

## MATERIALS LICENSE

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 I, Parts 30, 31, 32, 33, 34, 35, 39, 40 and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; 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 below.

## Licensee

1. B&W Fuel Company  
Commercial Nuclear Fuel Plant  
P.O. Box 11646  
2. Lynchburg, Virginia 24506-1646

3. License number SNM-1168, Amendment 28

4. Expiration date September 30, 2000

5. Docket or  
Reference No 70-12016. Byproduct, source, and/or  
special nuclear material7. Chemical and/or physical  
form8. Maximum amount that licensee  
may possess at any one time  
under this licenseMaterialFormMaximum  
Quantity

A. Uranium enriched  
(and enriched reprocessed  
uranium containing  
plutonium and other  
transuranic isotopes)  
up to 1 w/o U-235

A. Uranium  
oxide pellet

A. 15,000 kilograms  
of U-235

B. Uranium, natural or  
depleted

B. Oxide, pellet or  
powder

B. 100,000 kilograms  
of uranium

C. Uranium, natural

C.  $UF_6$

C. Less than 1,000  
kilograms with no  
single container to  
exceed 50 kilograms

D. Byproduct material

D. Sealed sources

D. 10 curies with atomic  
numbers 3 to 83,  
inclusive

E. Plutonium

E. Sealed sources

E. 6 grams plutonium

F. Californium-252

F. Sealed sources

F. 3 milligrams of  
Californium-252

G. Uranium enriched  
in U-235

G. Any

G. 350 grams of U-235

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- |  |   |                           |
|--|---|---------------------------|
| H. Americium-241                                     | H. Sealed sources   | H. 5 curies Americium-241 |
| I. Byproduct material and Plutonium                  | I. Contamination on/within equipment, tooling, and components and waste | I. 1,000 curies, total    |
| J. Any licensed material between atomic numbers 1-96 | J. Quality control samples  | J. 1 $\mu$ Ci total       |
9. Authorized place of use: The licensee's existing facilities at Lynchburg, Virginia. Material identified in Condition 6.I., 7.I., and 8.I., may be used at temporary job sites throughout the United States where the U.S. Nuclear Regulatory Commission retains jurisdiction for regulating the use of licensed materials.
10. This license shall be deemed to contain two sections: Safety Conditions and Safeguards Conditions. These sections are part of the license, and the licensee is subject to compliance with all listed conditions in each section.

FOR THE NUCLEAR REGULATORY COMMISSION

Date:

10/24/96

By:

Robert PiersonDivision of Fuel Cycle Safety  
and Safeguards  
Washington, DC 20555

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SAFETY CONDITIONS

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- S-1. Authorized use: For use in accordance with statements, representations, and conditions of Part I of the licensee's application dated June 22, 1990; and supplements dated October 15 and October 24, 1990; January 4, January 7, April 22, June 18, September 25 (containing pages dated September 18, 1991), November 7, and December 10, 1991; January 16, March 16, May 15, September 2, and November 4, 1992; January 14, January 28, March 23, May 6, May 7, June 16, October 1, November 1, November 9, and December 1, 1993; March 21, and December 21, 1994; May 25, September 29, and October 18, 1995; and January 16, and September 18, 1996.
- S-2. The licensee shall inform the Regional Administrator, Region II, within 30 days if the State-permitting agency revokes the State-issued NPDES permit for the discharge of liquid effluents and shall inform the Regional Administrator, Region II, on a semiannual basis if the State-permitting agency supersedes, conditions, modifies, or otherwise nullifies the effectiveness of the State-issued NPDES permit for the discharge of liquid effluents.
- S-3. The licensee is hereby granted the exemptions and special authorizations in Sections 1.7.1 through 1.7.4, Chapter 1, of the application.
- S-4. At not more than 2-year intervals from September 30, 1990, the licensee shall update the demonstration sections of the renewal application to reflect the licensee's current operations. The updates to the application shall, as a minimum, include information for the health and safety section of the application as required by 10 CFR 70.22(a) through 70.22(f) and 70.22(i) and operational data or environmental releases as required by 70.21. In lieu of an update at the end of the 10-year renewal period, the licensee shall file a renewal application on or before September 30, 1999.
- S-5. Deleted - Condition complied with - Emergency Plan submitted and approved by Amendment 15 dated November 17, 1993. Emergency Plan no longer required - approved by Amendment 17 dated April 6, 1994.
- S-6. The incumbent, Manager, Fuel Manufacturing, identified in the amendment application dated September 25, 1991, is deemed to satisfy the education requirements for the position because of the incumbent's experience in the position since 1985 and his nuclear plant experience since 1970.
- S-7. The licensee's Decommissioning Funding Plan and the financial surety arrangements, to assure that funds will be available for decommissioning, submitted by application dated March 27, 1992, and supplements dated August 23 and October 15, 1993; and May 10 and November 30, 1994, are hereby incorporated as a condition of the license.

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- S-8 By August 15, 1995, the licensee shall perform an inventory of its byproduct material to determine the quantity currently possessed. The amount of byproduct material contained in field service equipment, accepted for storage or repair, shall be estimated and added to the inventory within 1 week of its receipt.
- S-9 The licensee may receive, rod-load, download, store and ship enriched reprocessed uranium containing plutonium and other transuranic isotopes, provided that the concentration of transuranic isotopes in such uranium shall be limited to that specified in ASTM Specification C996-90. The licensee shall obtain shipper certification that the uranium is within the limits for transuranics of ASTM Specification C996-90.
- S-10 Notwithstanding the requirements of License Condition S-4, the licensee may delay until November 30, 1996, the submittal of its revised Demonstration Section.

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SAFEGUARDS CONDITIONS

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Section 1.0 - Material Control & Accounting

SG-1.1 The licensee shall follow Chapters 1.0 through 8.0 of its "Fundamental Nuclear Materials Control Plan," with all pages designated as Revision 7 and dated "5-01-95," page 2-5 designated as Revision 8 and dated "10-31-95," pages 1-4, 5-4, 5-5, 5-6, and 8-2 designated as Revision 8 and dated "11-14-95," and pages 2-1, 2-2, and 2-4 designated as Revision 9 and dated "11-14-95." Any revisions to this Plan shall be made in accordance with, and pursuant to, either 10 CFR 70.32(c) or 70.34.

SG-1.2 Notwithstanding the requirement of 10 CFR 74.31(c)(8) to independently assess the effectiveness of the total MC&A system at least every 24 months, the licensee may assess the effectiveness of its contractor laboratory at intervals not to exceed 36 months. All other elements and aspects of the licensee's MC&A program, however, remain subject to 10 CFR 74.31(c)(8).

Section 2.0 - Physical Protection For SNM of Low Strategic Significance

SG-2.1 The licensee shall follow the Security Plan dated May 16, 1980, as revised May 20, 1983, February 5, 1986, and August 28, 1992, and as revised in accordance with the provisions of 10 CFR 70.32(e).

Section 3.0 - International Safeguards

SG-3.1 The licensee shall follow Codes 1 through 6 of the Transitional Facility Attachment No. 6A dated December 4, 1995, to the US/IAEA Safeguards Agreement.