

## LICENSE FOR INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter 1, Part 72, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, and possess the power reactor spent fuel and other radioactive materials associated with spent fuel storage designated below; to use such material for the purpose(s) and at the place(s) designated below; and to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified herein.

Licensee	
1. Virginia Electric and Power Company	3. License No. SNM-2501 Amendment No.
2. 5000 Dominion Boulevard Glen Allen, Virginia 23060	4. Expiration Date July 31, 2046
	5. Docket or Reference No. 72-2

6. Byproduct, Source, and/or Special Nuclear Material
7. Chemical and/or Physical Form
8. Maximum Amount That Licensee May Possess at Any One Time Under This License
- |   |   |  |
|---|---|--|
| A. Spent fuel assemblies from Surry Unit 1 & 2 reactors (using natural water for cooling) and associated radioactive materials related to receipt, storage, and transfer of the fuel assemblies | A. As UO <sub>2</sub> clad with zirconium or zirconium alloys | A. 811.44 TeU of spent fuel assemblies |
|---|---|--|
9. Authorized Use: The material identified in 6.A and 7.A above is authorized for receipt, possession, storage, and transfer as described in the Surry Independent Spent Fuel Storage Installation Final Safety Analysis Report, as supplemented and amended in accordance with 10 CFR 72.70 and 10 CFR 72.48.
10. Authorized Place of Use: The licensed material is to be received, possessed, transferred, and stored at the Surry ISFSI located on the Surry Power Station site in Surry County, Virginia, near Surry, Virginia, as described in the Final Safety Analysis Report.
11. The Technical Specifications contained in Appendix A attached hereto are incorporated into the license. The licensee shall operate the installation in accordance with the Technical Specifications in Appendix A.
12. The Safeguards License Condition contained in Appendix B attached hereto is hereby incorporated into this license. The licensee shall maintain a facility physical security program in accordance with this condition.
13. The Technical Specifications for Environmental Protection contained in Appendix C attached hereto are incorporated into the license. The licensee shall operate the installation in accordance with the Technical Specifications in Appendix C.

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FUEL AND HIGH-LEVEL RADIOACTIVE WASTE  
SUPPLEMENTARY SHEET**

14. The continued storage of burnable poison rods (BPRAs) and thimble plug devices (TPDs) is permitted in the following casks presently located at the Surry ISFSI:

CASTOR V/21-02, -03, -04, -05, -06, -07, -08, -09, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24, -25, and -26;

NAC-I28-01 and -02; and

Westinghouse MC-10-02.

Continued storage of BPRAs and TPDs is limited to the BPRAs and TPDs presently contained in the CASTOR V/21, MC-10, and NAC-I28 casks in their present configuration. Unloading and loading of these casks for the purpose of maintenance or retrieval of the fuel is permitted with the following restriction:

A fuel assembly with or without a BPRA or TPD may be reloaded into a CASTOR V/21, MC-10, or NAC-I28 cask (after removal) provided it is the exact fuel assembly/BPRA/TPD previously loaded in that cask and it is placed in the exact basket position from which it was previously removed, or prior NRC approval must be obtained prior to loading.

15. The Final Safety Analysis Report supplement submitted pursuant to 10 CFR 72.42(b) on April 29, 2002, as revised on October 6, 2003, describes certain future inspection activities to be completed before the period of extended operation. These inspection activities, which may be planned or a result from an unplanned inspection opportunity, shall be completed no later than July 31, 2006. The licensee shall likewise repeat these inspections within  $20 \pm 5$  years. The licensee shall notify the NRC in writing in accordance with 10 CFR 72.4, within 60 days of any significant findings or when implementation of these activities is complete.

The Final Safety Analysis Report supplement submitted pursuant to 10 CFR 72.42(b) on April 29, 2002, as revised on October 6, 2003, describes the aging management program for the Surry ISFSI. The aging management program includes the ISFSI boundary radiation measurements required by the Surry ISFSI Technical Specifications. Evaluation of these measurements for adverse trends ensures that no significant deterioration of the in-service storage casks polymer neutron shield material occurs undetected.

Based upon the requirements, the Commission finds that the licensee's request to be exempted from the provisions of 10 CFR 72.42(a), with respect to the 20 year license period, is authorized by law and will not endanger life or property or the common defense and security as is otherwise in the public interest. Pursuant to 10 CFR 72.7, the Commission hereby grants the exemption.

16. This renewed license is effective as of the date of issuance shown below.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

John Monninger, Chief  
Licensing Section  
Spent Fuel Project Office  
Office of Nuclear Material Safety  
and Safeguards  
Washington, DC 20555

Date of Issuance: February 25, 2005

Attachments: 1. Appendix A  
2. Appendix B  
3. Appendix C