

Administration, Room 9K70, 300 E Street SW., Washington, DC 20546, (202) 358-2088.

SUPPLEMENTARY INFORMATION: The meeting will be open to the public up to the seating capacity of the room. The agenda for the meeting is as follows:

- Call to Order
- Reading of Minutes
- Update on NASA SDB Program
- Report from the Chairman
- Public Comment
- Proposed MBRAC Recommendations
- Subcommittee Reports
- New Business
- Adjourn

It is imperative that the meeting be held on this date to accommodate the scheduling priorities of the key participants. Visitors will be requested to sign a visitor's register.

Dated: March 26, 1996.

Leslie M. Nolan,

*Advisory Committee Management Officer,
National Aeronautics and Space
Administration.*

[FR Doc. 96-5862 Filed 3-11-96; 8:45 am]

BILLING CODE 7510-01-M

NATIONAL SCIENCE FOUNDATION

Special Emphasis Panel in Cross Disciplinary Activities; Notice of Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92-463, as amended), the National Science Foundation announces the following meeting.

Name: Special Emphasis Panel in Cross Disciplinary Activities (#1193).

Date and Time: March 29, 1996; 8:30 am-5 pm

Place: National Science Foundation, 4201 Wilson Boulevard, Room 1150, Arlington, VA 22230.

Type of Meeting: Closed

Contact Person(s): Rita V. Rodriguez, Program Director, CISE/CDA, Room 1160, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230. Telephone: (703) 306-1980.

Purpose of Meeting: To provide advice and recommendations concerning proposals submitted to NSF for financial support.

Agenda: To review and evaluate CISE Minority Institutions Infrastructure proposals as part of the selection process for awards.

Reasons for closing: The proposals being reviewed include information of a proprietary or confidential nature, including technical information; financial data, such as salaries; and personal information concerning individuals associated with the proposals. These matters are exempt under 5 U.S.C. 552b(c), (4) and (6) of the Government in the Sunshine Act.

Dated: March 6, 1996.

M. Rebecca Winkler,

Committee Management Officer.

[FR Doc. 96-5797 Filed 3-11-96; 8:45 am]

BILLING CODE 7555-01-M

NATIONAL TRANSPORTATION SAFETY BOARD

Sunshine Act Meeting

TIME AND DATE: 9:30 a.m., Tuesday, March 19, 1996.

PLACE: The Board Room, 5th Floor, 490 L'Enfant Plaza, S.W., Washington, D.C. 20594.0

STATUS: Open.

MATTERS TO BE CONSIDERED:

6531A Railroad Accident Report: Collision of Two New York City Transit Subway Trains in Brooklyn, New York, February 9, 1995.

NEWS MEDIA CONTACT: Telephone: (202) 382-0660.

FOR MORE INFORMATION CONTACT: Bea Hardesty, (202) 382-6525.

Dated: March 8, 1996.

Bea Hardesty,

Federal Register Liaison Officer.

[FR Doc. 96-5948 Filed 3-8-96; 11:15 am]

BILLING CODE 7533-01-M

NUCLEAR REGULATORY COMMISSION

[Docket No. STN 50-529]

Arizona Public Service Company, et al. (Palo Verde Nuclear Generating Station, Unit No. 2); Exemption

I

The Arizona Public Service Company, et al. (APS or the licensee), is the holder of Facility Operating License No. NPF-51, which authorizes operation of the Palo Verde Nuclear Generating Station (PVNGS), Unit No. 2, a pressurized-water reactor (PWR) located in Maricopa County, Arizona. This license provides, among other things, that the licensee is subject to all the rules, regulations, and orders of the Commission now or hereafter in effect.

II

Section 50.46 of Title 10 of the Code of Federal Regulations (10 CFR 50.46) contains acceptance criteria for emergency core cooling systems (ECCS) for light-water nuclear power reactors fueled with uranium oxide pellets within cylindrical zircaloy cladding. Further, 10 CFR 50.46 states that ECCS cooling performance following

postulated loss-of-coolant accidents must be calculated in accordance with an acceptable evaluation model.

Appendix K to 10 CFR Part 50 contains the required and acceptable features for ECCS evaluation models. Finally, 10 CFR 50.44 contains requirements for the control of hydrogen gas that may be generated after a postulated loss-of-coolant accident (LOCA) in light-water power reactors fueled with uranium oxide pellets within cylindrical zircaloy cladding.

III

By letter dated December 20, 1995, APS submitted an amendment request for PVNGS Unit 2 to allow fuel rods clad with advanced zirconium-based alloys to be substituted in two fuel assemblies for up to 40 rods clad with conventional Zircaloy-4. These assemblies would be used for evaluating in-reactor performance during fuel cycles 7, 8, and 9.

By letter dated January 12, 1996, APS submitted a request for an exemption to 10 CFR 50.46, 10 CFR Part 50, Appendix K, and 10 CFR 50.44. These regulations refer to the use of zircaloy, but do not clearly specify what is considered zircaloy. Therefore, the use of advanced zirconium-based alloys rather than conventional Zircaloy-4 may not be within the regulatory basis.

Pursuant to 10 CFR 50.12(a), "The Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of the regulations of this part, which are—(1) Authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. (2) The Commission will not consider granting an exemption unless special circumstances are present. Special circumstances are present whenever * * * (ii) 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 Code of Federal Regulations at 10 CFR 50.46 states: "Each boiling and pressurized light-water nuclear power reactor fueled with uranium oxide pellets within cylindrical Zircaloy cladding must be provided with an ECCS that must be designed such that its calculated cooling performance following postulated loss-of-coolant accidents conforms to the criteria set forth in paragraph (b) of this section. ECCS cooling performance must be calculated in accordance with an acceptable evaluation model and must be calculated for a number of postulated

loss-of-coolant accidents of different sizes, locations, and other properties sufficient to provide assurance that the most severe postulated loss-of-coolant accidents are calculated." The Code of Federal Regulations at 10 CFR 50.46 then goes on to give specifications for peak cladding temperature, maximum cladding oxidation, maximum hydrogen generation, coolable geometry, and long-term cooling. Since 10 CFR 50.46 specifically refers to fuel with Zircaloy cladding, the use of fuel clad with advanced zirconium-based alloys would, in effect, place the licensee outside the applicability of this section of the Code.

The underlying purpose of the rule is to ensure that facilities have adequate acceptance criteria for ECCS. The fuel rods clad with the advanced zirconium-based alloys will be identical in design and dimension to the fuel rods clad with conventional Zircaloy-4. The advanced cladding materials used in the demonstration fuel assemblies were chosen based on the improved 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 clad made from the advanced zirconium-based alloys meet all the mechanical requirements of the conventional Zircaloy-4 procurement specifications. Thus, the cladding and structural integrity of the fuel rods and fuel assemblies that have the advanced zirconium-based alloys will be maintained.

Therefore, due to these similarities between advanced zirconium-based alloys and Zircaloy-4, the advanced alloys are expected to result in clad and fuel performance similar to Zircaloy-4, such that the 10 CFR 50.46 LOCA acceptance criteria will be satisfied for the advanced zirconium-based cladding. Thus, the underlying purpose of the rule has been met.

Strict interpretation of the regulation would render the criteria of 10 CFR 50.46 inapplicable to the advanced zirconium-based alloys, even though analysis shows that applying the Zircaloy criteria to the advanced zirconium-based alloys yields acceptable results.

A strict application of the regulation in this instance is not necessary to achieve the underlying purpose of the rule. Therefore, special circumstances exist to grant an exemption from 10 CFR 50.46(a)(1)(i) that would allow the

licensee to apply the acceptance criteria of 10 CFR 50.46 to a reactor with 40 fuel rods clad with advanced zirconium-based alloys.

The Code of Federal Regulations at 10 CFR 50.44 provides requirements for control of hydrogen gas generated in part by Zircaloy clad fuel after a postulated LOCA. The intent of this rule is to ensure that an adequate means is provided for the control of hydrogen gas that may be generated following a LOCA.

The hydrogen produced in a post-LOCA scenario comes from cladding oxidation from a metal-water reaction. Most of the high-temperature oxidation occurs in the β -phase since the diffusion coefficient for oxygen in the β -phase of zirconium is significantly greater than that in α -phase zirconium.

The β -phase oxidation resistance of the alloys is expected to be as good as or better than that of Zircaloy-4. It is expected that the alloying element levels adjusted to improve the corrosion resistance of the α -phase of these alloys with respect to the α -phase of Zircaloy-4 will result in an improvement of the corrosion resistance of the β -phase of these alloys as well. It is therefore concluded that the β -phase oxidation rate of the alloys will be comparable to or lower than that of Zircaloy-4 and that the Baker-Just correlation will overpredict the β -phase oxidation of the alloys. A strict interpretation of the rule in this instance would result in the criteria of 10 CFR 50.44 inapplicable to advanced zirconium-based alloys. Since application of the regulation is not necessary to achieve the underlying purpose of the rule, special circumstances exist to grant an exemption from 10 CFR 50.44 to a reactor containing 40 fuel rods clad 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 generation, and cladding oxidation from the metal-water reaction shall be calculated using the Baker-Just equation. However, since the Baker-Just equation presumes the use of Zircaloy clad fuel, strict application of the rule would not permit use of the equation. The intent of this part of Appendix K, however, is to apply an equation that conservatively bounds all post-LOCA scenarios. Due to the similarities in the 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 will conservatively bound all post-LOCA scenarios. Since the use of the Baker-Just equation presupposes Zircaloy cladding and post-LOCA

scenarios are conservatively bounded, the underlying purpose of the rule will be met. Thus, special circumstances exist to grant an exemption from Paragraph I.A.5 of 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 that, pursuant to 10 CFR 50.12, this 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. 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 50.46, 10 CFR Part 50, Appendix K, and 10 CFR 50.44.

Pursuant to 10 CFR 51.32, the Commission has determined that granting this exemption will not have a significant impact on the human environment (61 FR 5042).

This exemption is effective upon issuance and shall expire at the completion of the ninth Unit 2 refueling outage.

Dated at Rockville, Maryland, this 6th day of March 1996.

For the Nuclear Regulatory Commission,
Elinor G. Adensam,
Deputy Director, Division of Reactor Projects
III/IV, Office of Nuclear Reactor Regulation.
[FR Doc. 96-5813 Filed 3-11-96; 8:45 am]

BILLING CODE 7590-01-P

[Docket No. STN 50-529]

Arizona Public Service Company; Palo Verde Nuclear Generating Station, Unit No. 2, Environmental Assessment and Finding of No Significant Impact

In notice document 96-2834 beginning on page 5042, in the issue of Friday, February 9, 1996, make the following corrections:

In the third full paragraph, in the first column, on page 5042, in line 3, the date of "December 20, 1995" should be corrected to read "January 12, 1996."

In the fourth full paragraph, in the third column, on page 5042, in line 3, the date of "December 20, 1995" should be corrected to read "January 12, 1996."

Dated at Rockville, Maryland, this 6th day of March 1996.