



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS  
WASHINGTON, D. C. 20555

July 13, 1976

The Honorable Les Aspin  
United States House of Representatives  
Washington, DC 20515

Dear Congressman Aspin:

This is in response to your letter of June 7, 1976, asking that the Advisory Committee on Reactor Safeguards (ACRS) outline specific changes in the Koshkonong plant design to improve the Emergency Core Cooling System (ECCS) and to prevent sabotage. As you know, Sections 29 and 182(b) of the Atomic Energy Act of 1954, as amended, set forth the legislative basis for ACRS functions (Attachment A). In connection with specific power reactors, the responsibility of the ACRS is to review critically and report on applications for construction permits and operating licenses. The ACRS believes that the necessary objectivity and lack of commitment to any particular system would be compromised if the ACRS itself were to become involved in the development of specific designs.

Please be assured that the Committee believes, as stated in its report of May 12, 1976, that the Koshkonong Nuclear Plant can be constructed with reasonable assurance that it can be operated without undue risk to the public health and safety.

The ACRS has made recommendations with regard to improved ECCS and increased protection against sabotage in a number of reports outside the context of specific power reactor applications. A few examples are given in Attachments B, C, and D. These are areas in which, with continuing effort, new insights and improvements may be realized and would be very worthwhile. Therefore, these matters warrant special attention in the development of the final design of the Koshkonong plant and future plants of this type.

NRC Regulatory Guide 1.17 provides interim guidance regarding access control for sabotage protection, and the ACRS is working actively with the NRC Staff in the development of an improved Guide.

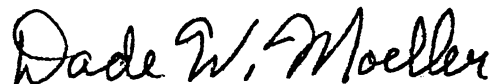
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The ACRS has been urging that further consideration be given in nuclear reactor plant design and layout to make still more unlikely the chance that sabotage could adversely affect the public health and safety. Several ideas and concepts have become available. These concepts reflect different approaches to the overall problem, and the ACRS believes that considerable effort will be required by all parties concerned before judgments on appropriate design approaches can be made. However, the ACRS believes such efforts should be given high priority.

With regard to ECCS, the ACRS has for several years been recommending that improvements in function and reliability be developed (Attachment B). A recently developed fuel assembly design, which will be utilized in the Koshkonong plant, is calculated to give reduced peak clad temperatures during postulated loss-of-coolant accidents. However, the ACRS continues to believe that increased reflooding rates and increased reliability of ECC systems should be pursued vigorously.

Finally, it should be noted that before an operating license is issued, an additional review will be made of all aspects of the Koshkonong plant by the NRC Staff and the ACRS.

Sincerely yours,



Dade W. Moeller  
Chairman

Attachments:

- A. Excerpt from the Atomic Energy Act of 1954, as amended
- B. "Report on Acceptance Criteria for Emergency Core Cooling Systems for Light-Water-Cooled Nuclear Power Reactors," September 10, 1973
- C. "Report on Evaluation Models for Commission Criteria for Emergency Core Cooling Systems for Light-Water-Cooled Nuclear Power Reactors," November 20, 1974
- D. "Report on Industrial Sabotage," October 14, 1975

Excerpt from the Atomic Energy Act of 1954, as amended  
(Atomic Energy Legislation through 93d Congress, 2nd Session)

"SEC. 29. ADVISORY COMMITTEE ON REACTOR SAFEGUARDS.—There is hereby established an Advisory Committee on Reactor Safeguards consisting of a maximum of fifteen members appointed by the Commission for terms of four years each. The Committee shall review safety studies and facility license applications referred to it and shall make reports thereon, shall advise the Commission with regard to the hazards of proposed or existing reactor facilities and the adequacy of proposed reactor safety standards, and shall perform such other duties as the Commission may request. One member shall be designated by the Committee as its Chairman. The members of the Committee shall receive a per diem compensation for each day spent in meetings or conferences, or other work of the Committee, and all members shall receive their necessary traveling or other expenses while engaged in the work of the Committee. The provisions of section 163 shall be applicable to the Committee."<sup>ab</sup>

Committee on  
Reactor  
Safeguards.  
42 U.S.C.  
sec. 2039.

<sup>ab</sup> Public Law 85-256 (71 Stat. 576) (1957), sec. 5, added sec. 29.

ACRS Report.  
Sec. 182

"b. The Advisory Committee on Reactor Safeguards shall review each application under section 103 or section 104 b. for a construction permit or an operating license for a facility, any application under section 104 c. for a construction permit or an operating license for a testing facility, any application under section 104 a. or c. specifically referred to it by the Commission, and any application for an amendment to a construction permit or an amendment to an operating license under section 103 or 104 a., b., or c. specifically referred to it by the Commission, and shall submit a report thereon which shall ~~be made part of the record of the application and available to the public except to the extent that security classification prevents disclosure.~~<sup>a</sup>

<sup>a</sup> Public Law 85-256 (71 Stat. 576) (1957), sec. 6, added subsec. b, and relettered former subsecs. b. and c. as subsecs. c. and d. Public Law 87-615 (76 Stat. 409) (1962), sec. 3, amended subsec. b. Before amendment, it read: "b. The Advisory Committee on Reactor Safeguards shall review each application under section 103 or 104 b. for a license for a facility, any application under section 104 c. for a testing facility, and any application under section 104 a. or c. specifically referred to it by the Commission, and shall submit a report thereon, which shall be made part of the record of the application and available to the public, except to the extent that security classification prevents disclosure."

Proposed amendment under  
H.R. 9285, 6/21/71

... and shall submit a report thereon:

provided, however, that unless the Commission specifically requests a review and report on an application or portion thereof, the Committee may dispense with such review and report by

notifying the Commission in writing that review by the Committee is not warranted. Any report or notice required by this subsection shall be made part of the record of the application and available to the public except to the extent that security classification prevents disclosure.