

WISCONSIN PUBLIC SERVICE CORPORATION



P.O. Box 1200, Green Bay, Wisconsin 54305

DOCKET NUMBER  
PRM 50-32  
(47 FR 27371) 14

DOCKETED  
USNRC

August 23, 1982

'82 AUG 25 AM 1:00

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

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Dear Sir:

Docket 50-305  
Operating License DPR-43  
Kewaunee Nuclear Power Plant  
EMP Rulemaking Petition  
Docket No. PRM-50-32

The Thursday, June 24, 1982 Federal Register noted the receipt of petition for rulemaking from Ohio Citizens for Responsible Energy (OCRE) to amend 10CFR Part 50 to require applicants for construction permits and operating licenses for nuclear power plants to provide for design features to protect against the affects of an electromagnetic pulse (EMP) (47 FR 27371). An EMP is generated by a high altitude nuclear explosion and can induce current or voltage through electrically conducting materials. The petitioner claims this effect may either destroy or temporarily disrupt control systems in a nuclear power plant which are essential for safety. Comments relevant to this proceeding fall into two categories: 1) evaluation of the significance to the public of the consequence of an EMP and 2) the technical nature of the solution.

With regard to the first category, we note that this concern is not directed to the effects of one EMP, as operating safety systems have standby systems, but rather the effect of subsequent EMP's whose effects may disable system response initiated by the first pulse. We believe the direct effects on the public of multiple nuclear detonations would be the overriding factor with respect to radiation risk, and that any additional increase in risk to the population as a direct result of a nuclear plant malfunction is insignificant. Should "EMP hardening" be required against an "x" megaton weapon at an altitude of "y" kilometers, a new era of ratcheting could be initiated wherein subsequent reviews could demand protection against increased yields or lower detonation heights. Resources expended to protect the public against such events would be much more effective in other areas.

Although the petitioner claims, " 'EMP hardening' circuitry can be incorporated with not great expense in a nuclear power plant," it is not clear that this is a generally accepted conclusion. We note that research activities are in progress to study the effects of EMP's on nuclear plants and that a staff report is scheduled for submission to the Commission on October 15, 1982. As a licensee, we have full

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Acknowledged by card. 8/27/82 emp

Secretary of the Commission

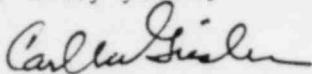
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confidence that the NRC will initiate appropriate action if the findings of these studies provide the justification, as it has in previous instances.

We believe that the petition for rulemaking should be denied for the general reasons discussed above. At such time that additional knowledge is available concerning the nature and consequences of EMP's we have full confidence the issue will receive in-depth technical review (by industry and regulators) with the appropriate action taken by the NRC to protect the health and safety of the public.

Very truly yours,



Carl W. Giesler  
Vice President - Nuclear Power

js

cc - Mr. Robert Nelson, US NRC Sr. Resident Inspector

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LAW OFFICES OF  
DEBEVOISE & LIBERMAN

PERMIT NUMBER  
PRM 50-32  
(471-R 27371)

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August 23, 1982

Honorable Samuel J. Chilk  
Secretary  
Nuclear Regulatory Commission  
Washington, D.C. 20555

DOCKETED  
USNRC

'82 AUG 25

RE: PRM-50-32

OFFICE  
DOCKED

Dear Mr. Chilk:

On March 22, 1982 the Ohio Citizens for Responsible Energy filed a petition with the NRC requesting it to amend 10 CFR Part 50 to require applicants for construction permits and operating licenses for power reactors to provide for design features to protect against the effects of electromagnetic pulse (EMP). The petition was published in the Federal Register on June 24, 1982 (47 Fed. Reg. 27371). The following comments are submitted on behalf of Debevoise & Liberman, which represents various power reactor licensees and construction permit holders.

Overall, we believe that the petition should be rejected and that the suggested amendments to Part 50 not be adopted. We note from the outset that under existing regulations applicants need not provide for design features to protect against the effects of attacks and destructive acts or the use or deployment of weapons incident to U.S. defense activities (10 CFR §50.13). Further there is no legal requirement that the NRC mandate such features which include "EPM-hardening circuitry." Siegel v. Atomic Energy Commission, 400 F.2d 778 (D.C. Cir. 1968). Thus, the issue is whether the NRC should reverse itself by imposing a design feature which would be called into play only under circumstances which are the province of the military. In addition, the proposal may implicate intricate questions of foreign policy.

We believe that at the minimum it would be premature to require now that licensees provide for design features to protect against EMPs. We understand that the Office of Nuclear Reactor Regulation is currently examining the matter and are informed that the draft final report on its

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study will be completed in early October. We further understand that the report will then be submitted to the Commission, which presumably will decide whether further action on this matter is required. Thus, to now adopt the proposed amendments to Part 50 without first considering this study and making it available to the affected industry and the interested public would not be consistent with applicable requirements of law nor sound administration.

Further, the technical basis and explanation submitted along with the petition is inadequate to permit either considered comments or informed decisionmaking. Additionally, no analysis is presented addressing the complicating or other effects (if any) of installing "EMP-hardening" circuitry on plant systems or components. Nor is any discussion included as to whether such circuitry should be required at all power reactors irrespective of age, design, location and stage of construction; the reactor components and/or systems which would need this circuitry; the cost and effectiveness of the proposed requirements; and how the proposed requirements would be implemented.

In short, while the petition sets forth a proposed action, it does not provide sufficient justification or explanation in support of that action. Accordingly, we urge that the instant petition be rejected.

Respectfully submitted,

DEBEVOISE & LIBERMAN

By:  \_\_\_\_\_