SHAW, PITTMAN, POTTS & TROWBRIDGE

A PARTNERSHIP OF PROFESSIONAL CORPORATIONS

1800 M STREET, N. W.
WASHINGTON, D. C. 20036
(202) 822-1000

TELECOPIER
(202) 822-1099 & 822-1199

TELEX
89-2693 (SHAWLAW WSH)
CABLE "SHAWLAW"

WRITER'S DIRECT DIAL NUMBER

August 28, 1982

(18)

Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Docketing and Service Branch

Re: Ohio Citizens for Responsible Energy
Filing of Petition for Rulemaking,
Docket No. PRM-50-32

Gentlemen:

On June 24, 1982, the Commission published in the Federal Register a notice of receipt of a petition for rulemaking from Ohio Citizens for Responsible Energy ("OCRE"). 47 Fed. Reg. 27371. The petition seeks amendment of the Commission's regulations to require that applicants for nuclear power plant construction permits and operating licenses provide for design features to protect against the effects of electromagnetic pulse ("EMP"). OCRE is also an intervenor in the operating license proceeding in Docket Nos. 50-440 and 50-441, Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), and the petition requests that the Commission suspend or defer those portions of that proceeding which relate to safety, pending disposition of the rulemaking petition.

DS11
add: John Philips 4000 MNBB
Faust Rosa P-1030

Acknowledged by card. 8/31/82 emp

On behalf of The Cleveland Electric Illuminating Company, we are pleased to present the following comments in opposition to the petition.

Prior to filing its rulemaking petition, OCRE had attempted to litigate the EMP issue in the Perry operating license proceeding. The Atomic Safety and Licensing Board rejected OCRE's proposed contention based on 10 C.F.R. §50.13. That regulation provides that nuclear power plants need not be designed to withstand the effects of attacks and destructive acts by enemies of the United States or the use or deployment of weapons incident to U.S. defense activities. Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), LBP-81-42, 14 N.R.C. 842 (1981). The licensing board subsequently rejected OCRE's request pursuant to 10 C.F.R. §2.758, for a waiver of 10 C.F.R. §50.13 with regard to EMP, on the grounds that OCRE had failed to show special circumstances justifying a waiver. LBP-81-57, 14 N.R.C. 1037 (1981). Having been stymied by the Commission's regulations in its attempt to litigate the EMP issue, OCRE has now followed the licensing board's suggestion, 14 N.R.C. at 1039, that its remedy (if any) is to seek a change in the regulations and a suspension of all or part of the Perry proceeding during the pendency of the rulemaking.

EMP is produced by high-altitude detonation of nuclear weapons. It therefore falls squarely within the scope of 10 C.F.R. §50.13. That regulation states:

> An applicant for a license to construct and operate a production or utilization facility, or for an amendment to such license, is not required to provide for design features or other measures for the specific purpose of protection against the effects of (a) attacks and destructive acts, including sabotage, directed against the facility by an enemy of the United States, whether a foreign government or other person, or (b) use or deployment of weapons incident to U.S. defense activities.

The issue presented by OCRE's petition, therefore, is whether OCRE has shown some reason for changing the Commission's long-standing policy codified in 10 C.F.R. §50.13. For more than 15 years, the Commission's policy and practice has been not to require license applicants to protect against attacks and

destructive enemy acts. See, e.g. Commission Memorandum and Order in Florida Power & Light Co. (Turkey Point Nuclear Generating Units 3 and 4), 3 A.E.C. 173 (1967); "Exclusion of Attacks and Destructive Acts by Enemies of the United States in Determining the Issuance of Facility Licenses", 32 Fed. Reg. 2821 (1967); "Exclusion of Attacks and Destructive Acts by Enemies of the U.S. in Issuance of Facility Licenses", 32 Fed. Reg. 13445 (1967).

The purposes underlying this policy and practice are set out in the Federal Register notice adopting 10 C.F.R. §50.13. 32 Fed. Reg. 13445. They include:

> 1. the strong national policy that protection of the United States against hostile enemy acts is the responsibility of the nation's defense and internal security establishments;
>
> 2. the recognition that this national policy encompasses other structures within our complex industrial economy, not just nuclear facilities;
>
> 3. enemy attack or sabotage is a risk shared by the nation as a whole;
>
> 4. assessing whether and to what extent military force would be used against the facility, and the nature and likelihood of such hostile force, is "speculative in the extreme"; and
>
> 5. the likelihood that examination of such matters, apart from their speculative nature, "would involve information singularly sensitive from the standpoint of both our national defense and our diplomatic relations".

The Commission's policy has received judicial approval. In Siegel v. AEC, 400 F.2d 778 (D.C. Cir. 1968), the court found that the policy expressed in §50.13 was in accord with the intent of Congress.

> We are unable to find any specific indication, within or without the corners of the statute, that the Commission was commanded to include the possibility of enemy action into

> the concepts of "common defense and security" and "the public health and safety"....
>
> In short, Congress certainly can be taken to have expected that an applicant for a license should bear the burden of proving the security of his proposed facility as against his own treachery, negligence, or incapacity. It did not expect him to demonstrate how his plant would be invulnerable to whatever destructive forces a foreign enemy might be able to direct against it in 1984.

400 F.2d at 784.

The only justification expressed by OCRE for creating an EMP exception to the policy embodied in §50.13 is its allegation that protection against the effects of EMP can be achieved "quite simply with little hardship worked upon applicants" and "can be incorporated with not great expense in a nuclear power plant." OCRE Rulemaking Petition at 3.[1/] OCRE cites two sources for this conclusion, a letter from L. Douglas DeNike to the NRC dated April 22, 1981, and a statement by the Perry licensing board. Even if the practicability argument were an appropriate answer to the Commission's underlying policy bases (which it is not),[2/] OCRE's references do not support its conclusion.

The DeNike letter, according to OCRE, claims that

> all that is necessary to protect against EMP is "a relatively inexpensive changeover from solid-state to vacuum-tube technology".

1/ This statement is somewhat more optimistic (but no more justified) than OCRE's position in the Perry operating license proceeding. There, OCRE stated that "[i]t may be entirely practicable" to protect against EMP, and referred to the licensing board's "observations [that] suggest that a defense might be practicable." OCRE "Petition for Waiver of Commission Regulation 10 CFR Section 50.13 and Resubmission of its Contention 14", dated November 3, 1981 at 2 (emphasis added).

2/ Although the Commission in promulgating §50.13 recognized that protecting against "the full range of the modern arsenal of weapons" is not practicable, 32 Fed. Reg. at 13445, the Commission nowhere distinguished between protection which is practicable and protection which is not.

OCRE Petition for Waiver, dated November 3, 1981 at 2. It is unclear what Dr. DeNike's basis is for claiming that it would be easy (or even possible) to replace all solid-state components in a nuclear power plant with vacuum-tubes. On its face, such an assertion seems incredible. In any event, since "Dr. DeNike's training is in the area of clinical psychology", Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-410, 5 N.R.C. 1398, 1406 n. 19 (1977), he would not appear to be qualified to speculate on EMP effects or countermeasures.

Similarly, OCRE's reliance on a statement by the Perry licensing board is misplaced. In its October 7, 1981 Memorandum to the Commission Concerning Ohio Citizens for Responsible Energy's Motion for Leave to File a Contention About Electromagnetic Pulses, the licensing board stated

> [A]s NUREG-0153 (December 1976) indicates (at pp. 27-1 to 27-7), there may be only a few reactor systems which need hardening against EMP, so the cost of hardening may not be excessive.

The EMP discussion in NUREG-0153[3/] contains no information on the cost or practicality of protecting reactor systems against EMP.

Other documents cited by OCRE, however, directly contradict OCRE's claim that EMP hardening "can be incorporated with not great expense in a nuclear power plant". For example, OCRE's November 3, 1981 Petition for Waiver in the Perry proceeding cited a May 16, 1981 article in Science News.[4/] Yet that article indicates that EMP protection is far from inexpensive.

> Perhaps if EMP were relatively inexpensive, there would be less resistance to hardening. But there is "a pretty impressive price tab" associated with hardening, notes

---

3/ NUREG-0153, "Staff Discussion of Twelve Additional Technical Issues Raised by Responses to November 3, 1976 Memorandum from Director, NRR to NRR Staff" (December 1976).

4/ Raloff, "EMP Defensive Strategies", Science News, vol. 119, p. 314 (May 16, 1981).

> Bill Macklin of IRT Corp. (a firm that has specialized in EMP work for the military). Estimates vary, but it could cost at least an extra 15 to 20 percent to build EMP into a new facility.... EMP-hardening an existing facility can be notably more expensive.

Thus, OCRE has not supported its claim that EMP hardening can be achieved "quite simply with little hardship", OCRE Rulemaking Petition at 3, particularly for a facility such as Perry which is largely completed.

Nor has OCRE made a case for suspending or deferring those portions of the Perry operating license proceeding that relate to safety, pending the disposition of the rulemaking petition. OCRE has put forward no basis (and we are aware of none) for distinguishing the Perry facility from any other facility. The EMP issue is not unique to Perry, nor is there any reason to believe that Perry would be more susceptable to EMP than other facilities. If, as OCRE has stated, a single nuclear detonation could "drench [the entire continental U.S.] in a bath of EMP"5/ suspending or deferring action in only one licensing proceeding is hardly warranted.

For the reasons set forth above, we respectfully submit that the Commission should deny OCRE's rulemaking petition and its request to defer or suspend portions of the Perry licensing proceeding.

Respectfully submitted,

Jay E. Silberg

JAY E. SILBERG
Counsel for The Cleveland
Electric Illuminating
Company

5/ OCRE Reply to Staff and Applicants' Response to OCRE Contention 14 (Electromagnetic Pulse), dated August 19, 1981, p. 3, in the Perry proceeding.