

# **Oconee Nuclear Station License Renewal May 2, 2000**

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## **Purpose**

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- Inform the Commission of the results of the review of the Oconee license renewal application
- Request the Commission authorize the Director of NRR to renew the operating licenses for Oconee Nuclear Station, Units 1, 2, and 3

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## **Performance Goals**

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- **Maintain Safety**
- **Increase Public Confidence**
- **Reduce Unnecessary Regulatory Burden**
- **Make NRC decisions effective, efficient & realistic**

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## **License Renewal**

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### **Program Monitoring and Oversight**

- **Executive Council oversight**
- **Steering Committee guidance and coordination**
  - ▶ **Interface with NEI Working Group**
  - ▶ **Coordination of technical and process issues**
  - ▶ **Monitoring of success measures and resources**
- **Monthly management meetings**
  - ▶ **Facilitate communications**
  - ▶ **Identify issues and assign actions**

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## **License Renewal Principles**

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- The regulatory process is adequate to maintain safety, with the possible exception of the detrimental effects of aging
- The licensing basis must be maintained during the renewal term

## **Renewal Process**

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- Focus on aging management and time-limited design analysis
- Draft standard review plan provided aging management program attributes and reasonable review scope

## **Safety Review Milestones**

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- July 6, 1998 – Date of Duke application
- December 4, 1998 – Complete issuance of staff questions
- February 17, 1999 – Received Duke's responses
- April 26-30, 1999 – Scoping/Screening Inspection
- June 16, 1999 – Published SER with open items (OIs) & confirmatory items (CIs)
- July 12-16, & 26-30 – Aging Management Inspection
- September 1-3, 1999 – ACRS briefing on SER
- February 3, 2000 – SER closure of OIs & CIs
- Feb 28 - March 3, 2000 – Followup inspection
- March 2, 2000 – ACRS briefing on SER
- March 2000 – Published NUREG-1723

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## **Review Results**

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- Scoping & Screening [§54.4 - SER Chapter 2]
  - ▶ Evaluated applicant's methodology of which systems, structures, and components should be within the scope of license renewal
  - ▶ Evaluated applicant's implementation of the methodology for structures and components subject to an aging management review
  - ▶ Evaluated applicant's determination of which passive, long-lived structures and components are subject to aging management

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## **Review Results - continued**

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- Aging Management [54.21(a)(3) - SER Chapter 3]
  - ▶ Evaluated applicant's identification of applicable aging effects and proposed programs to manage aging effects to ensure relevant equipment intended functions are maintained
  
- Time-Limited Aging Analysis (TLAA) [54.21(c) - SER Chapter 4]
  - ▶ Evaluated applicant's methods to determine how analyses with time-limited assumptions have been or will be managed for period of extended operation

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## **Review Results**

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- Unique Aspects
  - ▶ Keowee Hydroelectric Station
  - ▶ Standby Shutdown Facility
  - ▶ Insulated Cables and Connection Aging Management Program
  - ▶ Use of topical reports

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## **Safety Review Highlights**

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- Many existing programs provide adequate aging management
- Some programs modified to ensure adequate aging management
- Additional inspections to resolve potential aging effects or demonstration of program adequacy
- UFSAR supplement to be incorporated by July 2001

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## **Safety Conclusion**

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- Actions have been or will be taken with respect to managing the effects of aging
- Actions have been or will be taken with respect to time-limited aging analyses
- The staff finds that there is reasonable assurance that the activities authorized by a renewed license will continue to be conducted in accordance with the licensing basis for the ONS Units 1, 2 and 3, as revised by the renewal commitments

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## **Environmental Review**

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- National Environmental Policy Act (NEPA) requires environmental impact statement for major federal actions.
  - ▶ 10 CFR Part 51 implements NEPA
- Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG-1437 (GEIS)
  - ▶ Category 1 issues (generically resolved)
  - ▶ Category 2 issues (site-specific evaluation)
  - ▶ Uncategorized (site-specific evaluation)
- Oconee site-specific evaluation, NUREG-1437, Supplement 2

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## **Environmental Milestones**

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- July 6, 1998 - ER submitted as part of LRA
- August 5, 1998 - Notice of Acceptance for Docketing
- September 14, 1998 - Notice of Intent to Prepare EIS/Conduct Scoping
- Sept 14 - Nov 19, 1998 - Public Comment Period for Scoping
- October 19, 1998 - 2 Public Scoping Meetings
- October 19-22, 1998 - Site Visit & Audit
- May 20, 1999 - Draft EIS Issued
- May 28 - August 16, 1999 - Public Comment Period on Draft EIS
- July 8, 1999 - 2 Public Meetings on Draft EIS
- December 9, 1999 - Final EIS Issued

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## **Environmental Review Results**

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- Unique Aspects
  - ▶ Scope of transmission line impacts
  - ▶ Combined generation alternative

## **Environmental Impact Conclusion**

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- The environmental impacts of renewing the Oconee Nuclear Station licenses are acceptable for the purposes of license renewal

# **Inspection Program**

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## Region II Activity

- Conducted three inspections following established procedures
  - ▶ Determine if Scoping and Screening, as implemented by Duke, was consistent with their application and the rule
  - ▶ Determine if Duke's existing and planned aging management programs were consistent with their application, the rule, and the staff safety evaluation
  - ▶ Verify that supporting documentation was auditable

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# **Inspection Program**

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- Selected 14 mechanical systems, 3 major structures, and 2 electrical systems to verify the adequacy of Duke's scoping and screening effort
- Selected 4 mechanical and 1 electrical system excluded from scope by Duke effort
- Visually inspected portions of 7 systems and reviewed status of 31 aging management programs credited in the application

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## **Inspection Conclusions**

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- Duke successfully implemented scoping and screening process and is establishing aging management programs as described in their application
- Duke demonstrated the capability to manage aging during the period of extended operation
- Duke aging management programs provide an adequate foundation for renewing Oconee licenses

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## **Overall Conclusion**

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### Staff Recommendation

- The conclusions of the safety review, evaluation of environmental impacts, and inspection verifications support renewal of the licenses for Oconee Nuclear Station, Units 1, 2, and 3
- The staff requests that the Commission authorize the Director of NRR to renew licenses DPR-38, DPR-47, and DPR-55 with expiration dates of February 6, 2033, October 6, 2033, and July 19, 2034, respectively

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