



Department of Energy

Bonneville Power Administration  
Mail Drop 1399  
P.O. Box 968  
Richland, Washington 99352-0968

POWER BUSINESS LINE

360610  
Ryan Cates  
5/29/05

May 26, 2005

In reply refer to: PGC/Richland

Letter of Agreement No. 05GS-75180

Mr. William Murphie, Manager  
United States Department of Energy  
Portsmouth/Paducah Project Office  
1017 Majestic Drive, Suite 200  
Lexington, KY 40513

Dear Mr. Murphie:

Bonneville Power Administration (BPA), an agency of the U.S. Department of Energy (DOE), in coordination with Energy Northwest (EN), a joint operating agency organized under Washington State law, and the Environmental Management Office (EM) of DOE have agreed to implement a PILOT project to determine the usability of a portion of DOE's depleted uranium hexafluoride (DUF<sub>6</sub>) inventory. The DUF<sub>6</sub>, as identified below, may contain enough uranium (U<sup>235</sup>) for practical use in a nuclear power production reactor, after enrichment.

If successful, this interdepartmental PILOT project will result in the avoidance by EM of as much as approximately \$40 million in disposal costs and save a projected \$50 million in future nuclear fuel costs for EN's Columbia Generating Station, the generating project capacity of which BPA has heretofore acquired. In order to implement this PILOT project, EN, in coordination with BPA, will assume responsibility for funding the PILOT project (enrichment and uranium fees), estimated to cost approximately \$88 million.

To commence the PILOT project work, and as consistent with interdepartmental property transfers, BPA requests delivery of DUF<sub>6</sub> from EM to BPA on the following basis:

1. DUF<sub>6</sub> cylinders from two DOE Lots will be delivered by EM on behalf of BPA to U.S. Uranium Enrichment Corporation (USEC) for the account of EN on a schedule mutually agreed upon by EM, EN, and USEC.
2. Lot 1 is defined as 165 Type 48G DUF<sub>6</sub> cylinders with a minimum assay between 0.400 to 0.4399 wt% U<sup>235</sup> and containing approximately 1,405,620 KgU as DUF<sub>6</sub> located in Paducah, Kentucky.
3. Lot 2 is defined as 507 Type 48G DUF<sub>6</sub> cylinders with a minimum assay of 0.440 wt% U<sup>235</sup> and containing approximately 4,314,400 KgU as DUF<sub>6</sub> located in Paducah, Kentucky.

Source: Linda Guster, DOE  
Prepare Document DOE USEC Agreement

4. Delivery of DUF<sub>6</sub> by EM on behalf of BPA will be to USEC's Paducah, Kentucky, Enrichment Plant (the "delivery point"). Upon delivery, title to, risk of loss and responsibility for the DUF<sub>6</sub> and the cylinders passes to EN.

5. EM will use good faith efforts to exchange any DUF<sub>6</sub> cylinders that are transferred to delivery point but not accepted for processing by USEC at the Paducah plant ("rejected cylinders") with a cylinder of equivalent assay. The rejected cylinder shall be returned to EM, and EM shall make all necessary arrangements to remove all rejected cylinders at EN's expense pursuant to paragraph 8 below. Title to, risk of loss, and responsibility for any cylinders so rejected will transfer back to EM upon EM's acceptance of the unprocessed cylinders from USEC.

6. Either BPA or EM, in its sole discretion, may terminate transfers of cylinders to the delivery point under this Agreement at any time. Such termination shall be in the form of written notice, shall state the nature and extent of termination, and shall be effective upon receipt unless a later date is specified. As promptly as practicable after such notice, EM shall undertake to accept from USEC any unprocessed cylinders affected by the termination notice from the delivery point. Custodial and administrative responsibility and title for any cylinders delivered and returned under this item 6 will transfer back to EM upon EM's acceptance of the unprocessed cylinders from USEC.

7. EM shall be reimbursed its cost of transferring each cylinder to the delivery point hereunder, at \$2,200.00 (Two Thousand Two Hundred Dollars) per cylinder. Such payments shall be made to EM, or its designated agent, within thirty days of the date of invoicing. For each cylinder successfully processed under this PILOT project as provided herein, EM shall be paid a fixed fee of \$10,450.00 (Ten Thousand Four Hundred and Fifty Dollars) per cylinder. Unless otherwise agreed to by the parties, such fixed fee shall be made to EM, or its designated agent, in cash, or in-kind to the extent permitted by law, as designated in writing by EM, within thirty days of the conclusion (whether by completion or termination) of the PILOT project. BPA is responsible for all payments to EM as it is for all cost items approved in EN's budget for the Columbia Generating Station, under BPA Contract No. 14-03-19121 (10-05-70), the "Project Agreement" for Columbia Generating Station. BPA anticipates that all payments, for which BPA bears ultimate financial responsibility, will be made by EN as its designate; such payments being made by EN through either short term lines of credit and/or municipal bonds that EN is authorized to issue.

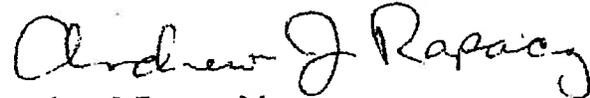
8. For each cylinder that is returned to EM under item 5 or item 6, EM shall be paid \$2,200.00 (Two Thousand Two Hundred Dollars) per cylinder, which shall be considered EM's full, complete, and total compensation per cylinder for cost incurred in connection with any and all such cylinders so returned. Payment of such transfer charge will be made to EM, or its designated agent within thirty days of the date of invoicing. Amounts not timely paid shall accrue interest pursuant to the terms provided in FAR 32.614-1.

9. BPA and EM intend to pursue the reuse of additional uranium inventories at the conclusion of the PILOT project on a schedule and terms to be mutually agreed upon. BPA has a significant financial stake in the PILOT project and if such project successfully meets the expectations of both parties, EM agrees to work with BPA to make additional quantities of DUF<sub>6</sub> available for reuse. BPA further agrees to make a good faith effort to assist EM in the reutilization of other surplus uranium.

**10. EM MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY(A) OF MERCHANTABILITY; (B) OF FITNESS FOR A PARTICULAR PURPOSE; OR (C) THAT CYLINDERS OR MATERIAL DELIVERED BY IT WILL NOT RESULT IN INJURY OR DAMAGE WHEN USED FOR ANY PARTICULAR PURPOSES.**

Please indicate your concurrence with this Agreement by executing one of the two included duplicate originals of this Agreement and returning one to me. The other duplicate original is of course for your files.

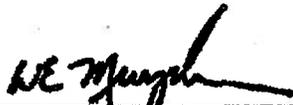
Sincerely,



Andrew J. Rapacz, Manager  
Contract Generating Resources  
Bonneville Power Administration

ACCEPTED

By

  
\_\_\_\_\_  
Manager, Portsmouth & Paducah Sites

Name WILLIAM E. MURPHIE  
(Print/Type)

Date 31 MAY 2005

cc:

Mr. Scott W. Oxenford – Energy Northwest, PE04  
Mr. Dale K. Atkinson – Energy Northwest, PE08  
Ms. Pamela R. Bradley – Energy Northwest, PE08  
Mr. Eric K. Rockett – Energy Northwest, PE26



RECEIVED Department of Energy  
MAY 31 2005 Bonneville Power Administration  
Mail Drop 1399  
P.O. Box 968  
Richland, Washington 99352-0968

POWER BUSINESS LINE

May 26, 2005

In reply refer to: PGC/Richland

Mr. W. S. Oxenford, Vice-President  
Technical Services  
Energy Northwest M/D PE04  
P. O. Box 968  
Richland, WA 99352-0968

Dear Mr. Oxenford:

As part of the Uranium Tailings Pilot Project, the US Department of Energy (DOE) and Energy Northwest (EN) have executed an agreement, Bonneville Power Administration ("BPA") Contract No. 05PB-11620 (Transfer Agreement), covering the delivery of cylinders containing depleted uranium hexafluoride ( $\text{DUF}_6$ ) to the U.S. Enrichment Corporation (USEC) and the transfer of title to that cylinder to EN.

In order to document the treatment of specific cylinders, a Cylinder Transfer Acknowledgement (CTA) letter (enclosed), indicating acknowledgement of and acceptance by EN of specific cylinders, will be completed and executed by EN each time cylinders of  $\text{DUF}_6$ , supplied under the Letter of Agreement Number 05GS-75180 (LOA,) are accepted or rejected for processing by USEC under Contract No. 318588, and each time title to cylinders accepted by USEC transfers to EN.

Currently, the deliveries and acceptance of such cylinders are anticipated to occur approximately every 30 days. It is agreed, however, that regardless of whether such deliveries occur at less frequent or more frequent intervals, the CTA documenting the acknowledgment and acceptance of cylinders will be completed with all indicated information, including: (1) the numbers of any cylinders "rejected" for processing by USEC under Paragraphs 2 and 3 of the CTA; (2) the numbers of such cylinders "accepted" for processing by USEC under Paragraph 4 of the CTA; and (3) the numbers of such cylinders for which title has transferred.

As you are aware, the purpose of this CTA is to document the transfer of title and financial responsibility for such cylinders accepted or rejected by USEC, and the fact that DOE has no further financial, administrative, custodial, or legal obligations of any type with regard to the cylinders. This CTA contains an explicit provision to confirm our agreement that EN waives any claim against DOE and agrees to hold DOE harmless from, and indemnify DOE against, any third party claim (including claims from USEC) relating to any cylinder, and the material therein, that has been delivered to USEC pursuant to the Transfer Agreement. This indemnification, however, is not intended to nor shall it be construed to waive or otherwise affect: (1) the fees to

EM as are provided for in the Transfer Agreement, or (2) BPA's obligations to Energy Northwest contained in the WNP-2 (now called Columbia Generating Station) Project Agreement No. 14-03-19121 (10-05-70).

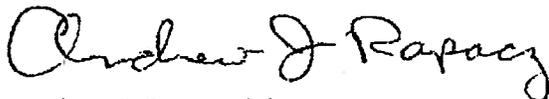
In a related matter, we are also asking for confirmation, by your signature below, that EN has included sufficient provisions in its Contract (No. 318588) with USEC to assure that DOE will not incur any costs in connection with that Contract or any related activities, except to the extent that the costs to EN may be reflected in its billing arrangements with BPA.

It is further agreed that one executed original copy of the enclosed "CTA" shall be completed in its entirety and copies routed to each of the addressees indicated below by first class mail within five business days of the USEC "acceptance" or "rejection" of cylinders for processing and the "transfer of title" previously described above.

Any addressee *may* change addresses or individuals specified below by providing written notice of such change to Energy Northwest, as well as the other addressees indicated below.

Please indicate your concurrence with the terms of this letter and the requirements of the CTA by signing the four originals of this letter and returning a copy to Mr. Murphie, Mr. McRae, and me. The fourth copy is for your records.

Sincerely,



Andrew J. Rapacz, Manager  
Contract Generating Resources



CONCURRENCE  
W. S. Oxenford - Vice President  
Technical Services

Enclosure

cc: w/Enclosure

Mr. William Murphie, Manager  
Portsmouth Paducah Projects  
United States Department of Energy  
Portsmouth/Paducah Project Office  
1017 Majestic Drive, Suite 200  
Lexington, KY 40513

Mr. James Bennett McRae, Asst General Counsel  
for Civilian Nuclear Programs  
GC-52/Forrestal Building  
U.S. Department of Energy  
1000 Independence Ave., S.W.  
Washington, DC 20585

Enclosure

**(ENERGY NORTHWEST LETTERHEAD)**

Date

Mr. William Murphie, Manager  
Portsmouth Paducah Projects  
United States Department of Energy  
Portsmouth/Paducah Project Office  
1017 Majestic Drive, Suite 200  
Lexington, KY 40513

Mr. Andrew J. Rapacz, Manager  
Contract Generating Resources  
Bonneville Power Administration  
P O Box 968 - MD-1399  
Richland, WA 99352-0968

Dear Messrs. Murphie and Rapacz:

1. Consistent with the Agreement between the U.S. Enrichment Corporation (USEC) and Energy Northwest (EN) USEC Contract No. EC-SC01-05UE03003 (also designated as Energy Northwest Contract No. 318588), (Agreement) USEC has previously received the records covering the cylinders recently delivered to USEC on or about \_\_\_\_\_, pursuant to Section 4.1 of the Agreement. As you will recall, the purpose of such records was to assist USEC in its preliminary determination of whether those cylinders were suitable for feeding into the Paducah Gaseous Diffusion Plant (PDGP). These records included, at minimum: (i) a list of the cylinders, identified by cylinder number, that EN proposes to deliver pursuant to Section 4.1 of the Agreement; (ii) a cylinder history card for each such cylinder, if available; and (iii) authorization for USEC to have access to the Nuclear Material Control and Accountability records of such cylinders.

2. Pursuant to Section 4.2 of the Agreement, USEC has (*or has not*) rejected cylinders based on its determination that the records of such cylinder(s) indicate that such cylinders may not be suitable for feeding at the PGDP. *Such cylinders so rejected are as follows: (List of Cylinders Numbers)* \_\_\_\_\_

3. Pursuant to Section 4.2 of the Agreement, USEC has (*or has not*) rejected cylinders based upon its determination that such cylinder(s): do not meet ANSI Specification N14.1 "Packaging of Uranium Hexafluoride for Transport" (the "ANSI Specification"); and/or have been overfilled

with UF<sub>6</sub>; and/or otherwise are not suitable for feeding. *Such cylinders so rejected are as follows: (List of Cylinders Numbers)*

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4. Consistent with Paragraph 5 of the May \_\_\_\_, 2005, Agreement between the Department of Energy (DOE) and EN, BPA Contract No. 05PB-11620 (Transfer Agreement), the foregoing enumerated "rejected cylinders" are now being returned to the Environmental Management Office of DOE (EM), who shall make all necessary arrangements to remove the rejected cylinders at EN's cost as specified in Paragraph 5 below.

5. As provided for in the Transfer Agreement, EM (or its designated agent) shall be reimbursed by EN at the rate of \$2,200.00 (Two Thousand Two Hundred Dollars) per cylinder, following transportation from USEC back to EM, and within 30 days of invoicing to EN for such cylinders so transported. This reimbursement is in addition to the reimbursement to EM by EN at the rate of \$2,200.00 (Two Thousand Two Hundred Dollars) per cylinder for delivering the cylinder to USEC.

6. Pursuant to the Transfer Agreement, title to such cylinders as have now been transported to USEC, and which have not been rejected pursuant to Paragraph 2 or Paragraph 3 above, have been transferred to EN from DOE. The numbers of those cylinders are as follows:

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7. EN waives any claim against DOE and agrees to hold DOE harmless from, and indemnify DOE against, any third party claim (including claims from USEC) relating to any cylinder, and the material therein, that has been delivered to USEC pursuant to the Transfer Agreement. This indemnification, however, is not intended to nor shall it be construed to waive or otherwise affect BPA's obligations to EN contained in the WNP-2 (now called Columbia Generating Station) Project Agreement No. 14-03-19121 (10-05-70).

---

Lisa Ferek  
Group Lead – Fuel and Cycle Management, Fuel Design  
Energy Northwest

cc:  
James Bennett McRae  
Asst. General Counsel for Civilian Nuclear Programs  
GC-52/Forrestal Building  
U.S. Department of Energy  
1000 Independence Ave., S.W.  
Washington, DC 20585



**Department of Energy**

Bonneville Power Administration  
Mail Drop 1399  
P.O. Box 968  
Richland, Washington 99352-0968

POWER BUSINESS LINE

May 26, 2005

In reply refer to: PGC/Richland

Contract No. 05PB-11620  
TRANSFER AGREEMENT

Mr. W. Scott Oxenford, Vice-President  
Technical Services M/D PE04  
Energy Northwest  
P. O. Box 968  
Richland, WA 99352-0968

Dear Mr. Oxenford:

As you are aware, the Bonneville Power Administration (BPA), an agency of the U.S. Department of Energy (DOE), in coordination with the Environmental Management Office (EM) of DOE, have agreed to implement a Uranium Tailings Pilot Project or UTPP (PILOT project), with Energy Northwest (EN) a joint operating agency organized under Washington State law, to determine the usability of a portion of DOE's depleted uranium hexafluoride ( $\text{DUF}_6$ ) inventory for potential use as nuclear fuel in EN's Columbia Generating Station, a nuclear power production reactor. The  $\text{DUF}_6$ , as identified below, may contain enough uranium ( $\text{U}^{235}$ ) for practical use as nuclear fuel, after enrichment.

If successful, this PILOT project will result in the avoidance by EM of as much as approximately \$40 million in disposal costs and save as much as a projected \$50 million in future nuclear fuel costs for EN's Columbia Generating Station, the generating project capacity of which BPA has heretofore acquired. To commence the PILOT project, two agreements are being executed contemporaneously with this Tailings Pilot Project Transfer Agreement (Transfer Agreement). Those separate agreements are: (1) BPA Letter of Agreement No. 05GS-75180 (between EM and BPA); and (2) Energy Northwest Contract No. 318588 (between EN and the U.S. Enrichment Corporation [USEC]).

This Transfer Agreement serves to confirm the terms under which title to the cylinders containing  $\text{DUF}_6$  shall be transferred to EN, and moreover to explicitly provide that EN waives any claim against DOE and agrees to hold DOE harmless from, and indemnify DOE against, any third party claim (including claims from USEC) relating to any cylinder, and the material therein, that has been delivered to USEC pursuant to the Transfer Agreement. This indemnification, however, is not intended to nor shall it be construed to waive or otherwise affect

BPA's obligations to EN contained in the WNP-2 (now called Columbia Generating Station) Project Agreement No. 14-03-19121 (10-05-70).

DOE and EN, therefore agree as follows:

1. DUF<sub>6</sub> cylinders from two DOE Lots will be delivered by EM on behalf of BPA to U.S. Uranium Enrichment Corporation (USEC) for the account of EN, on a schedule mutually agreed upon by EM, EN, and USEC;
2. Lot 1 is defined as 165 Type 48G DUF<sub>6</sub> cylinders with a minimum assay between 0.400 to 0.4399 wt% U<sup>235</sup> and containing approximately 1,405,620 KgU as DUF<sub>6</sub> located in Paducah, Kentucky;
3. Lot 2 is defined as 507 Type 48G DUF<sub>6</sub> cylinders with a minimum assay of 0.440 wt% U<sup>235</sup> and containing approximately 4,314,400 KgU as DUF<sub>6</sub> located in Paducah, Kentucky;
4. Delivery of DUF<sub>6</sub> by EM on behalf of BPA will be to USEC's Paducah, Kentucky, Enrichment Plant (the delivery point). Upon delivery, title to, risk of loss and responsibility for the DUF<sub>6</sub> and the cylinders passes to EN.
5. Any DUF<sub>6</sub> cylinders that are transferred to the delivery point but not accepted for processing by USEC at the Paducah plant (rejected cylinders) shall be exchanged with a cylinder of equivalent assay from DOE's current inventory, based upon DOE's good faith efforts. The "good faith efforts" of DOE to exchange such rejected cylinders with cylinders of equivalent assay shall be, however, DOE's sole obligation for rejected cylinders. EN waives all claims against DOE for failure of DOE to so provide cylinders of equivalent assay, and EN waives any claim against DOE and agrees to hold DOE harmless from, and indemnify DOE against, any third party claim (including claims from USEC) relating to any cylinder, and the material therein, that has been delivered to USEC pursuant to the Transfer Agreement. This indemnification, however, is not intended to nor shall it be construed to waive or otherwise affect BPA's obligations to EN contained in the WNP-2 (now called Columbia Generating Station) Project Agreement No. 14-03-19121 (10-05-70). EN's sole remedy for rejected cylinders is for DOE to use good faith efforts to replace the cylinders. The rejected cylinders shall be returned to EM, who shall make all necessary arrangements to remove the rejected cylinders at EN's cost as specified in paragraph 8 below. Title to, risk of loss, and responsibility for any cylinders so rejected will transfer back to EM upon EM's acceptance of the unprocessed cylinders from USEC.
6. DOE, in its sole discretion, may terminate transfers of cylinders to the delivery point under this Transfer Agreement at any time. Such termination shall be in the form of written notice from either BPA or EM, shall state the nature and extent of the termination, and shall be effective upon receipt unless a later date is specified in the termination notice. As promptly as practicable after such notice, EM shall undertake to accept from USEC any unprocessed

cylinders affected by any such termination notice from the delivery point. Custodial and administrative responsibility and title for any cylinders delivered and returned under this item 6 will transfer back to EM upon EM's acceptance of the unprocessed cylinders from USEC.

7. EN shall reimburse EM its cost of transferring each cylinder to the delivery point hereunder, at \$2,200.00 (Two Thousand Two Hundred Dollars) per cylinder. Such payments shall be made to EM, or its designated agent, within thirty days of the date of invoicing. For each cylinder successfully processed under this PILOT project as provided herein, EN shall pay EM a fixed fee of \$10,450.00 (Ten Thousand Four Hundred and Fifty Dollars) per cylinder. Unless otherwise agreed to by the parties, the fixed fee shall be paid to EM, or its designated agent, in cash, or in-kind to the extent permitted by law, as designated in writing by EM, within thirty days of the conclusion (whether by completion or termination) of the PILOT project.

8. For each cylinder that is returned to EM under item 5 or item 6, EN shall pay EM \$2,200.00 (Two Thousand Two Hundred Dollars) per cylinder, which shall be considered EM's full, complete, and total compensation per cylinder for cost incurred in connection with any and all such cylinders so returned. Payment of such transfer charge will be made to EM, or its designated agent within thirty days of the date of invoicing. Amounts not timely paid shall accrue interest pursuant to the terms provided in FAR 32.614-1.

9. DOE is not responsible for any losses or costs incurred by EN under its agreement with USEC.

10. **DOE MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY (A) OF MERCHANTABILITY; (B) OF FITNESS FOR A PARTICULAR PURPOSE; OR (C) THAT CYLINDERS OR MATERIAL DELIVERED BY IT WILL NOT RESULT IN INJURY OR DAMAGE WHEN USED FOR ANY PURPOSE.**

Please indicate your concurrence with this Agreement by executing two of the three enclosed duplicate originals of this Transfer Agreement, returning one to Mr. William Murphie in Lexington, Kentucky, and one to me.

Sincerely,



Andrew J. Rapacz, Manager  
Contract Generating Resources  
Bonneville Power Administration

ACCEPTED

By

  
Vice-President - Technical Services

Name W. Scott Oxenford  
*(Print/Type)*

Date 5/26/05

cc:

Mr. William Murphie, Manager  
United States Department of Energy  
Portsmouth/Paducah Project Office  
1017 Majestic Drive, Suite 200  
Lexington, KY 40513

Mr. Dale K. Atkinson - Energy Northwest, PE08  
Ms. Pamela R. Bradley - Energy Northwest, PE13  
Mr. Eric K. Rockett - Energy Northwest, PE26



MAY 10 2005

Department of Energy

Bonneville Power Administration  
P.O. Box 3621  
Portland, Oregon 97208-3621

EXECUTIVE OFFICE

MEMORANDUM FOR THE DEPUTY SECRETARY

THROUGH:

DAVID K. GARMAN   
ASSISTANT SECRETARY, ENERGY EFFICIENCY  
AND RENEWABLE ENERGY

FROM:

STEPHEN J. WRIGHT   
ADMINISTRATOR AND CHIEF EXECUTIVE  
OFFICER, BONNEVILLE POWER  
ADMINISTRATION

Charles E. Anderson   
PRINCIPAL DEPUTY ASSISTANT SECRETARY FOR  
ENVIRONMENTAL MANAGEMENT

SUBJECT:

ACTION: Approve Uranium Tails Pilot Project involving  
Bonneville Power Administration, the Department of  
Energy Office of Environmental Management and  
Energy Northwest

ISSUE:

The Bonneville Power Administration (BPA), in  
coordination with Energy Northwest (EN), has entered  
into discussions with the Office of Environmental  
Management (EM) regarding the potential for recycling  
two specific lots of uranium tails.

DISCUSSION:

EN is a joint operating agency organized under  
Washington State law. Approximately eighteen months  
ago, EN approached BPA expressing an interest in  
engaging the Department of Energy (DOE) about  
recycling some of the DOE uranium tails for use in the  
Columbia Generating Station's (CGS) nuclear fuel cycle.  
BPA has acquired all of the generating capacity of CGS.  
These tails are depleted uranium hexafluoride (DUF<sub>6</sub>)  
that were generated by DOE at the Portsmouth and  
Paducah Gaseous Diffusion Plant (GDP) sites. Over  
700,000 metric tons (MT) of DUF<sub>6</sub> were generated during  
the fifty years that the government controlled the uranium  
enrichment enterprise, and the DUF<sub>6</sub> is currently in the  
custody of EM.

Subsequent discussions between EN and EM have identified the following areas of common interest:

- EM has an interest in re-using the tails in a Uranium Tails Pilot Project (Pilot Project), which, if successful, will reduce EM's obligations for conversion and disposal of tails and improve its planning ability by confirming such reuse is practical.
- EN has an interest in commercial enrichment of the tails for use in the CGS fuel cycle, provided that enrichment can be done in an economically viable manner to benefit CGS and BPA's ratepayers.

Consequently, a small-scale Pilot Project to assess the feasibility and benefits of commercial use of the DOE tails is proposed by BPA and EM. Enrichment of about 8,500 MT of  $DUF_6$  produces enough equivalent natural  $UF_6$  for about four fuel reloads (eight years) for CGS. This is estimated to provide a reduction in CGS future fuel costs of \$50 million, based on current uranium prices, which otherwise would be recovered in BPA rates.

The Secretary has the statutory authority under section 161m of the Atomic Energy Act to approve the transfer of the depleted uranium. Section 3112 of the USEC Privatization Act, which restricts the sale or transfer of certain DOE natural and enriched uranium stockpiles, does not apply to the transfer of the depleted uranium (tails).

On April 1, 2005, BPA executed a categorical exclusion for this proposal which exempts it from further National Environmental Policy Act review based upon two regulatory provisions: 10 C.F.R. Part 1021, Subpart D, Appendix B3.6, which exempts, among other things, "small-scale pilot projects (generally less than two years) conducted to verify a concept before demonstration actions" and 10 C.F.R. Subpart D, Appendix A7, which exempts the "[t]ransfer, lease, disposition or acquisition of interests in personal property (e.g., equipment and materials) or real property (e.g., permanent structures and land), if the property use remains unchanged; i.e., the type and magnitude of impacts would remain essentially the same."

This Pilot Project is planned to commence when USEC begins with the enrichment of the first delivery of  $\text{DUF}_6$  to USEC and is expected to end within two years of that date. Any decision by DOE to continue enrichment beyond the duration of the Pilot Project will be based upon appropriate NEPA review.

DOE's inventory of depleted uranium is surplus to defense needs and below commercial specification in the content of the isotope  $\text{U}^{235}$ . The domestic and international uranium industry is experiencing a resurgence that has witnessed the price of natural uranium more than double since 2003. The Office of Nuclear Energy, Science and Technology (NE) commissioned a market study to examine the impact upon the commercial uranium industry of the Pilot Project and other planned sales/transfers of the Department's uranium inventory, including down-blended Highly Enriched Uranium belonging to the National Nuclear Security Administration (NNSA). Based on this market study, NE prepared an analysis (attached) of the proposed depleted uranium transfer to BPA. NE has concluded that the Pilot Project combined with other known Department plans for placing uranium inventories into the commercial market will have insignificant impact on the domestic uranium mining, conversion, or enrichment industries. In fact, the inclusion of this material in the market is expected to increase the demand for enrichment services and should be beneficial to the enrichment industry.

Unless an innovative approach such as the one proposed herein is adopted, the fair market value of DOE's  $\text{DUF}_6$  inventory is negative because DOE would otherwise pay for its disposition. The material is being transferred based on the negotiated value that represents a fair trade-off by each party of the expected cost savings/avoidance and risk, considering the fair market value. In addition, the Pilot Project would advance one of DOE's top priorities of "pursuing nuclear power and the resolution of nuclear waste disposal ... and environmental cleanup issues."

The Pilot Project will be memorialized through a Letter of Agreement (05GS-75180) signed on DOE's behalf by the Manager, Portsmouth Paducah Project Office (PPPO).

PPPO is the appropriate DOE office because it has been tasked with dispositioning DOE's entire tails inventory, and other uranium inventories stored at the DOE sites in Portsmouth and Paducah. Custodial and administrative responsibility for the DUF<sub>6</sub> shall pass, and delivery shall be deemed made from EM to BPA upon acceptance of the material for processing by the United States Enrichment Corporation (USEC) at the USEC Paducah Enrichment Plant. Title to the tails will pass to EN upon commencement of tails processing by USEC. EN will pay EM or its agent a nominal fee for the handling of the cylinders and a subsequent fee for any uranium that is successfully processed by USEC. Due to the Miscellaneous Receipts Act, DOE is precluded from retaining such fees, although DOE may retain fees in an amount equal to the direct costs and reasonably related indirect costs incurred by DOE to transfer the cylinders to EN. In spite of the limitation imposed by the Miscellaneous Receipts Act, the transaction will result in the disposition of DUF<sub>6</sub> with a net reduction in EM funding requirements estimated to be as much as approximately \$40 million.

EN will enter into contractual agreements with USEC for the enrichment of the tails from 0.4 percent to 0.7 percent uranium 235 (U<sup>235</sup>). Estimates for USEC's enrichment services and fees to EN are in the range of \$88 million for the Pilot Project. EN will use a line of credit and bond financing to support the cash flows required for the Pilot Project.

In support of the Pilot Project the following actions are being completed:

- BPA has proposed an agreement (attached) with EM for the transfer of the uranium tails.
- EN is finalizing an enrichment contract with USEC for processing of the tails material. In the past, DOE and USEC have expended considerable time and resources to resolve disputes over contaminated cylinders. Agreement between EN and USEC should be clear that DOE will incur no cost obligation if USEC rejects a cylinder.

Following completion of the above actions, the transfer and enrichment of the uranium tails will begin. This Pilot Project is an opportunity to determine the feasibility of enriching depleted uranium and for all parties involved to gain financial benefits while accomplishing a reduction in the nation's depleted uranium tails inventory.

**SENSITIVITIES:**

The reduction of DOE tails inventory may be viewed with concern by both the Kentucky and Ohio Congressional delegations because it reduces the inventory of feed for the DOE conversion facilities under construction in Portsmouth and Paducah. The reduction of inventory would reduce the operational life at these plants and thereby impact employment. Members of the Ohio and Kentucky delegations are likely to believe that if the Pilot Project is successful, DOE will expand it, thus further reducing inventory of feed for the new DOE conversion plants. This will be offset by the increased demand for enrichment services at Paducah and may be further neutralized by the fact that the resultant secondary tails will likely be processed at a DOE facility. Members of the New Mexico Congressional delegation may also view this proposed Pilot Project with great skepticism. Louisiana Energy Services (LES) is working to build a uranium enrichment facility in New Mexico with strong support from the community. The Congressional delegation may view the Pilot Project as benefiting USEC in the future at the expense of potential competition from LES.

Members of the Oregon, Washington, Idaho, and Montana delegations are likely to be highly appreciative of the \$50 million benefit to ratepayers through BPA rates.

The uranium mining, conversion and enrichment industry is very concerned with the impact of DOE uranium inventories competing in the commercial uranium market. Although this Pilot Project will increase demand for enrichment at the Paducah GDP, there will be a slight reduction in demand for natural uranium. The House version of the Energy Bill as currently drafted, H.R. 6, would annually limit the "[t]otal amount of uranium transferred [by DOE] ... for consumption by commercial nuclear power end users." The amount of material

covered by the Pilot Project alone would be within the limit allowed for under H.R. 6.

If it becomes law, H.R. 6 would limit federal transfers of uranium to three million pounds of U3O8 equivalent per year for the period FY 2005-09. Other planned sales or transfers in combination with the Pilot Project could exceed the annual limit for uranium transfers set forth in H.R. 6. Specifically, a proposed sale of low-enriched uranium derived from 17 MT of highly-enriched uranium (HEU) by NNSA: 0 M lbs in 2005; 2.3 M lbs in 2006; 3.0 M lbs in 2007 and 2.3 M lbs in 2008. BPA will work with EM, EN and USEC to accelerate planned 2005 transfers under the Pilot Project toward the 3.0 M lbs limit, and to have part of the DUF<sub>6</sub> Pilot Project deferred starting in FY 2006, if necessary. BPA will consult and coordinate on a continuing basis with NNSA to adjust BPA transfers during the two year term of the Pilot Project so as not to conflict with actual NNSA transfers should a uranium transfer limit, such as the one set forth in H.R. 6, be enacted. However, members of the Senate and House Armed Service Committees are likely to express concerns that the Pilot Project will negatively affect the ability of NNSA to transfer uranium if the H.R. 6 limit on uranium transfers is signed into law.

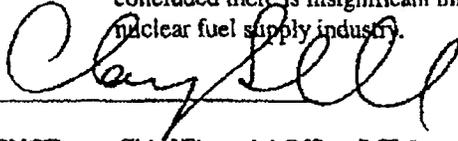
If approved, DOE should enter into discussions with the uranium mining industry to assure them that DOE will remain sensitive to the price of uranium and ensure that DOE's huge tails inventory will be managed to avoid any impact to market prices. Unfortunately, the price may continue to rise or drop independent of any DOE action, but the industry may blame DOE for any price drop. Members of the Nebraska and Wyoming Congressional delegations (where uranium mining still occurs) are likely to strongly oppose the Pilot Project.

If the Pilot Project is successful, the Tennessee Valley Authority may propose a similar arrangement to transfer DUF<sub>6</sub> to support their needs connected to tritium production and the requirement for U.S. origin uranium (foreign source uranium is generally restricted by agreement to non-defense purposes).

**POLICY IMPACT:** None

RECOMMENDATION: Approve the Pilot Project Agreement (Attachment 1) based on the market analysis (Attachment 2) that has concluded there is insignificant impact to the domestic nuclear fuel supply industry.

Approval: \_\_\_\_\_



CONCURRENCE:	Chief Financial Officer/ME-1	S/	5/16/05
	Nuclear Energy/NE-1	S/	5/16/05
	General Counsel/GC-1	S/	5/16/05
	National Nuclear Security/NA-1	S/	5/16/05
	Congressional Affairs/CI-1	S/	5/16/05

2 Attachments

cc: I. Kolb - S-1  
L. Brown - S-3  
K. Kolevar - TD-1  
E. Nicoll - CI-20  
W. Murphie - PPPO  
S. Wright - BPA

