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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

APPLICANT'S MOTION FOR SUMMARY DISPOSITION
OF POTTHOFF CONTENTION 6

I. THE CONTENTION

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("FS-FES"). That analysis pointed out that 600 to 1,200 square miles of land would be needed to grow enough plants to sustain a biomass conversion plant equivalent to ACNGS. FS-FES at S.9-7. Furthermore, the Staff concluded that about fifteen years of research and development will be required to make biomass conversion commercially feasible. Id.

Mr. Potthoff's contention challenges the Staff's conclusion that biomass conversion is not now a practical way to produce electricity:

In the FES, the Staff states that biomass production is "not now a reasonable alternative" to ACNGS. However, Project Independence estimates fuels from biomass production (urban waste, agricultural waste, terrestrial crops, marine crops) would amount to 3×10^{16} gross BTUs per year, and that large quantities of marine crops can be grown and harvested without subsidies when oil hits \$11 per barrel. Project Independence estimates a 100,000 [sic] acre marine biomass farm, producing 27×10^{12} BTUs/year, would cost \$578 million. I contend building and operating a marine biomass farm, or other biomass production systems, would be environmentally preferable to ACNGS, and ask the Board to deny the permit under the NEPA.

The Staff apparently considered only land production of biomass materials, whereas Potthoff contemplates growing plants at sea:

...When I talk about a biomass form [sic], I specifically mean a marine biomass form [sic] which-- basically, you know, my idea was that they would grow kelp and take it in and have it decay into alcohol or methane or something like that.

Prehearing Conference, October 16, 1979, tr. 931. In its Order of March 10, 1980, this Board rejected Potthoff's contention for failure to provide a basis for alleging that "such a large scale marine biomass farms would be an environmentally superior alternative." Order at 12.

Subsequently, however, the Atomic Safety and Licensing Appeal Board (ASLAB) in its Decision of April 22, 1980, ruled that Potthoff's contention should be admitted. The Appeal Board interpreted the contention as follows:

...In essence, Mr. Potthoff seeks to challenge the staff's dismissal of biomass production as a viable alternative to the proposed Allens Creek facility. More specifically, he insists that a marine biomass farm (apparently not considered by the staff in its evaluation of alternatives in the FES Supplement) should be substituted for Allens Creek....

Houston Lighting & Power Company (Allens Creek Nuclear Generating Station), ALAB-590, Slip Op. at 8 (April 22, 1980) (emphasis in original).

II. ARGUMENT

A. Mr. Potthoff's Statement of his Contention Does Not Support the Proposition that Biomass is a Reasonable Alternative.

Although there has been substantial disagreement on whether Mr. Potthoff's contention should be admitted, nearly every person who has considered this contention appears to recognize that a marine biomass farm is not presently a realistic alternative source of energy.

Dr. Buck, who dissented from the decision to admit this contention, demonstrated clearly why the contention lacks merit:

Just a few simple computations utilizing petitioner's own energy output figures associated with his hypothetical marine biomass farm will suffice to show the total frivolity of his claim. As noted, according to the petitioner, a 100,000 acre (or 156 square mile) marine biomass farm will produce enough kelp to supply 27×10^{12} BTUs/year. The Allens Creek facility, however, is designed to produce 107×10^{12} BTUs/year, roughly four times the amount of the postulated marine biomass farm. What this means is that the farm would have to quadruple its production to meet the power needs projected to be served by the plant. Assuming a fourfold increase in the marine area necessary to produce the kelp (a reasonable assumption for this purpose), the result is a marine biomass farm comprising 400,000 acres or 624 square miles. Whether we accept petitioner's claim that a 156 square mile biomass farm is the energy equivalent to the Allens Creek plant or the extrapolated 624 square mile farm, either shows the utter unreality of the contention.

ALAB at 23-24 (footnote omitted).

The fact of the matter is that the Project Independence Blueprint: Final Report of the Solar Energy Task Force (1974), itself, does not support Mr. Potthoff's claim that a marine biomass farm is a viable alternative to ACNGS. That document clearly does not establish that energy can now be produced commercially from seaweed. The point of the report is that more research and development are needed before it can be shown that biomass conversion is technically

and economically feasible. The report clearly says an "R&D [research and development] program has been formulated to establish the commercial practicability" of biomass conversion. Id. at V-4. The report does not say that the commercial practicability has been proven.

B. The Attached Affidavit of Dr. Herbert Woodson Demonstrates that Marine Biomass is not a Viable Alternative.

In support of its motion, Applicant submits the affidavit of Dr. Herbert Woodson, who is the Director, Center for Energy Studies, University of Texas. In his capacity, Dr. Woodson is involved in assessing the technical and economic feasibility of potential energy sources. Dr. Woodson has done a thorough review of the information available on biomass conversion and has set forth in his affidavit the reasons why a marine biomass farm is not commercially feasible at this time and why the prospects for such an enterprise are remote and speculative. The affidavit points out that a biomass farm of the scale necessary to replace ACNGS does not presently exist, nor is it likely to exist in the near future. Significant additional research and development are necessary before a feasible model for a large scale biomass farm can even be formulated. Based on the known information it is not possible to determine whether a marine biomass farm of the size required to

replace ACNGS will be commercially viable at any time in the future. In short, substantial technological advancements are necessary before it can become commercially viable to produce electric power utilizing marine biomass products. Even if the commercial viability is some day proven, there is still the enormous practical problem of putting such an operation into action. For example, Dr. Woodson points out that in order to have a farm that is large enough to substitute for ACNGS, HL&P would have to have exclusive control over the 15 to 20 percent of the Gulf of Mexico from the mouth of the Mississippi River to Mexico that would be useful for plant cultivation. There is simply no known legal process by which this feat can be accomplished. Finally, Dr. Woodson concludes that generation of electricity through biomass conversion is not environmentally preferable to ACNGS.

C. Remote and Speculative Alternatives Need Not Be Considered Under the National Environmental Policy Act.

In his attempt to obtain consideration of a marine biomass farm in this licensing proceeding, Mr. Potthoff relies exclusively upon the National Environmental Policy Act, 42 U.S.C. §4321 et. seq. That Act requires this Board to consider alternatives to the proposed ACNGS, including

alternative sources of energy. However, the environmental review mandated by NEPA, including the consideration of alternatives to a proposed project, is governed by a rule of reason. National Resources Defense Council v. Morton, 458 F.2d 827 (D.C. Cir. 1972). The "rule of reason" has been so widely followed as to defy full citation. See, e.g., Friends of the Earth v. Coleman, 513 F.2d 295 (10th Cir. 1975); Carolina Environmental Study Group v. United States, 510 F.2d 796 (D.C. Cir. 1975); Public Service Electric and Gas Co. (Hope Creek Generating Stations, Units 1 and 2), ALAB-518, 9 NRC 14, 38 (1979). As the Supreme Court has stated, NEPA does not require the NRC to consider alternatives that are remote and speculative and that require the suspension of common sense.

[A]s should be obvious even upon a moment's reflection, the term "alternatives" is not self-defining. To make an impact statement something more than an exercise in frivolous boilerplate the concept of alternatives must be bounded by some notion of feasibility. . . .

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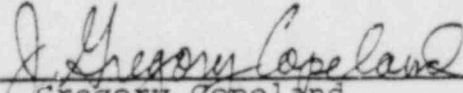
Common sense also teaches us that the "detailed statement of alternatives" cannot be found wanting simply because the agency failed to include every alternative device and thought conceivable by the mind of man. Time and resources are simply too limited to hold that an impact statement fails because the agency failed to ferret out every possible alternative, regardless of how uncommon or unknown that alternative may have been at the time the project was approved.

Vermont Yankee Nuclear Power Corp. v. Natural Resources
Defense Council, Inc., 435 U.S. 519 (1978).

III. CONCLUSION

Section 2.749 of the Commission's Rules of Practice encourages the summary disposition of dubious issues raised in petitions to intervene for which no genuine issues of material fact exist. See, e.g., Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-73-12, 6 AEC 241, 242 (1973); Duquesne Light Co. (Beaver Valley Power Station, Unit 1), ALAB-109, 6 AEC 243, 246 (1973). Applicant submits that the affidavit of Dr. Herbert Woodson attached to this Motion places indisputable facts in the record to show that Mr. Potthoff's proposed biomass farm cannot be relied upon to produce electricity commercially in the timeframe of Allens Creek and that his proposed alternative may properly be characterized as "remote and speculative." The facts alleged by Mr. Potthoff in his contention and at the October Prehearing Conference also do not support an assertion that marine biomass is now a viable alternative. Therefore, Applicant moves the Board to grant this Motion for Summary Disposition of Potthoff Contention 6.

Respectfully submitted,



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