkably little about earthquakes in the New England area, and the problem is not to say who is right and who is wrong, but rather to define a conservative estimate for the Safe Shutdown Earthquake given this lack of knowledge. The choice of experts to give opinions to the Board should be left to the NRC Staff, in whom I have full confidence. I hope they will present the results of a recent study in which a number of experts in the seismicity of the Eastern U.S. each contributed opinions on many of the issues to be discussed by the Appeal Board, and these opinions were collated by Tera Corporation.

There are three scientific questions which lie at the heart of any attempt to interpret Appendix A. They are all quite controversial, and I do not believe that previous actions by the Licensing Board and the Appeals Board have properly explored their ramifications. These are the following:

a) How should the tectonic province containing the Seabrook site be defined, and what is the quality of the historical record of seismicity in this province?

b) Could an earthquake larger than the largest in this historical record possibly occur in this province? If so, how large might it be?

c) Do we have any rational basis for characterizing the historical record in such a way as to allow us to estimate the probability of occurrence of these large earthquakes during the lifetime of the Seabrook structure?

I have opinions on each of these questions, and these will be outlined in a separate document. It is very important to me, however, that the appeal Board understand how my opinions relate to those of other seismologists and geologists. This can only be done by the solicitation of unbiased expert opinion.

Because of all of the above, I would very much prefer not to appear before the Appeal Board on behalf of the NECNP. Instead, I should be called before the Board as one of its own witnesses. Perhaps this way we can eliminate some of the incessant vituperation that seems to accompany the adversary proceeding, and provide the Board with a rational scientific basis upon which it can make its decision.

I request that you send a copy of this letter to each of the addressees of your October 17, 1980 memorandum to the Appeal Board. I also request that this letter be placed in the record of the forthcoming hearings of the Appeal Board.

Yours sincerely,

Michael A. Chinnery

Michael A. Chinnery
Group Leader

MAC:mm