UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL (Perry Nuclear Power Plant, Units 1 & 2)	Docket Nos. 50-440-OL 50-441-OL October 2, 1981

MEMORANDUM AND ORDER

CONCERNING
OHIO CITZENS FOR RESPONSIBLE ENERGY'S MOTION
FOR LEAVE TO FILE A CONTENTION ABOUT ELECTROMAGNETIC PULSES; AND
POSSIBLE READMISSION TO DISCOVERY OF THE ATWS CONTENTION

I ELECTROMAGNETIC PULSES CONTENTION

On July 8, 1981 the Ohio Citizens for Responsible Energy (OCRE) filed a motion seeking permission to file Contention 14, relating to the disruptive effect of electromagnetic pulses (EMP) on plant operation. Answers were filed by applicant and staff. Then, at the direction of the Board, OCRE filed a reply on August 19, 1981.

OCRE's contention arose from an article in Science News, May 19, 1981 at p. 300. That article states that high altitude nuclear explosions would generate electromagnetic pulses that would induce current or voltage through electrically conducting materials, thereby either destroying or temporarily disrupting control systems in Perry that are essential for safety.

Applicant argues that the admission of this contention is barred by 10 CFR §50.13 (upheld in Siegel v. Atomic Energy Commission, 400 F.2d 778, 780-782 (D.C. Cir. 1968)), which states:

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S01

> 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.

Staff joins Applicant in this ground for opposition but also argues that this is a late-filed contention that does not meet the criteria for admission established by 10 CFR §2.714.

If we accepted staff's arguments concerning late filing, we would not reach the merits of admitting this contention. However, we disagree with staff. Intervenor learned of this issue from a responsible current publication. To the extent that the current publication induced substantial fresh doubts in intervenors' minds about the safety of Perry, we do not think that technicalities should be used to exclude the issue in this still young proceeding. In addition, we have been impressed by OCRE's technical sophistication in arguing its corbicula contention and with its responsible approach to this particular contention, which it has presented logically and for which it has presented well conceived technical and legal arguments.

Having decided that the contention may not be dismissed for late filing, we must turn to the proper interpretation of 10 CFR §50.13. OCRE contends that the section does not bar its contention because: (1) an EMP could be caused by an accidental nuclear explosion rather than by an enemy attack on the plant, and (2) an explosion at 200 miles above ground level caused by an attack on Canada, Mexico or even El Salvador, would not be "directed against the facility by an enemy of the United States" but would cause Perry

serious disruption. For this second proposition, OCRE cites specific portions of the Science News article as a basis.

The merit of OCRE's position depends on the interpretation of the crucial phrase, "directed against the facility." OCRE apparently would have us apply a subjective test in order to interpret this phrase. It implies that we should inquire into the mind of the attacker and decide whether the act was intentional or merely incidental to some other purpose.

We disagree with OCRE's application of a subjective test. We apply an objective test which asks whether the consequences were a reasonably forseeable result of the act of detonating a nuclear device.

Nuclear weapons are dangerous instrumentalities. Just as with guns, less dangerous instrumentalities, users of nuclear weapons are subject to a more stringent standard than a subjective test. If a person fires a gun into a crowd and kills someone, he is responsible for the result and is guilty of murder or of voluntary manslaughter. Similarly, if a nation fires a nuclear device which causes electromagnetic pulses over the United States, that nation is responsible for the result. By that hostile act, the nation becomes an enemy of the United States and is responsible for direct or indirect consequences resulting from its use of a nuclear weapon. If that weapon damages the control system at Perry, then the nation firing it is responsible for that consequence and we would consider the attack to have been "directed against the facility", as well as against all other targets it destroys through blast, pulses or other forseeable physical consequences of its act.

This interpretation is consistent with the Statement of Consideration issued by the Commission when it promulgated §51.13.

32 F.R. 13445 (September 26, 1967). The Statement of Consideration explained that:

> The protection of the United States against hostile enemy acts is a responsibility of the nation's defense establishment and of the various agencies having internal security functions. The power reactors which the Commission licenses are, of course, equipped with numerous features intended to assure the safety of plant employees and the public. The massive containment and other procedures and systems for rapid shutdown of the facility included in these features could serve a useful purpose in protection against the effects of enemy attacks and destructive acts, although that is not their specific purpose. One factor underlying the Commission's practice in this connection has been a recognition that reactor design features to protect against the full range of the modern arsenal of weapons are simply not practicable and that the defense and internal security capabilities of this country constitute, of necessity, the basic "safeguards" as respects possible hostile acts by an enemy of the United States.
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> Furthermore, assessment of whether at some time during the life of a facility, another nation actually would use force against that particular facility, the nature of such force and whether that enemy nation would be capable of employing the postulated force against our defense and internal security capabilities are matters which are speculative in the extreme. Moreover, examination into the above matters, apart from their extremely speculative nature, would involve information singularly sensitive from the stand point of both our national defense and our diplomatic relations.

See also Siegel at 780.

We also reject OCRE's argument that an EMP could be generated by an accident. First, we note that OCRE's example, involving a missile silo accident, flows from the deployment of weapons by the United States. Hence, that risk is explicitly barred from consideration by §50.13. In addition, OCRE has failed to provide a basis for believing that there is any plausible mechanism by which there could be an accidental explosion of a non-defense related nuclear

device at sufficient altitude to create a problem of the sort described in the Science News article.

For all these reasons, we have decided that the EMP contention is not admissible as an issue in this proceeding.

II ATWS Contention

In our Order of September 9, 1981, we suspended from discovery the ATWS issue which we had admitted to the proceeding in our July 28 Order. The reason for suspending discovery on this issue was Applicant's argument that the Commission was about to promulgate a proposed rule on this subject and that the rule would preclude any ATWS issue from our proceeding.

Applicant was correct in arguing that the Commission had acted to publish a proposed rule for comment. On June 22, 1981, Samuel J. Chilk, Secretary to the Commission, issued a memorandum to William J. Dircks, Executive Director for Operations. In that memorandum, the Office of General Counsel and the Executive Director for Operations were authorized to publish for comment two ATWS rules.

However, it is now October. Two new Commission members have been appointed, including a new chairman. No action has ensued concerning publication of the Rule. Hence, we conclude that imminent publication is no longer a reason for suspending the ATWS issue from the proceeding.

Our discussion of the ATWS issue occurs on pp. 74-76 of our July 28, 1981, Special Prehearing Conference Order. In its brief of August 11, 1981, Applicant objects that the Sunflower Alliance Inc., et al., can not contribute meaningfully to the resolution of this issue. However, we are unwilling to bar a contention at this stage of the proceeding by making such a determination. We simply have

not had enough experience to render such a serious judgment about competence before Sunflower has had a chance to use discovery and demonstrate its ability. Furthermore, we note that OCRE also expressed an interest in this contention in its August 8 brief; and OCRE has already demonstrated its competence to our satisfaction.

We note that the readmission to discovery of the ATWS issue is a tribute to the correctness of staff's assertion, in its August 12 brief, that there was no pending rulemaking on ATWS.

O R D E R

For all the foregoing reasons and based on consideration of the entire record in this matter, it is this 2nd day of October 1981

ORDERED

(1) The Motion of the Ohio Citizens for Responsible Government for leave to file its Contention #14 is granted; but the contention shall not be admitted as an issue for reasons stated in the accompanying memorandum.

(2) Issue #6 in Ordering paragraph (7) of our July 28, 1981 Order is readmitted to discovery.

(3) This is an interlocutory order from which there is no appeal.

FOR THE

ATOMIC SAFETY AND LICENSING BOARD

Peter B. Bloch, Chairman
ADMINISTRATIVE JUDGE

October 2. 1981
Bethesda, Maryland