

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-317]

Baltimore Gas and Electric Company (Calvert Cliffs Nuclear Power Plant Unit No. 1); Exemption

I.

Baltimore Gas and Electric Company (BGE or the licensee) is the holder of Facility Operating License No. DPR-53, which authorizes operation of Calvert Cliffs Nuclear Power Plant, Unit 1 (the facility/CC-1), at a steady-state reactor power level not in excess of 2700 megawatts thermal. The facility is a pressurized water reactor located at the licensee's site in Calvert County, Maryland. The license provides among other things, that it is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (the Commission or NRC) now or hereafter in effect.

II.

By letter dated July 13, 1995, the licensee requested a temporary exemption to 10 CFR 50.44, 10 CFR 50.46, and Appendix K to 10 CFR Part 50 that would enable the use of four lead fuel assemblies during CC-1 Cycles 13, 14, and 15. These regulations refer to pressurized water reactors fueled with uranium oxide pellets within cylindrical zircaloy or ZIRLO cladding. The four lead fuel assemblies to be used during these fuel cycles contain fuel rods with zirconium-based claddings that are not chemically identical to zircaloy or ZIRLO.

Since 10 CFR 50.46 and Appendix K to 10 CFR Part 50 identify requirements for calculating emergency core cooling system (ECCS) performance for reactors containing fuel with zircaloy or ZIRLO cladding, and 10 CFR 50.44 relates to the generation of hydrogen gas from a metal-water reaction between the reactor coolant and reactor fuel having zircaloy or ZIRLO cladding, a temporary exemption is required to place the four lead fuel assemblies containing fuel rods with advanced zirconium based cladding in the core during CC-1 Cycles 13, 14, and 15.

III.

Title 10 of the Code of Federal Regulations at 50.12(a)(2)(ii) enables the Commission to grant an exemption from the requirements of Part 50 when special circumstances are present such that application of the regulation in the particular circumstances would not serve the underlying purpose of the rule, or is not necessary to achieve the

underlying purpose of the rule. The underlying purpose of 10 CFR 50.46 and 10 CFR Part 50, Appendix K is to establish requirements for the calculation of ECCS performance in order to assure reactor safety in the event of a loss of coolant accident. The licensee has performed a calculation demonstrating adequate ECCS performance for CC-1 and has shown that the four lead fuel assemblies do not have a significant impact on that previous calculation. The lead fuel assemblies, with the zirconium-based alloy cladding, meet the same design basis as the Zircaloy-4 fuel which is currently in the CC-1 reactor core and have similar thermal-hydraulic characteristics. No safety limits will be changed or setpoints altered as a result of using the lead fuel assemblies.

The Updated Final Safety Analysis Report (UFSAR) analysis are bounding for the lead fuel assemblies as well as the remainder of the core. The mechanical properties and behavior of the lead fuel assemblies during postulated loss-of-coolant-accidents (LOCA) and non-LOCA transients and operational transients will be essentially the same. In addition, the four lead fuel assemblies represent a small portion of the total core and will be placed in non-limiting core locations which experience no more than 0.95 of the core power density during operation. As such, the licensee has achieved the underlying purpose of 10 CFR 50.46 and 10 CFR Part 50, Appendix K.

The underlying purpose of 10 CFR 50.44 is to ensure that means are provided for the control of hydrogen gas that may be generated following a postulated LOCA. The licensee has provided means for controlling hydrogen gas and has previously considered the potential for hydrogen gas generation stemming from a metal-water reaction. The small number of fuel rods in the four lead fuel assemblies containing advanced zirconium-based claddings in conjunction with the chemical similarity of the advanced claddings to zircaloy and ZIRLO ensures that previous calculations of hydrogen production resulting from a metal-water reaction would not be significantly changed. As such, the licensee has achieved the underlying purpose of 10 CFR 50.44.

In addition to the above, the advanced claddings have been tested for corrosion resistance, tensile and burst strength, and creep characteristics. The test results indicate that the advanced claddings are safe for reactor service under all the anticipated operating conditions considered in the CC-1 UFSAR.

IV.

For the foregoing reasons, the NRC staff has concluded that the use of the four lead fuel assemblies in the CC-1 reactor during Cycles 13, 14, and 15 will not present an undue risk to public health and safety and is consistent with the common defense and security. The NRC staff has determined that there are special circumstances present as specified in 10 CFR 50.12(a)(2)(ii) such that the application of 10 CFR 50.44, 10 CFR 50.46, and Appendix K to 10 CFR Part 50 to explicitly consider the advanced clad fuel rods present within the four lead fuel assemblies is not necessary in order to achieve the underlying purpose of these regulations.

Accordingly, the Commission has determined that pursuant to 10 CFR 50.12, a temporary exemption is authorized by law and will not endanger life or property or common defense and security and is otherwise in the public interest, and hereby grants BGE a temporary exemption from the requirements of 10 CFR 50.44, 10 CFR 50.46, and Appendix K to 10 CFR Part 50 in that explicit consideration of the advanced zirconium-based clad fuel present within the four lead fuel assemblies is not required in order to be in compliance with these regulations. This exemption applies only to the four lead fuel assemblies for the time period (Cycles 13, 14, and 15) for which these assemblies will be in the CC-1 reactor core.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will have no significant impact on the quality of the human environment (60 FR 56622).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 28th day of November 1995.

For the Nuclear Regulatory Commission,
Steven A. Varga,
Director, Division of Reactor Projects—I/II,
Office of Nuclear Reactor Regulation.

[FR Doc. 95-29657 Filed 12-5-95; 8:45 am]

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[Docket No. 50-325/324]

Carolina Power and Light Company; Brunswick Nuclear Plant; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (the Commission) is considering the issuance of an exemption pursuant to 10 CFR 55.11 from certain requirements of its regulations to an applicant for a Senior Reactor Operator License (applicant) at

the Carolina Power & Light Company (CP&L), Brunswick Steam Electric Plant, located in Brunswick County, North Carolina.

Environmental Assessment

Identification of the Proposed Action

The proposed action would allow the applicant to file a new application before the two-month waiting period required by 10 CFR 55.35(a) expires and, thereafter, to be re-administered a written examination during the week of December 18, 1995. In their written request, CP&L indicated that the applicant has entered a remediation process, and will be ready for re-examination the week of December 18, 1995.

The proposed action is in accordance with CP&L's request on behalf of its employee, the above-referenced applicant for a Senior Reactor Operator License, dated November 8, 1995, for an exemption from the requirements of 10 CFR 55.35(a).

The Need for the Proposed Action

The exemption requested would allow the applicant to be administered a written re-examination during the week of December 18, 1995. This re-examination would be scheduled to coincide with a previously scheduled NRC initial examination visit, and would provide for re-examination prior to the expiration of a two-month time period required by 10 CFR 55.35(a) before an applicant can file a new application in order to retake an initial examination.

Environmental Impacts of the Proposed Action

The Commission has completed its evaluation of the request. The proposed exemption does not change the knowledge and skills requirements for licensing operators, and because the applicant must pass a written examination to be licensed as a Senior Reactor Operator, this proposed exemption would not increase the risk of facility accidents. In addition, the formal action of licensing an operator does not authorize changes to the facility's existing safety limits, safety settings, power operations, or effluent limits.

Because no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure, the change will not increase the probability or consequences of accidents. Accordingly, the Commission concludes that there are no

significant radiological environmental impacts associated with the proposed action.

Regarding potential nonradiological impacts, the proposed action involves features located entirely within the restricted area as defined in 10 CFR Part 20. It does not affect nonradiological plant effluents and has no other environmental impact. Accordingly, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed action.

Alternatives to the Proposed Action

Since the Commission has concluded that there is no measurable environmental impact associated with the proposed action, any alternatives with equal or greater environmental impact need not be evaluated. As an alternative to the proposed action, the staff considered denial of the requested exemption. Denial of the application would not reduce environmental impacts of plant operation. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the Brunswick Steam Electric Plant, Unit 1 and 2 dated January 1974.

Agencies and Persons Consulted

In accordance with its stated policy, on November 27, 1995, the staff consulted with the North Carolina State official, Mr. Johnny James, of the Division of Radiation Protection, North Carolina Department of Environmental, Commerce, and Natural Resources, 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 licensee's request on behalf of its employee for an exemption dated November 8, 1995, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the

University of North Carolina at Wilmington, William Madison Randall Library, 601 S. College Road, Wilmington, North Carolina 28403-3297.

Dated at Rockville, Maryland, this 30th day of November, 1995.

For the Nuclear Regulatory Commission.
Stuart A. Richards,

Chief, Operator Licensing Branch, Division of Reactor Controls and Human Factors, Office of Nuclear Reactor Regulation.

[FR Doc. 95-29658 Filed 12-5-95; 8:45 am]

BILLING CODE 7590-01-P

Advisory Committee on Reactor Safeguards; Joint Meeting of the Subcommittees on Individual Plant Examinations/Probabilistic Risk Assessment; Postponement

A joint meeting of the ACRS Subcommittees on Individual Plant Examinations (IPEs) and on Probabilistic Risk Assessment (PRA) scheduled to be held on December 14 and 15, 1995, in Room T-2B3, 11545 Rockville Pike, Rockville, Maryland has been postponed due to the need for additional information from the NRC staff. Notice of this meeting was published in the Federal Register on Monday, November 27, 1995 (60 FR 58393). When the meeting is rescheduled, it will be announced in the Federal Register Notice.

For further information contact: Dr. Medhat El-Zeftawy, the cognizant ACRS staff engineer, (telephone 301/415-6889) between 7:30 a.m. and 4:15 p.m. (EST).

Dated: November 28, 1995.

Sam Duraiswamy,

Chief, Nuclear Reactors Branch.

[FR Doc. 95-29660 Filed 12-05-95; 8:45 am]

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Advisory Committee on Nuclear Waste; Notice of Meeting

The Advisory Committee on Nuclear Waste (ACNW) will hold its 80th meeting on December 19, 20 and 21, 1995, Room T-2B3, at 11545 Rockville Pike, Rockville, Maryland.

The entire meeting will be open to public attendance.

The agenda for this meeting shall be as follows: