

existing Zircaloy-4. A strict interpretation of the rule in this instance would conclude that the criteria of 10 CFR 50.44 are not met by advanced zirconium-based alloys, since these alloys are not specifically zircaloy or ZIRLO. Since the advanced zirconium-based alloys meet the underlying purpose of the rule, strict application of the rule to only apply to zircaloy or ZIRLO cladding is not necessary to achieve the underlying purpose of the rule. Since strict application of 10 CFR 50.44 is not necessary to meet the underlying purpose of the rule, special circumstances exist to grant an exemption from this regulation to allow a reactor to contain three lead fuel assemblies containing fuel rods clad with advanced zirconium-based alloys.

The underlying purpose of 10 CFR 50.46 is to specify acceptance criteria for ECCS performance at light-water nuclear power reactors. The fuel rods clad with the advanced zirconium-based alloys will be identical in design and dimensions to the fuel rods clad with the existing Zircaloy-4. The advanced cladding materials used in the proposed fuel assemblies were chosen to improve corrosion resistance exhibited in ex-reactor autoclave corrosion tests in both high-temperature water and steam environments. Fuel rods clad with similar types of advanced zirconium-based alloys have been successfully irradiated in high-temperature PWRs in Europe. The mechanical properties of the advanced zirconium-based alloy clad meets all the mechanical requirements of the existing Zircaloy-4 procurement specifications. Thus the cladding and structural integrity of the fuel rods and fuel assemblies with advanced zirconium-based alloy cladding will be maintained. In addition, although the staff has not yet reviewed and generically approved the overall behaviors of alloys A and F to meet the limits of ECCS performance criteria requirements, the three lead fuel assemblies will be placed in non-limiting locations within the core. Based on the above considerations, the staff concludes that the lead fuel assemblies will perform acceptably under postulated LOCA conditions. Thus, the underlying purpose of the rule has been met. A strict interpretation of the rule in this instance would conclude that the criteria of 10 CFR 50.46 are not met by advanced zirconium-based alloys, since these alloys are not strictly zircaloy or ZIRLO. Since the advanced zirconium-based alloys meet the underlying purpose of the rule, strict application of the rule to only apply to zircaloy or ZIRLO cladding is not necessary to

achieve the underlying purpose of the rule. Therefore, special circumstances exist to grant an exemption from 10 CFR 50.46 that would allow the licensee to apply the acceptance criteria of 10 CFR 50.46 to a reactor containing a limited number of fuel rods with advanced zirconium-based alloys.

Paragraph I.A.5 of Appendix K to 10 CFR Part 50 states that the rates of energy release, hydrogen concentration, and cladding oxidation from the metal-water reaction shall be calculated using the Baker-Just equation. Since the Baker-Just equation presumes the use of zircaloy clad fuel, strict application of the rule would not permit use of the equation for advanced zirconium-based alloys for determining acceptable fuel performance. The underlying intent of this portion of the Appendix, however, is to ensure that analysis of fuel response to LOCAs is conservatively calculated. Due to the similarities in the composition of the advanced zirconium-based alloys and Zircaloy/ZIRLO, the application of the Baker-Just equation in the analysis of advanced zirconium-based clad fuel will conservatively bound all post-LOCA scenarios. Thus, the underlying purpose of the rule will be met. Thus, special circumstances exist to grant an exemption from Appendix K to 10 CFR Part 50 that would allow the licensee to apply the Baker-Just equation to advanced zirconium-based alloys.

IV.

Accordingly, the Commission has determined, pursuant to 10 CFR 50.12(a)(i), that an exemption as described in Section III above is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. The Commission has determined, pursuant to 10 CFR 50.12(a)(2)(ii), that special circumstances exist, as noted in Section III above. Therefore, the Commission hereby grants Arizona Public Service Company, *et al.*, an exemption from 10 CFR 50.44, 10 CFR 50.46, and Appendix K to 10 CFR Part 50 for use of lead fuel assemblies.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not have a significant impact on the quality of the human environment (62 FR 3925).

This exemption is effective upon issuance.

For the Nuclear Regulatory Commission.

Dated at Rockville, Maryland this 4th day of February 1997.

Frank J. Miraglia, Jr.,

Acting Director, Office of Nuclear Reactor Regulation.

[FR Doc. 97-3463 Filed 2-11-97; 8:45 am]

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[Docket Nos. 50-315 and 50-316]

Indiana Michigan Power Company; Donald C. Cook Nuclear Plant, Unit Nos. 1 and 2 Environmental Assessment and Finding of no Significant Impact

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating License Nos. DPR-58 and DPR-74, issued to Indiana Michigan Power Company, (the licensee), for operation of the D. C. Cook Nuclear Plant, Units 1 and 2, located in Berrien County, Michigan.

Environmental Assessment

Identification of the Proposed Action

By letter dated February 26, 1996, the licensee requested amendments to the Technical Specifications (TS) to allow an increased limit for the nominal enrichment of new (unirradiated) Westinghouse fabricated fuel stored in the new fuel storage racks. The proposed changes would allow for the storage of fuel with an enrichment not to exceed a nominal 4.95 weight percent (w/o) U-235, subject to certain integral fuel burnable absorber (IFBA) requirements, in the new fuel storage racks. Plant operation using the higher enriched fuel will be demonstrated to be acceptable by a cycle specific reload safety evaluation performed prior to each fuel loading.

Need for Proposed Action

The licensee intends to use higher enrichment fuel in subsequent fuel load cycles which does not currently meet the new fuel storage limits in the TSs. By increasing the fuel enrichment, the licensee will implement the fuel strategies developed for D.C. Cook Units 1 and 2.

Environmental Impact of the Proposed Action

The Commission has completed its evaluation of the proposed revision to the TSs and concludes that storage of fuel enriched with U-235 up to 4.95 weight percent at D.C. Cook Units 1 and 2 is acceptable. The safety considerations associated with higher enrichments have been evaluated by the NRC staff and the staff has concluded

that such changes would not adversely affect plant safety. The proposed changes have no adverse effect on the probability of any accident. As a result, there is no increase in individual or cumulative radiation exposure.

The environmental impacts of transportation resulting from the use of higher enrichment and extended irradiation are discussed in the staff assessment entitled "NRC Assessment of the Environmental Effects of Transportation Resulting from Extended Fuel Enrichment and Irradiation." This assessment was published in the Federal Register on August 11, 1988 (53 FR 30355), as corrected on August 24, 1988 (53 FR 32322), in connection with the Shearon Harris Nuclear Power Plant, Unit I: Environmental Assessment and Finding of No Significant Impact. As indicated therein, the environmental cost contribution of an increase in fuel enrichment of up to 5 weight percent U-235 and irradiation limits of up to 60 Gigawatt Days per Metric Ton (GWD/MT) are either unchanged, or may in fact be reduced from those summarized in Table S-4 as set forth in 10 CFR 51.52(c). These findings are applicable to the proposed amendment for D.C. Cook Units 1 and 2. Accordingly, the Commission concludes that this proposed action would result in no significant radiological environmental impact.

With regard to potential nonradiological impacts, the proposed changes involve systems located within the restricted area as defined in 10 CFR Part 20. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed amendment.

The Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing in connection with this action was published in the Federal Register on April 24, 1996 (61 FR 18172).

Alternative to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternative with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operational flexibility.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for D.C. Cook, Units 1 and 2, dated August 1973.

Agencies and Persons Contacted

In accordance with its stated policy, on December 20, 1996, the Commission consulted with the Michigan State official, Mr. Dennis Hahn of the Michigan Department of Public Health, Nuclear Facilities and Environmental Monitoring, regarding the environmental impact of the proposed action. The State official had no comments.

Finding of No Significant Impact

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to this action, see the application for license amendment dated February 26, 1996. Copies are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555, and at the local public document room located at the Maud Preston Palenske Memorial Library, 500 Market Street, St. Joseph, Michigan 49085.

Dated at Rockville, Maryland, this 28th day of January 1997.

For the Nuclear Regulatory Commission,
John B. Hickman,
*Project Manager, Project Directorate III-3,
Division of Reactor Projects III/IV, Office of
Nuclear Reactor Regulation.*

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Advisory Committee on Reactor Safeguards Subcommittee Meeting on Thermal Hydraulic Phenomena; Notice of Meeting

The ACRS Subcommittee on Thermal Hydraulic Phenomena will hold a meeting on February 19, 1997, Room T-2B3, at 11545 Rockville Pike, Rockville, Maryland.

Portions of the meeting may be closed to public attendance pursuant to 5 U.S.C. 552b(c)(4), which authorizes closure of meetings to protect proprietary information, and 5 U.S.C. 552b(c)(9)(B), which authorizes closure of meetings to protect information the premature disclosure of which would be likely to significantly frustrate

implementation of a proposed agency action.

The agenda for the subject meeting shall be as follows:

Wednesday, February 19, 1997—8:30 a.m. until the conclusion of business

The Subcommittee will gather information, analyze relevant issues and facts, and formulate proposed positions and actions for deliberation by the full Committee, regarding technical issues associated with AP600 test data generated at the ROSA and Oregon State University APEX test facilities. The Subcommittee may hear separate presentations by representatives of the NRC staff and the Westinghouse Electric Corporation regarding the test data.

Oral statements may be presented by members of the public with the concurrence of the Subcommittee Chairman; written statements will be accepted and made available to the Committee. Electronic recordings will be permitted only during those portions of the meeting that are open to the public, and questions may be asked only by members of the Subcommittee, its consultants, and staff. Persons desiring to make oral statements should notify the cognizant ACRS staff engineer named below five days prior to the meeting, if possible, so that appropriate arrangements can be made.

Further information regarding topics to be discussed, whether the meeting has been cancelled or rescheduled, the scheduling of sessions which are open to the public, the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted therefor can be obtained by contacting the cognizant ACRS staff engineer, Mr. Paul A. Boehnert (telephone 301/415-8065) between 7:30 a.m. and 4:15 p.m. (EST). Persons planning to attend this meeting are urged to contact the above named individual one or two working days prior to the meeting to be advised of any potential changes to the agenda, etc., that may have occurred.

Dated: February 6, 1997.

Sam Duraiswamy,

Chief, Nuclear Reactors Branch.

[FR Doc. 97-3461 Filed 2-11-97; 8:45 am]

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Biweekly Notice

Applications and Amendments to Facility Operating Licenses Involving No Significant Hazards Considerations

I. Background

Pursuant to Public Law 97-415, the U.S. Nuclear Regulatory Commission (the Commission or NRC staff) is