

were proposed (Natural Resources Defense Council v. Nuclear Regulatory Commission, 539 F.2d 824 (2nd Cir. 1976), judgment vacated and remanded for consideration of mootness sub nom. Allied-General Nuclear Services v. Natural Resources Defense Council, 46 U.S.L.W. 3447 (Jan. 17, 1978)).

This motion for summary disposition really focusses on three arguments. First, that there is a reasonable basis to believe that there is a program for development and deployment of a substantial number of FNPs. Second, that the FES prepared by the NRC Staff is not a programmatic impact statement. Third, that the FNP is a unique concept for which a programmatic approval is required. These arguments essentially depend upon acceptance of the validity of the Statement of Material Facts Which Are Not in Dispute and the interpretation of those facts for the legal questions presented here. We address in this memorandum the question of the interpretation of those facts.

II. Scope of Proposed Action

It is hardly necessary to elaborate on the obvious fact that the OPS plan for FNPs is to build substantially more than eight. Clearly OPS has in mind a substantial number of these facilities in the coastal area. For instance, in a New York Times article of June 4, 1972, Ralph Lapp saw the AGS facilities as the forerunners of hundreds of FNPs. Cited in an article by J.A. Ashworth, Assistant to the Project Manager, Public Service Electric and Gas Co., entitled Design Challenges of Offshore Standard Plants, a copy of which was provided to NRDC by letter

dated August 8, 1974, from T.M. Daugherty of OPS. In a speech to the Institutional Conference of Investment Bankers on October 23, 1973, A.P. Zechella, President of OPS stated (p. 6):

Our forecasts show that Offshore Power Systems at a production rate of four floating nuclear plants per year expects to build 42 plants for installation during the next two decades.

On January 17, 1974, Mr. Zechella told the Committee on Power Generation of the Association of Edison Illuminating Companies:

Our plans call for an orderly expansion of our facility manufacturing capability. Following the shipment of these first two units in 1979 and 1980. [sic] Our manufacturing schedules call for additional plants to ship at a rate of one in 1981, two in 1982, three in 1983 and four in 1984 and subsequent years.

* * * *

I am pleased to announce, for the first time that shortly, we will amend our manufacturing license application to increase the number of FNP's from eight plants to a total of sixteen. With our facility producing four plants per year as we reach maturity, the last of these additional eight would be ready for shipment in 1985.

The OPS scheme for FNPs is substantially broader than the eight proposed, and the manufacturing facility for which license approval is sought must be judged on the basis of its potential and OPS's plans for it and not the 8 FNPs identified in the application.

The Staff apparently believes that because only 8 FNP approvals were requested, only the impact of those 8 must be analyzed. This presents a situation analogous to Kleppe v. Sierra Club, 427 U.S. 390 (1976). Like Kleppe, we have a case in which

an effort is made to artificially define the scope of a proposed action. Like Kleppe, we have here a far broader program of which the specific actions are only a part. Like Kleppe, the consideration of the proposed actions can only occur after a programmatic statement has been prepared which encompasses these limited proposals. The OPS characterization of the proposal, as related only to 8 FNPs, is of course not binding, or all applicants could avoid programmatic statements by segmenting the programs.¹ The key is what is really happening, not how an applicant or agency characterizes it. What is clearly happening here is that OPS is launching a major program to build and site hundreds of FNPs.

III. The FES Is Not A Programmatic Impact Statement

There is no magic formula for what are the elements of a programmatic impact statement. The key is to identify what is the program and then to develop an FES which fairly addresses that program. This is essentially identical to the process for preparing any FES, except here the program requires consideration of far larger considerations than the standard FES. The scope of the proposed action here was discussed in section II, supra. A comparison of that program with the FES here conclusively demonstrates that this is not an adequate programmatic FES.

^{1/} Numerous cases have held that artificial segmentation of proposed actions is impermissible. Indian Lookout Alliance v. Volpe, 484 F.2d 11 (8th Cir. 1973); Named Individual Members of the San Antonio Conservation Society et al. v. Texas Highway Department, 446 F.2d 1013 (5th Cir. 1971).

At no time does the Staff analyze the environmental impacts of hundreds of FNPs in the coastal waters of the United States. The potential damage which such a fleet of FNPs could generate is set forth in our original petition for leave to intervene. The elements are included individually in the FES for this case but what is missing is the Staff analyzing the accumulated effect of hundreds of FNPs. If it had done this, we would know the extent of the programmatic effects of the actions analyzed in Sections 5 and 6 of NUREG-0056 and the programmatic effects of the actions analyzed in Subsections 2.4 and 2.5 of NUREG-0056, Supplement 1. These programmatic analyses would have provided a basis for determining whether ocean and near-shore environments could withstand the magnitude of the environmental insult which the FNP program would impose. Without those analyses, it is not possible to determine whether an FNP program should be allowed to begin and, if so, how large it should be. The reason for requiring a programmatic review is to be able to make these determinations before allowing a program to begin.

In both SIFI, supra, and NRDC v. NRC, supra, the courts stressed the principle that the purpose of the programmatic review is to make a reasonable forecast of the environmental consequences of an action before it is allowed to commence. In addition, when the FNPs are viewed as a program whose implementation will occur over many years, large scale programmatic alternatives will emerge and have to be considered. The Staff analysis of the alternatives of energy conservation and solar

energy is completely distorted by the artificially established deadline of the early 1990s. If the FNP is properly viewed, as OPS itself has viewed it, as a program for hundreds of plants over the next several decades, then it is not only reasonable but essential to address the many alternatives which exist in that time frame, including conservation, which, if properly implemented, can, without any deprivations of lifestyle changes, maintain a real GNP growth rate of 2-3% through the year 2000 with the addition of no more than 10-15% (7-12 quads) of new energy and with no additional nuclear plants beyond those already in existence and under construction. Energy: The Easy Path, Vince Taylor (Jan. 1, 1979); Soft Energy Paths, Amory B. Lovins (1977). Similarly, by the year 2000, one-fourth of our total energy needs could be met with solar energy. Council on Environmental Quality, Solar Energy: Progress and Promise (April 1978); Blueprint for a Solar America, Solar Lobby (January 1979). These are factors essentially ignored by the Staff because its entire focus was on eight FNPs by the early 1990s. The programmatic review required would expand the investigation of alternatives to FNPs and highlight the advantages of these alternatives.

IV. The Floating Nuclear Plant Is Unique

It is reasonable to anticipate that the applicant will argue that the FNP is not a new program but merely the continuation of an old and already established technology -- i.e., light water reactors. However, this entire proceeding and much

of what is already contained in the FES belie this assertion. The ACRS and the Staff have treated the FNP as a unique technology requiring a special analysis. Even OPS in seeking to sell the FNP concept has considered it a new concept, albeit alleging that it relies on existing technology.

Of particular relevance are the findings contained in NUREG-0502 with respect to the FNP design. Because of the unique risks associated with FNPs, the FNP will be the first reactor to be required to include a core-catcher and other materials to mitigate the consequences of a core-melt accident. These features make the FNP a markedly different device than existing plants. The risk factor is sufficiently altered by the water siting to transform an otherwise "incredible" accident into a credible accident for which design protections must be provided. Making a Class 9 accident a design basis risk involves a major technological variation from the existing reactor technology.

A similarly important technological difference in FNPs and land-based plants which also focusses on the fact that the plant is sited in water and not adjacent to water is the special site considerations related to the shoreline siting of FNPs. The Environmental Protection Agency and the Staff are on record as believing that it is highly unlikely that any shoreline sites for FNPs will be found which are acceptable. NUREG-0502, p. XIV. The floating of a nuclear plant with the attendant dredging, sedimentation and other potential adverse consequences

identified in NUREG-0056, Supp. 1, Sections 2.4 and 2.5, creates unique problems for all FNPs which are not applicable to all land-based plants.

Undeniably, what is different about FNPs is that they float on water. That difference is demonstrably significant as reflected by all the special conditions being imposed on the FNPs. Thus, the concept of an FNP represents a new technology for which a sufficiently broad implementation is planned that a programmatic review is required.

CONCLUSION²

Eight floating nuclear plants doesn't mean a hell
of a lot;

Eight floating nuclear plants doesn't mean a thing.

But give them to us four a year,

Every year for forty years,

That's enough for us to see the programmatic scheme.

Respectfully submitted,



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2/ With apologies to the composers of "Pajama Game."