

March 22, 1988

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UNITED STATES NUCLEAR REGULATORY COMMISSION '88 MAR 28 P4:26  
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

In the Matter of )

Public Service Company of )  
New Hampshire, et al. )

(Seabrook Station, Units 1 & 2) )

Docket No. 50-443 OL-1

ONSITE EMERGENCY  
PLANNING & TECHNICAL  
ISSUES

NEW ENGLAND COALITION ON NUCLEAR POLLUTION'S  
REPLY TO APPLICANTS' AND THE STAFF'S RESPONSES  
TO NECNP'S MOTION FOR RECONSIDERATION OF THE BOARD'S  
DENIAL OF NECNP'S MOTION TO COMPEL, DATED FEBRUARY 17, 1988

On March 1, 1988, the New England Coalition On Nuclear Pollution (NECNP) filed a motion requesting that the Licensing Board reconsider its Order dated February 17, 1988 denying NECNP's motion to compel, and ruling that the issue of "microbiologically induced corrosion" ("MIC") is not within the scope of NECNP Contention IV.<sup>1</sup> NECNP offers the following in response to the statements made in Applicants' and the NRC Staff's responses, dated March 14, 1988, and March 11, 1988,<sup>2</sup> respectively, as to why the scientific and expert opinion presented by NECNP would be disregarded by the Board.

1 "Motion for Reconsideration of the Board's Denial of NECNP's Motion to Compel, dated February 17, 1988," dated March 1, 1988.

2 "Applicant's [sic] Response to NECNP's Motion for Reconsideration of the Board's Order Denying NECNP's Motion to Compel," dated March 14, 1988; "NRC Staff Response to NECNP Motion for Reconsideration of the Board's Denial of NECNP's Motion to Compel," dated March 11, 1988.

First and foremost, Applicants and the Staff have utterly failed to controvert the expert testimony and scientific studies submitted by NECNP in support of its position that MIC is encompassed within the plain language of NECNP Contention IV. In lieu of expert opinion as to the meaning of NECNP Contention IV, Applicants and the staff rely solely on the "lay" interpretation of the word "accumulation," and conclude that "accumulation" of "aquatic organisms" can only refer to the accumulation of one type of "aquatic organisms," i.e. macro-biological organisms (clams, mussels, and barnacles). However, Contention IV does not state that it is limited to only accumulations of macro-biological aquatic organisms, and the Staff and Applicants have utterly failed to present any evidence controverting the expert opinion provided by NECNP that the use of the term "aquatic organisms" in the bio-chemistry field refers to both micro-biological and macro-biological organisms.<sup>3</sup>

Second, Applicants and the Staff suggest that the Contention's use of the term "accumulation" was meant to limit Contention IV to only one of the detrimental effects of such accumulations, i.e. blockage of cooling systems, and subsequent impairment of heat transfer capabilities. However, as Dr. Bryers' affidavit points out, there are a number of detrimental effects of the "accumulation" of "aquatic organisms." Another effect of

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<sup>3</sup> See Bryers Affidavit, at Para. 8, attached as Exhibit A, to "NECNP's Motion for Reconsideration."

the "accumulation" of microbiological "aquatic organisms" is corrosion.<sup>4</sup> Applicants and the Staff have offered no expert opinion that controverts this.

Applicants and the Staff both suggest that the Board should disregard Dr. Bryers' testimony. Applicants rest merely on the bald assertions of counsel that Dr. Bryers' testimony is "unpersuasive;"<sup>5</sup> the NRC Staff merely states, again without submitting any controverting evidence of opinion, that Dr. Bryers' opinion "is entitled to little, if any weight."<sup>6</sup> However, Applicants and the Staff have countered the expert opinion offered by NECNP as to the scientific meaning of the terms used in NECNP Contention IV with nothing more than the unsupported assertions of counsel as to their meaning.

It is ludicrous that the Board should give the unsupported "lay" interpretations offered by the legal counsel for

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4 See Bryers, J.D., Characklis, W.G., Zilver, N., and Nimmons, M.G., "Microbial Film Development and Associated Energy Losses," at 12.14-1, Paper No. 12-15 presented at the Proc. 6th OTEC Conference, "Ocean Thermal Energy for the '80's," Washington, D.C., June 19-20, 1979, an excerpt of which is attached as Exhibit C to "NECNP's Motion for Reconsideration," and Bryers Affidavit, at Para. 8, attached as Exhibit A, to "NECNP's Motion for Reconsideration."

5 "Applicant's Response to NECNP's Motion for Reconsideration of the Board's Order Denying NECNP's Motion to Compel," dated March 14, 1988, at 3.

6 "NRC Staff Response to NECNP Motion for Reconsideration of the Board's Denial of NECNP's Motion to Compel," dated March 11, 1988, at 5 n. 3.

Applicants' and the staff greater weight than the expert opinion provided by NECNP. Where expert opinion evidence is submitted by only one side, as is the case here, an agency may disregard it only under three circumstances: where the agency possesses the expertise to substitute its judgment in the place of the experts'; where there is contrary evidence already in the record; and where the expert's testimony has minimum credibility. Stein, Mitchell, and Mezir: Administrative Law, § 28.06 (Mathew-Bender, 1987). None of these circumstances are present here. First, the issue at hand involves the interpretation of technical, scientific terms used in the field of microbiology and biochemical engineering, which is not an area in which the Commission possesses expertise. Second, there is no contrary evidence in the record, other than the unsupported "lay" opinion of Applicants' and the Staff's legal counsel. Finally, as is clearly demonstrated by Dr. Bryers' curriculum vitae,<sup>7</sup> Dr. Bryers is one of the country's foremost experts on the subject of the effects of biological fouling on engineered safety systems. His opinion as to the meaning and scope of the plain language of the plain language of NECNP Contention IV is clearly entitled to

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7 Dr. Bryers is the author of over thirty published articles in scientific journals and treatises on the subject of microbial fouling and its effects in engineered systems, including nuclear power plant heat-exchange systems, and is a recognized expert in this area. His Curriculum Vitae is attached as Exhibit B to NECNP's Motion for Reconsideration.

great weight.<sup>8</sup>

Indeed, the Staff's assertion that Dr. Bryers' opinion is entitled to little weight because it is offered six years after Contention IV was formulated is patently absurd. NECNP has provided this Board with scientific studies dating back to 1977 that demonstrate that MIC was a recognized safety concern and detrimental effect of the process of microbial fouling, and no effort has been made to rebut this.<sup>9</sup> Dr. Bryers' so-called "post hoc" interpretation of this Contention is necessitated by the fact that its contention was wrongfully dismissed at an earlier stage in this proceeding. To disallow expert opinion as to the scientific meaning of the plain language of the Contention because it cannot, due to an error not of NECNP's making, be made contemporaneously, would be blatantly unfair and prejudicial to NECNP, and would cripple NECNP's ability to litigate this contention in any meaningful way.

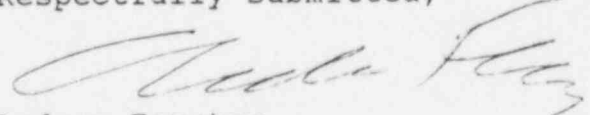
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8 While Dr. Bryers' opinion as to "the scope of NECNP Contention IV" is, admittedly, the ultimate issue of this case, Dr. Bryers' expert opinion of the technical, scientific meaning of the terms used in the contention, and his expert opinion as to the range of detrimental effects that are caused by the process referred to in the contention, are entirely appropriate and admissible.

9 Indeed, Dr. Bryers himself was the author of one of these scientific studies. See Norman, G., Characklis, W.G., and Bryers, J.D., "Control of Microbial Fouling in Circular Tubes with Chlorine," 18 Development in Industrial Microbiology, pp. 581-590 (1977), excerpt attached as Exhibit G to NECNP's Motion for Reconsideration, at 8.

Finally, contrary to the Staff's suggestion,<sup>10</sup> the fact that the Federal Register notice referenced by NECNP Contention IV does not mention corrosion as one of the detrimental effects of biofouling is irrelevant. As Applicants and the Staff have pointed out several times, Intervenors are bound by the literal terms of their admitted contention. Texas Utilities Electric Co. (Comanche Peak Steam Electric station), ALAB-868, 25 NRC \_\_, Slip Op. at 37 n. 83. The same goes for Applicants and the Staff. The literal terms of NECNP Contention IV plainly encompasses all of the detrimental effects of the "accumulation" of "aquatic organisms" in cooling systems. This includes both blockage and subsequent heat transfer impairment caused by the build-up of macro-biological organisms, and microbiologically induced corrosion and subsequent leakage, caused by the accumulation of micro-biological organisms.

Respectfully submitted,



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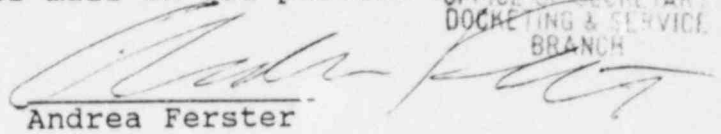
<sup>10</sup> "NRC Staff Reponse to NECNP Motion for Reconsideration of the Board's Denial of NECNP's Motion to Compel," dated March 11, 1988, at 2.

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CERTIFICATE OF SERVICE

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I certify that on March 22, 1988, copies of the foregoing pleading were served by first-class mail on all parties listed on the attached service list.

  
Andrea Ferster

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