

D851016

Honorable Nunzio J. Palladino
Chairman
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Dr. Palladino:

SUBJECT: ACRS COMMENTS ON THE PROPOSED NRC ADVANCED REACTOR POLICY STATEMENT

During its 306th meeting, October 10-12, 1985, the Advisory Committee on Reactor Safeguards reviewed the proposed Statement on the Revised Regulatory Policy for Advanced Reactors as presented in SECY-85-279 dated August 21, 1985. This matter was also discussed during a meeting of the ACRS Subcommittee on Advanced Reactors on September 25, 1985. We also had the benefit of the documents referenced.

In our view the intent of the proposed statement is fully appropriate, including the specific provisions for establishing an early and continuing interaction between the NRC and the designers and others engaged in developing proposals for advanced reactors. We also welcome the intention to stabilize, expedite, and clarify, to the extent possible, the regulatory review process for advanced designs, and particularly the effort to make the findings and decisions readily understandable by all those concerned -- including the general public.

In the "Commission Policy" paragraph of the proposed text (and also in the "Summary"), it is stated that, "The Commission intends to require the same degree of protection . . . as is required for current generation LWRs." It might be better to say "The Commission intends to require at least the same degree of protection . . .," or, alternatively, that "The Commission does not intend to relax in any way the degree of protection required" It is, of course, true for a number of reasons -- including the advances in technology since the basic present LWR designs were laid down, the contribution of past experience to new designs, and the inherent features of some proposed advanced designs -- that a greater margin of safety or a greater assurance of safety can be expected to be realized. Beyond the general intention to make as full use of these as may be feasible, we however, do not consider it useful or possible in any clearly implementable way to include such an expectation as a requirement.

As an additional general comment, in the section "Proposed Policy," there is a list of eleven attributes, some or all of which, it would seem, must be incorporated to some degree for a reactor design to qualify as "advanced." This list is a rather mixed bag, and some of the stated attributes would appear to be inconsistent with some others. For example, "Simplified safety systems which require . . . the least equipment" may be difficult to reconcile with "sufficient . . . redundancy, diversity," etc. It would seem preferable to have this (or some such) list identified as possibly desirable attributes which could assist in establishing the acceptability or licensability of a proposed design, but not as a set of criteria for the decision of whether or not a reactor is "advanced." Indeed, some of the attributes -- such as reducing radiation exposure to plant personnel, or considering

defense-in-depth philosophy -- would scarcely appear to be hallmarks for being advanced. The statement of the particular (desirable) attribute of "providing sufficient inherent safety," tied in, as it is, with the possibly incompatible requirements for redundancy, diversity, etc. might benefit from rewording or rethinking.

Along with these general comments, there are a number of minor items in the proposed text of the statement which we would suggest should be modified or given some further consideration:

. The second sentence of the paragraph "Purpose" would appear to define what is meant by an "advanced reactor." This might better end after, ". . . now under construction or in operation." Though the properties identified in the balance of the sentence -- "providing more margin . . ." -- or "making more use . . ." may indeed be desirable, to include these here makes it less clear than it ought to be whether a particular design is to be considered "advanced," and tends to conflict with the more basic intention to require (at least) the same degree of protection. [The same sentence also appears in the "Summary."]

. In the second paragraph of "Previous Experience" it is stated that the FFTF was "reviewed but not licensed." It might be worthwhile to make it clear that the reason it was not licensed had to do with its not being in the realm requiring a license, rather than because it was not licensable.

. In the last sentence of this same paragraph it seems odd to adduce the previous experience with LWRs.

. In the paragraph following the list of attributes it is said that the number of regulatory requirements would be based on the extent to which a design incorporates the suggested attributes. This sentence might be a candidate for deletion.

. In the next following paragraph it is interesting to learn, as part of the Commission policy on advanced reactors, that early interaction may be accomplished either by means of meetings or in writing. This is another highly deletable sentence.

. In the final sentence of the antepenultimate paragraph it is pointed out that if there should be too many requests for interaction, the Commission may have to limit the number. This might become a fact of life, but is it really a proper part of a Commission Policy Statement?

. Finally, at the end of the third paragraph of the "Summary," the Commission is urged to undertake to keep the public informed of its judgment on all the "known and unknown" aspects This would seem to be ambitious beyond reason.

Sincerely,

David A. Ward
Chairman

References:

1. SECY-84-453A, Subject: Regulatory Policy for Advanced Reactors, dated

February 26, 1985

2. Letter from R. F. Fraley, Executive Director, Advisory Committee on Reactor Safeguards, to J. E. Zerbe, Director, Office of Policy Evaluation, NRC, Subject: Proposed Regulatory Policy for Advanced Reactors, dated April 15, 1985
3. Memorandum from J. E. Zerbe, Director, Office of Policy Evaluation, NRC, for NRC Commission, Subject: Information Paper - Summary of Comments on Advanced Reactors Policy Statement, dated July 3, 1985

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