

- Long-Lived Data Collections: Status Report.

- Infrastructure Committee.

Committee on Education and Human Resources (8:30 a.m.–10:30 a.m.) Room 1295

Minutes

- Minutes.
- Comments from the Chair.
- Discussion: NWP Task Force Report.

Report.

- Reports from Working Groups (K–12, Undergraduate & Graduate).

- Report from Subcommittee on S&E Indicators.

- Focus on the Future: BIO 2010 (continued).

- Report from the August 12th Workshop on Broadening Participation.

- Report from the EHR AD.
- New Business.

Plenary Session of the Board (12:30 Noon–3:30 p.m.)

Room 1235

- Oath of Office.
- Minutes.
- Closed Items, October 2003.
- Chairman's Report.
- Director's Report.
- NSF Strategic Plan, 2003–2008.
- NWP Report.
- Multidisciplinary Data Initiative.
- Wireless Connectivity Update.
- Committee Reports.

Closed

Committee on Programs and Plans (8 a.m.–9:15 a.m.)

Room 1235

- Major Research Equipment & Facilities Construction.
- Report on Meeting of the MREFC Panel.
- New MREFC Projects.

Plenary Session of the Board (10:30 a.m.–12 Noon)

Room 1235

- Closed Minutes.
- Member Proposal.
- FY 2005 Budget.
- Closed Session Committee Reports.

Michael P. Crosby,

Executive Officer, NSB.

[FR Doc. 03–20353 Filed 8–6–03; 8:45 am]

BILLING CODE 7555–01–M

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–413 and 50–414]

Duke Energy Corporation, North Carolina Electric Membership Corporation, Saluda River Electric Cooperative, Inc., Catawba Nuclear Station, Units 1 and 2; Exemption

1.0 Background

Duke Energy Corporation *et al.*, (the licensee) is the holder of Facility Operating License Nos. NPF–35 and NPF–52, which authorize operation of the Catawba Nuclear Station, Units 1 and 2. The licenses provide, 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 two pressurized water reactors located in York County, South Carolina.

2.0 Request/Action

Title 10 of the Code of Federal Regulations (10 CFR) part 50, section 50.46 and appendix K identify requirements for calculating emergency core cooling system (ECCS) performance for reactors containing fuel with Zircaloy or ZIRLO cladding, and 10 CFR 50.44 identifies requirements for the control of hydrogen gas generated in part from a metal-water reaction between the reactor coolant and reactor fuel having Zircaloy or ZIRLO cladding.

The licensee has requested, in its letter dated December 3, 2002, as supplemented by letter dated April 8, 2003, a temporary exemption to 10 CFR 50.44, “Standards for combustible gas control system in light-water-cooled power reactors,” 10 CFR 50.46, “Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors,” and appendix K to 10 CFR part 50, “ECCS Evaluation Models,” that would allow the Catawba Nuclear Station, Units 1 and 2 to operate using eight lead test assemblies (LTAs) with a tin composition that is nominally below the lower bound licensed limit of 0.80 percent, as specified in WCAP–12610–P–A, “VANTAGE+ Fuel Assembly Reference Core Report,” in non-limiting core locations. The purpose of the LTAs is to obtain data that would allow the optimization of ZIRLO corrosion resistance, in order to support improved fuel performance and reliability at increased burnup levels.

3.0 Discussion

Pursuant to 10 CFR 50.12, “Specific exemptions,” 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. Under section 50.12(a)(2), special circumstances include, among other things, when the application of the regulation would not serve, or is not necessary to achieve, the underlying purpose of the rule.

The underlying purpose of 10 CFR 50.44, 10 CFR 50.46, and appendix K to 10 CFR part 50, is to establish requirements for the calculation of ECCS performance, and acceptance criteria for that performance, in order to assure that the ECCS functions to transfer heat from the reactor core following a loss-of-coolant-accident, such that (1) fuel and clad damage that could interfere with continued effective core cooling is prevented, and (2) clad metal-water reaction is limited to specified amounts.

The mechanical properties of the low-tin ZIRLO in the LTAs are very similar to those of the approved ZIRLO, since both of these alloys are zirconium-based materials with slight variations in tin content. The licensee will perform an evaluation of the fuel rod design using the same methods used for the current robust fuel assembly design. No new or altered design limits need to be applied, nor are any required for this program for the purposes of 10 CFR part 50, appendix A, “General Design Criteria for Nuclear Power Plants,” Criterion 10, “Reactor Design” (GDC 10). The licensee has evaluated the three areas of the mechanical design that could potentially be impacted by low-tin ZIRLO, namely, material properties, corrosion and thermal creep. The staff evaluated the data provided to substantiate that the material properties are similar to Zircaloy and that the corrosion and thermal creep will remain within established acceptance criteria. The NRC staff concludes that the data show that the selected LTA mechanical design will satisfy established acceptance criteria and should perform safely in the Catawba Nuclear Station.

The licensee has performed evaluations of the impact of the LTAs on the nuclear design. The approved reload methodologies can be used to model the LTAs since the features of the LTAs do not challenge the validity of the standard methodologies. The licensee has limited the number of LTAs to eight, and all of the LTAs will be placed in non-limiting locations in the