

NATIONAL TRANSPORTATION SAFETY BOARD

Sunshine Act Meeting Notice

TIME AND DATE: 9:30 a.m., Tuesday, September 17, 2002.

PLACE: NTSB Conference Center, 429 L'Enfant Plaza SW., Washington, DC 20594.

STATUS: The three items are Open to the Public.

MATTERS TO BE CONSIDERED:

- 7493—Marine Accident Report—Grounding of the Small Passenger Vessel Finest, Sandy Hook, New Jersey, January 4, 2001.
- 7494—Marine Accident Report—Fire On Board the Small Passenger Vessel Seastreak New York, Sandy Hook, New Jersey, September 28, 2001.
- 7371A—Hazardous Materials Accident Report—Release and Ignition of Hydrogen Following the Collision Between a Tractor/Semitrailer with Horizontally Mounted Cylinders and a Pickup Truck near Ramona, Oklahoma, May 1, 2001.

News Media Contact: Telephone: (202) 314-6100.

Individuals requesting specific accommodations should contact Ms. Carolyn Dargan at (202) 314-6305 by Friday, September 13, 2002.

FOR MORE INFORMATION CONTACT: Vicky D'Onofrio, (202) 314-6410.

Dated: September 6, 2002.

Vicky D'Onofrio,

Federal Register Liaison Officer.

[FR Doc. 02-23082 Filed 9-6-02; 2:25 pm]

BILLING CODE 7533-10-M

NUCLEAR REGULATORY COMMISSION

[Docket No. 50-339]

Virginia Electric and Power Company, North Anna Power Station, Unit 2; Exemption

1.0 Background

The Virginia Electric and Power Company (the licensee) is the holder of Facility Operating License No. NPF-7, which authorizes operation of the North Anna Power Station, Unit 2. The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC, the Commission) now or hereafter in effect.

The facility consists of a one pressurized-water reactor located in Louisa County in the Commonwealth of Virginia.

2.0 Request/Action

Title 10 of the Code of Federal Regulations (10 CFR), part 50, Section 50.44 requires reactors fueled with Zircaloy or ZIRLO cladding to control any hydrogen gas that may be generated after a postulated loss-of-coolant accident (LOCA). 10 CFR 50.46 identifies design requirements for calculating the performance of the emergency core cooling system (ECCS) for reactors containing fuel with Zircaloy or ZIRLO cladding. Finally, Appendix K to 10 CFR part 50 requires the Baker-Just equation, which is only applicable for fuels using Zircaloy cladding, be used to predict the rates of energy release, hydrogen concentration, and cladding oxidation from the metal water reaction.

By letter dated February 11, 2002, as supplemented by letter dated May 16, 2002, the licensee submitted a request for a license amendment to irradiate a Framatome lead test assembly during Cycle 16 at North Anna, Unit 2. The lead test assembly to be used is one of four lead test assemblies that have been used for the past three operating cycles at North Anna, Unit 1. Included in this proposed license amendment was a request for an exemption from the requirements of 10 CFR 50.44, 50.46, and Appendix K to 10 CFR part 50 that would allow the licensee to use a lead test assembly that consisted of two advanced zirconium-based alloys, M4 and M5, for the fuel rod cladding. The licensee included the following license condition in its submittal:

Virginia Electric and Power Company may operate one lead test assembly containing advanced zirconium-based alloys for one cycle, to a lead rod burnup not exceeding 75,000 MWD/MTU.

3.0 Discussion

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50 when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. In accordance with 10 CFR 50.12(a)(2)(ii), special circumstances exist whenever an application of a particular regulation under the circumstances is not necessary to achieve the underlying purpose of the rule.

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 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 chemical similarity of the lead test assembly containing advanced zirconium-based cladding with that of the Zircaloy cladding 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.

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. The licensee has performed a calculation demonstrating adequate ECCS performance for North Anna, Unit 2, and has shown that the lead test assembly does not have a significant impact upon the calculation. The peak cladding temperature of the lead test assembly was significantly lower than the resident Westinghouse fuel. Using the Baker-Just equation, the result conservatively predicted local cladding oxidation of the lead test assembly of only a few percent. Also, the maximum hydrogen generation was unchanged with the inclusion of the lead test assembly. Therefore, the coolable geometry was maintained following a LOCA.

Paragraph I.A.5 of Appendix K to 10 CFR part 50 states that the rates of energy, 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 chemical composition of the advanced zirconium-based alloys and Zircaloy, the application of the Baker-Just equation in the analysis of advanced zirconium-based clad fuel is justified and will conservatively bound all post-LOCA scenarios. Thus the underlying purpose of the rule will be met, and special circumstances exist, allowing the staff 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.

The staff confirmed that the licensee used approved LOCA methods to

perform the calculations that demonstrated adequate safety performance of ECCS systems. These methods include: (1) RSG LOCA-BWNT LOCA evaluation model (BAW-10168, Rev. 3), (2) RELAP5/MOD2-B&W code (BAW-10164, Rev. 3), (3) the BEACH implementation of RELAP5 (BAW-10166, Rev. 4), and (4) REFLOD3B (BAW-10171-PA, Rev. 3). The licensee documented calculations based on these models to demonstrate that existing North Anna calculations based on the current fuel design conservatively bound the LOCA performance of the lead test assembly as calculated by the NRC-approved methods. Results of comparative LOCA calculations with the same plant operating parameters demonstrated that the LOCA calculational methods used are acceptable for the lead test assembly at North Anna, Unit 2. Therefore, the licensee has achieved the underlying purpose of 10 CFR 50.46 and 10 CFR Part 50, Appendix K.

The lead test assembly meets the same design bases and requirements as the resident Westinghouse fuel for the North Anna, Unit 2, Cycle 16 core. No safety limits or setpoints have been altered as a result of the use of the lead test assembly. The lead test assembly will be placed in a core location that will not experience the most limiting power peaking during the aforementioned operating cycle. The advanced cladding has been irradiated and tested for corrosion resistance, tensile and burst strength, and creep characteristics. The results indicate that the advanced cladding should be acceptable for reactor service. Therefore, granting the exemption requests will not present an undue risk to public health and safety or be inconsistent with the common defense and security.

Based on the previously acceptable performance of the four lead test assemblies at North Anna, Unit 1, and the subsequent approval of the advanced cladding material M5, the staff concludes that the licensee has demonstrated that the lead test assembly will perform adequately under LOCA conditions, and thus the lead test assembly is acceptable for operation in North Anna, Unit 2, Cycle 16. In addition, based on the special circumstances described above, the staff approves of an exemption from the requirements of 10 CFR 50.44, 10 CFR 50.46, and 10 CFR Part 50 Appendix K for the lead test assembly in North Anna, Unit 2.

4.0 Conclusion

Accordingly, the Commission has determined that, pursuant to 10 CFR

50.12(a), the exemption 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. Also, special circumstances are present. Therefore, the Commission hereby grants the licensee an exemption from the requirements of 10 CFR 50.44, 10 CFR 50.46, and Appendix K to 10 CFR Part 50, for North Anna Power Station, Unit 2. This exemption only applies to the one lead test assembly containing advanced zirconium-based alloys for the one operating cycle, with a lead rod burnup not exceeding 75,000 MWD/MTU.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment (67 FR 53813).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 4th day of September 2002.

For the Nuclear Regulatory Commission.

John A. Zwolinski,

Director, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 02-22915 Filed 9-9-02; 8:45 am]

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NUCLEAR REGULATORY COMMISSION

Sunshine Act Meeting Notice

AGENCY HOLDING THE MEETING: Nuclear Regulatory Commission.

DATES: Weeks of September 9, 16, 23, 30, October 7, 14, 2002.

PLACE: Commissioner's Conference Room, 11555 Rockville Pike, Rockville, Maryland.

STATUS: Public and Closed.

MATTERS TO BE CONSIDERED:

Week of September 9, 2002

There are no meetings scheduled for the Week of September 9, 2002.

Week of September 16, 2002—Tentative

There are no meetings scheduled for the Week of September 16, 2002.

Week of September 23, 2002—Tentative

There are no meetings scheduled for the Week of September 23, 2002.

Week of September 30, 2002—Tentative

Tuesday, October 1, 2002

9:25 a.m.—Affirmation Session (Public Meeting) (If needed).

9:30 a.m.—Briefing on Decommissioning Activities and

Status (Public Meeting) (Contact: John Buckley, 301-415-6607).

This meeting will be webcast live at the Web address—www.nrc.gov.

Wednesday, October 2, 2002

10 a.m.—Briefing on Strategic Workforce Planning and Human Capital Initiatives (Closed—Ex. 2).

Thursday, October 3, 2002

9 a.m.—Discussion of Management Issues (Closed—Ex. 2).

Week of October 7, 2002—Tentative

There are no meetings scheduled for the Week of October 7, 2002.

Week of October 14, 2002—Tentative

There are no meetings scheduled for the Week of October 7, 2002.

Week of October 14, 2002—Tentative

There are no meetings scheduled for the Week of October 14, 2002.

* The schedule for Commission meetings is subject to change on short notice. To verify the status of meetings call (recording)—(301) 415-1292. Contact person for more information: R. Michelle Schroll (301) 415-1662.

Additional Information

By a vote of 5-0 on September 3, the Commission determined pursuant to U.S.C. 552b(e) and § 9.107(a) of the Commission's rules that "Affirmation of (a) Final Rule: 10 CFR Part 63: Specification of a Probability for Unlikely Features, Events, and Processes, and (b) Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility); Board's Certified Question Regarding Procedure" be held on September 4, and on less than one week's notice to the public.

The NRC Commission Meeting Schedule can be found on the Internet at: www.nrc.gov/what-we-do/policy-making/schedule.html.

This notice is distributed by mail to several hundred subscribers; if you no longer wish to receive it, or would like to be added to the distribution, please contact the Office of the Secretary, Washington, DC 20555 (301)-415-1969). In addition, distribution of this meeting notice over the Internet system is available. If you are interested in receiving this Commission meeting schedule electronically, please send an electronic message to dkw@nrc.gov.

Dated: September 5, 2002.

R. Michelle Schroll,

Acting Technical Coordinator, Office of the Secretary.

[FR Doc. 02-23090 Filed 9-6-02; 2:37 pm]

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