

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice 99-103]

NASA Advisory Council (NAC), Space Science Advisory Committee (SScAC), Solar System Exploration Subcommittee

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, Public Law 92-463, as amended, the National Aeronautics and Space Administration announces a meeting of the NASA Advisory Council, Space Science Advisory Committee, Solar System Exploration Subcommittee.

DATES: Monday, August 23, 1999, 8:30 a.m. to 5 p.m., and Tuesday, August 24, 1999, 8:30 a.m. to 5 p.m.

ADDRESSES: NASA Headquarters, Conference Room 5H46, 300 E Street, SW, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Dr. Carl Pilcher, Code S, National Aeronautics and Space Administration, Washington, DC 20546, (202) 358-2470.

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

- SScAC meeting summary.
- Office of Space Science Program update.
- Solar System Program update.
- Mission to the Kuiper Belt.
- Building Blocks and our Chemical Origins.
- Evolution of Earth-like Environment.
- Astrophysical Analogues.
- General discussion on mission priorities.

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

Dated: July 30, 1999.

Matthew M. Crouch,

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

[FR Doc. 99-20070 Filed 8-3-99; 8:45 am]

BILLING CODE 7510-01-P

NATIONAL FOUNDATION ON THE ARTS AND HUMANITIES**Proposed Collection; Comment Request**

AGENCY: National Endowment for the Humanities.

ACTION: Notice.

SUMMARY: The National Endowment for the Humanities (NEH) is soliciting public comments on the proposed information collection described below. The proposed information collection will be sent to the Office of Management and Budget (OMB) for review, as required by the provisions of the Paperwork Reduction Act of 1995.

DATES: Comments on this information collection must be submitted on or before October 4, 1999.

ADDRESSES: Send comments to Ms. Susan Daisey, Assistant Director, Grants Office, National Endowment for the Humanities, 1100 Pennsylvania Avenue, NW, Room 311, Washington, D.C. 20506, or by email to: sdaisey@neh.gov. Telephone 202-606-8494.

SUPPLEMENTARY INFORMATION: The National Endowment for the Humanities will submit the proposed information collection to OMB for review, as required by the Paperwork Reduction Act of 1995 (Pub. L. 104-13, 44 U.S.C. Chapter 35). This notice is soliciting comments from members of the public and affected agencies. NEH is particularly interested in comments which help the agency to: (1) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (2) evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (3) enhance the quality, utility, and clarity of the information to be collected; and (4) minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submissions of responses.

This Notice also lists the following information:

Type of Review: Extension of a currently approved collection.

Agency: National Endowment for the Humanities.

Title of Proposal: My History Is America's History Website.

OMB Number: 3136-0136.

Frequency of Collection: Continual.

Affected Public: General Public.

Number of Respondents:

Approximately 100,000 per year.

Estimated Time per Respondent:

Approximately one hour per response.

Estimated Total Burden Hours:

100,000.

Total Annualized capital/startup costs: 0.

Total Annual costs (operating/maintaining systems or purchasing service): 0.

DESCRIPTION: Comments submitted in response to this notice will be summarized and/or included in the request submitted to the Office of Management and Budget for extended approval of the information collection request; they will also become a matter of public record.

Juan Mestas,

Deputy Chairman.

[FR Doc. 99-19935 Filed 8-3-99; 8:45 am]

BILLING CODE 7536-01-M

NATIONAL SCIENCE FOUNDATION**Sunshine Act Meeting**

AGENCY HOLDING MEETING: National Science Foundation, National Science Board, Executive Committee.

DATE AND TIME: August 10, 1999: 2:00 p.m., Closed Session.

PLACE: The National Science Foundation, 4201 Wilson Boulevard, Room 1205, Arlington, VA 22230.

STATUS: This meeting will be closed to the public.

MATTERS TO BE CONSIDERED: Closed Session (2:00 p.m. to 5:00 p.m.)—FY 2001 Budget.

Marta Cehelsky,

Executive Officer.

[FR Doc. 99-20146 Filed 8-2-99; 1:05 pm]

BILLING CODE 7555-01-M

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50-269, 50-270, and 50-287]

Duke Energy Corporation (Oconee Nuclear Station, Units 1, 2, and 3); Exemption

I

The Duke Energy Corporation (Duke/the licensee) is the holder of Facility Operating License Nos. DPR-38, DPR-47, and DPR-55, that authorize operation of the Oconee Nuclear Station, Units 1, 2, and 3 (Oconee), respectively. The licenses provide, among other things, that the facilities are subject to all rules, regulations, and orders of the US Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

The facilities consist of pressurized water reactors located on Duke's Oconee site in Seneca, Oconee County, South Carolina.

II

Title 10 of the *Code of Federal Regulations* (10 CFR) part 50, Appendix G requires that pressure-temperature (P-T) limits be established for reactor pressure vessels (RPVs) during normal operating and hydrostatic or leak rate testing conditions. Specifically, 10 CFR part 50, Appendix G states that "[t]he appropriate requirements on * * * the pressure-temperature limits and minimum permissible temperature must be met for all conditions." Appendix G of 10 CFR part 50 specifies that the requirements for these limits are the American Society of Mechanical Engineers (ASME) Code, section XI, Appendix G limits.

Pressurized water reactor licensees have installed cold overpressure mitigation systems/low temperature overpressure protection (LTOP) systems in order to protect the reactor coolant pressure boundary (RCPB) from being operated outside of the boundaries established by the P-T limit curves and to provide pressure relief of the RCPB during low temperature overpressurization events. The licensee is required by the Oconee Units 1, 2, and 3 Technical Specifications (TS) to update and submit the changes to its LTOP setpoints whenever the licensee is requesting approval for amendments to the P-T limit curves in the Oconee Units 1, 2, and 3 TS.

Therefore, in order to address provisions of amendments to the TS P-T limits and LTOP curves, the licensee requested in its submittal dated May 11, 1999, that the staff exempt Oconee Units 1, 2, and 3 from application of specific requirements of 10 CFR part 50, section 50.60(a) and 10 CFR part 50, Appendix G, and substitute use of three ASME Code Cases as follows:

1. N-514 as an alternate methodology for determining the low temperature overpressure protection system enable temperature,

2. N-588 for determining the reactor vessel P-T limits derived from postulating a circumferentially-oriented reference flaw in a circumferential weld, and

3. N-626 as an alternate reference fracture toughness for reactor vessel materials for use in determining the P-T limits. (As a result of recent ASME code committee action, the designation for Code Case N-626 was changed to N-640. Therefore, Code Case N-640 will be discussed below rather than Code Case N-626, the designation referenced in the submittal.)

The proposed action is in accordance with the licensee's application for exemption contained in a submittal

dated May 11, 1999, and is needed to support the TS amendments that are contained in the same submittal and are being processed separately. The proposed amendments will revise the P-T limits of TS 3.4.3 for Oconee Units 1, 2, and 3 related to the heatup, cooldown, and inservice test limitations for the Reactor Coolant System of each unit to a maximum of 33 Effective Full Power Years (EFPY). It will also revise TS 3.4.12, Low Temperature Overpressure Protection System, to reflect the revised P-T limits of the reactor vessels.

Code Case N-514

During staff review of this submittal, the staff determined that granting of an exemption to use Code Case N-514 to redefine the LTOP enable temperature as $RT_{NDT} + 50^\circ\text{F}$ was not necessary. Since the prior definition of the enable temperature as $RT_{NDT} + 90^\circ\text{F}$ is found only in an NRC Branch Technical Position, an exemption is not required.

Code Case N-588

This requested exemption will allow the use of ASME Code Case N-588 to determine stress intensity factors for postulated defects in circumferential welds. Appendix G of 10 CFR part 50 requires, in part, that Article G-2120 of ASME section XI, Appendix G, be used to determine the maximum postulated defects in reactor pressure vessels (RPV) when determining the P-T limits for the vessel. Article G-2120 specifies that the postulated defect be in the surface of the vessel material and normal (perpendicular in the plane of the material) to the direction of maximum stress. ASME section XI, Appendix G, also provides methodology to determine the stress intensity factors for a maximum postulated defect normal to the maximum stress. The purpose of this article is to prevent non-ductile failure of the RPV by providing procedures to identify the most limiting postulated fractures to be considered in the development of P-T limits.

Per Article G-2120 of ASME section XI, Appendix G, the postulated flaw "normal to the direction of maximum stress" would be an axially-oriented flaw for each reactor vessel beltline material. This postulated reference flaw is intended to be a conservative, bounding defect when compared to those defects that may have gone undetected during the fabrication process.

Engineering experience and non-destructive examinations over the course of the last thirty years have shown this to be a valid assumption and have shown that no service-induced

degradation mechanism exists in pressurized water reactors that would cause significant growth of preservice flaws.

However, for a circumferential weld, it is extremely unlikely that axial flaws of appreciable size would be introduced perpendicular to the weld seam during fabrication since the nature of the welding process leads to any extended flaws being introduced parallel to the direction of travel of the welding head. In addition, the size of flaw required to be postulated by the ASME Code, if oriented axially, would extend across the entire nominal width of the circumferential weld and into the base material on either side. Given the strict procedure controls required during the fabrication of ASME Code Class 1 reactor vessels and the extensive amount of preservice and inservice non-destructive examination to which their welded regions have been subjected, it has been confirmed that any remaining defects are small and do not cross transverse to the weld bead orientation. Therefore, the NRC staff finds that the application of this degree of non-physical conservatism is not necessary to achieve the underlying intent of 10 CFR part 50, Appendix G.

In summary, the underlying purpose of 10 CFR part 50, Appendix G and ASME section XI, Appendix G, is to satisfy the requirement that: (1) The reactor coolant pressure boundary be operated in a regime having sufficient margin to ensure that when stressed the vessel boundary behaves in a non-brittle manner and the probability of a rapidly propagating fracture is minimized, and (2) P-T operating and test curves provide margin in consideration of uncertainties in determining the effects of irradiation on material properties.

Application of Code Case N-588 to determine P-T operating and test limit curves per ASME section XI, Appendix G, provides appropriate, conservative procedures to determine limiting maximum postulated defects and to consider those defects in the P-T limits. This application of the code case maintains the margin of safety for circumferential welds equivalent to that originally contemplated for plates/forgings and axial welds.

Therefore, pursuant to 10 CFR 50.12(a)(2)(ii), application of the code case would continue to achieve the underlying purpose of the rule.

Code Case N-640 (Formerly Code Case N-626)

The licensee has proposed an exemption to allow use of ASME Code Case N-626 (which is now Code Case N-640) in conjunction with ASME

section XI, 10 CFR 50.60(a) and 10 CFR part 50, Appendix G, to determine that the P-T limits meet the underlying intent of the NRC regulations.

The proposed amendment to revise the P-T limits for Oconee Units 1, 2, and 3 rely in part on the requested exemption. These revised P-T limits have been developed using the K_{Ic} fracture toughness curve shown on ASME section XI, Appendix A, Figure A-2200-1, in lieu of the K_{Ia} fracture toughness curve of ASME section XI, Appendix G, Figure G-2210-1, as the lower bound for fracture toughness. The other margins involved with the ASME section XI, Appendix G process of determining P-T limit curves remain unchanged.

Use of the K_{Ic} curve in determining the lower bound fracture toughness in the development of P-T operating limits curve is more technically correct than the K_{Ia} curve. The K_{Ic} curve appropriately implements the use of static initiation fracture toughness behavior to evaluate the controlled heat-up and cooldown process of a reactor vessel. The licensee has determined that the use of the initial conservatism of the K_{Ia} curve when the curve was codified in 1974 was justified. This initial conservatism was necessary due to the limited knowledge of reactor pressure vessel materials. Since 1974, additional knowledge has been gained about reactor pressure vessel materials, which demonstrates that the lower bound on fracture toughness provided by the K_{Ia} curve is well beyond the margin of safety required to protect the public health and safety from potential reactor pressure vessel failure. In addition, P-T curves based on the K_{Ic} curve will enhance overall plant safety by opening the P-T operating window with the greatest safety benefit in the region of low temperature operations. The two primary safety benefits in opening the low temperature operating window are a reduction in the challenges to RCS power operated relief valves and elimination of RCP impeller cavitation wear.

Since the RCS P-T operating window is defined by the P-T operating and test limit curves developed in accordance with the ASME section XI, Appendix G procedure, continued operation of Oconee with these P-T curves without the relief provided by ASME Code Case N-640 would unnecessarily restrict the P-T operating window. This restriction requires, under certain low temperature conditions, that only one reactor coolant pump in a reactor coolant loop be operated. The licensee has found from experience that the effect of this restriction is undesirable degradation of

reactor coolant pump impellers that results from cavitation sustained when either one pump or one pump in each loop is operating. Implementation of the proposed P-T curves as allowed by ASME Code Case N-640 does not significantly reduce the margin of safety. Thus, pursuant to 10 CFR 50.12(a)(2)(ii), the underlying purpose of the regulation will continue to be served.

In summary, the ASME section XI, Appendix G procedure was conservatively developed based on the level of knowledge existing in 1974 concerning reactor pressure vessel materials and the estimated effects of operation. Since 1974, the level of knowledge about these topics has been greatly expanded. The NRC staff concurs that this increased knowledge permits relaxation of the ASME section XI, Appendix G requirements by application of ASME Code Case N-640, while maintaining, pursuant to 10 CFR 50.12(a)(2)(ii), the underlying purpose of the ASME Code and the NRC regulations to ensure an acceptable margin of safety.

III

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. The staff accepts the licensee's determination that an exemption would be required to approve the use of Code Cases N-588 and N-626 (now Code Case N-640). The staff examined the licensee's rationale to support the exemption request and concurred that the use of the code cases would also meet the underlying intent of these regulations. Based upon a consideration of the conservatism that is explicitly incorporated into the methodologies of 10 CFR Part 50, Appendix G; Appendix G of the Code; and RG 1.99, Revision 2, the staff concluded that application of the code cases as described would provide an adequate margin of safety against brittle failure of the RPVs. This is also consistent with the determination that the staff has reached for other licensees under similar conditions based on the same considerations. Therefore, the staff concludes that requesting the exemption under the special circumstances of 10 CFR 50.12(a)(2)(ii) is appropriate and that the methodology of Code Cases N-588 and N-626 may be used to revise

the LTOP setpoints and P-T limits for the Oconee Units 1, 2, and 3 reactor coolant system.

IV

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Therefore, the Commission hereby grants Duke an exemption from the requirements of 10 CFR part 50, section 50.60(a) and 10 CFR part 50, Appendix G, for the Oconee Nuclear Station, Units 1, 2, and 3.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not result in any significant effect on the quality of the human environment (64 FR 40901).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 29th day of July 1999.

For the Nuclear Regulatory Commission.

John A. Zwolinski,

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

[FR Doc. 99-19986 Filed 8-3-99; 8:45 am]

BILLING CODE 7590-01-P

NUCLEAR REGULATORY COMMISSION

Sunshine Act Meeting

AGENCY HOLDING THE MEETING: Nuclear Regulatory Commission.

DATES: Weeks of August 2, 9, 16, and 23, 1999.

PLACE: Commissioners' Conference Room, 11555 Rockville Pike, Rockville, Maryland.

STATUS: Public and Closed.

MATTERS TO BE CONSIDERED:

Week of August 2

Thursday, August 5

9:55 p.m. Affirmation Session (Public Meeting) (If needed)

10:00 a.m. Briefing on EEO Program (Public Meeting) (Contact: Irene Little, 301-415-7380)

Week of August 9-Tentative

Thursday, August 12

11:30 a.m. Affirmation Session (Public Meeting) (If needed)

Week of August 16-Tentative

There are no meetings scheduled for the Week of August 16.